

SOFAR Modbus Protocol - General

valid for HYD 5 ... 20K-3PH and HYD3 ... 6K-EP

Last Update: 23.11.2020

Write Format													
Device Address	Function Code	Start Address		Write Register No.		Write Byte No	Data to write in				CRC		
1 Byte	1 Byte	Hi Byte	Low Byte	Hi Byte	Low Byte	1 Byte	Hi Byte1	Low Byte1	...	Hi Byten	Low Byten	Low Byte	Hi Byte
Brocast Address:0x00; Device Address:1-247	Write Function Code:0x10						For 32bits or 64bit data, it will be sent by Big-endian mode if there is no special explanation. For example , sequence to send a 32bits data: byte3,byte2,byte1,byte0				Modbus-CRC16		

Response Format of Write							
Device Address	Function Code	Start Address		Write Register No.		CRC	
1 Byte	1 Byte	Hi Byte	Low Byte	Hi Byte	Low Byte	Low Byte	Hi Byte
Slave Address	Write Function Code:0x10					Modbus-CRC16	

Read Format							
Device Address	Function Code	Start Address		Read Register No.		CRC	
1 Byte	1 Byte	Hi Byte	Low Byte	Hi Byte	Low Byte	Low Byte	Hi Byte
Device Address:1-247	ReadFunction Code:0x03					Modbus-CRC16	

Response Format of Read									
Device Address	Function Code	Data Byte No.	Response register data						CRC
1 Byte	1 Byte	1 Byte	Hi Byte1	Low Byte1	...	Hi Byte N	Low Byte N	Low Byte	Hi Byte
Slave Address	ReadFunction Code:0x03		For 32bits or 64bit data, it will be sent by Big-endian mode if there is no special explanation. For example , sequence to send a 32bits data: byte3,byte2,byte1,byte0						Modbus-CRC16

Abnormal Response				
Device Address	Function Code	Error Code	CRC	
1 Byte	1 Byte	1 Byte	Low Byte	Hi Byte
Slave Address	Abnormal Function Code:0x90	See Error Code List	Modbus-CRC16	

Error Code List	
Value	Explain
1	illegal function
2	illegal register address
3	illegal register value
4	slave device fault
7	slave device busy

SOFAR HYD 5 ... 20K-3PH Modbus Protocol - Register List

Shadow Register: The operations which need multiple registers to write in will use shadow register as "cache". The value in shadow register will not be effective until relative Write Control register been set.

Write Control Register (Config_Control): To enable the value in shadow register be effective.

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
Real Time Data Area (0x0400-0x07FF)											
System Info (0x0400-0x047F)											
0400	AddressMask_Realtime_SysInfo1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effective 1:Effective	End User	0003F9C1	0581FFFF
0401									End User		
0402									End User		
0403									End User		
0404	SysState	U16					R	Operation Status 0:Wait 1:Check 2:On Grid 3:EPS 4>Error 5:Permanent Error 6:Firmware Updating 7:Self Charging	End User	1	16
0405	Fault1	U16					R	Fault1	End User	1	32
0406	Fault2	U16					R	Fault2	End User	1	64
0407	Fault3	U16					R	Fault3	End User	1	128
0408	Fault4	U16					R	Fault4	End User	1	256
0409	Fault5	U16					R	Fault5	End User	1	512
040A	Fault6	U16					R	Fault6	End User	1	1024
040B	Fault7	U16					R	Fault7	End User	1	2048
040C	Fault8	U16					R	Fault8	End User	1	4096
040D	Fault9	U16					R	Fault9	End User	1	8192
040E	Fault10	U16					R	Fault10	End User	1	16384
040F	Fault11	U16					R	Fault11	End User	1	32768
0410	Fault12	U16					R	Fault12	End User	1	65536
0411	Fault13	U16					R	Fault13	End User		0
0412	Fault14	U16					R	Fault14	End User		0
0413	Fault15	U16					R	Fault15	End User		0
0414	Fault16	U16					R	Fault16	End User		0
0415	Fault17	U16					R	Fault17	End User		0
0416	Fault18	U16					R	Fault18	End User		0
0417	Countdown	U16	1	Second			R	Countdown time	End User	1	8388608
0418	Temperature_Env1	I16	1	°C			R	Temperature_Env1	End User	1	16777216
0419	Temperature_Env2	I16	1	°C			R	Temperature_Env2	End User		0
041A	Temperature_HeatSink1	I16	1	°C			R	Temperature_HeatSink1	End User	1	67108864
041B	Temperature_HeatSink2	I16	1	°C			R	Temperature_HeatSink2	End User		0
041C	Temperature_HeatSink3	I16	1	°C			R	Temperature_HeatSink3	End User		0
041D	Temperature_HeatSink4	I16	1	°C			R	Temperature_HeatSink4	End User		0
041E	Temperature_HeatSink5	I16	1	°C			R	Temperature_HeatSink5	End User		0
041F	Temperature_HeatSink6	I16	1	°C			R	Temperature_HeatSink6	End User		0
0420	Temperature_Inv1	I16	1	°C			R	Temperature_Inv1	End User	1	4294967296
0421	Temperature_Inv2	I16	1	°C			R	Temperature_Inv2	End User		0
0422	Temperature_Inv3	I16	1	°C			R	Temperature_Inv3	End User		0
0423	Temp_Rsvd1	I16	1	°C			R	Temp_Rsvd1	End User		0
0424	Temp_Rsvd2	I16	1	°C			R	Temp_Rsvd2	End User		0
0425	Temp_Rsvd3	I16	1	°C			R	Temp_Rsvd3	End User		0
0426	GenerationTime_Today	U16	1	Minute			R	GenerationTime_Today	End User	1	2,74878E+11
0427	GenerationTime_Total	U32	1	Minute			R	GenerationTime_Total	End User	1	5,49756E+11
0428									End User	1	1,09951E+12
0429	ServiceTime_Total	U32	1	Minute			R	ServiceTime_Total	End User		0
042A									End User		0
042B	InsulationResistance	U16	1	kΩ			R	InsulationResistance	End User	1	8,79609E+12
042C	SysTime_Year	U16					R	SysTime_Year	End User	1	1,75922E+13
042D	SysTime_Month	U16					R	SysTime_Month	End User	1	3,51844E+13
042E	SysTime_Date	U16					R	SysTime_Date	End User	1	7,03687E+13
042F	SysTime_Hour	U16					R	SysTime_Hour	End User	1	1,40737E+14
0430	SysTime_Minute	U16					R	SysTime_Minute	End User	1	2,81475E+14
0431	SysTime_Second	U16					R	SysTime_Second	End User	1	5,6295E+14
0432											
0433											
0434											
0435											
0436											
0437											
0438											
0439											
043A											
043B											
043C											
043D											
043E											
043F											
0440	AddressMask_Realtime_SysInfo2	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effective	End User	00000000	1FFFEFEF
0441									End User		
0442									End User		
0443									End User		
0444	Production_Code	U16						Reserved		0	0
0445	Serial_Number0	ASCII					R	The 1st and 2nd value of serial number High 8 bits for 1st value Low 8 bits for 2nd value	End User	1	32
0446	Serial_Number1	ASCII					R	The 3rd and 4th value of serial number High 8 bits for 3rd value Low 8 bits for 4th value	End User	1	64
0447	Serial_Number2	ASCII					R	The 5th and 6th value of serial number High 8 bits for 5th value Low 8 bits for 6th value	End User	1	128
0448	Serial_Number3	ASCII					R	The 7th and 8th value of serial number High 8 bits for 7th value Low 8 bits for 8th value	End User	1	256

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
0449	Serial_Number4	ASCII					R	The 9th and 10th value of serial number High 8 bits for 9th value Low 8 bits for 10th value	End User	1	512
044A	Serial_Number5	ASCII					R	The 11th and 12th value of serial number High 8 bits for 11th value Low 8 bits for 12th value	End User	1	1024
044B	Serial_Number6	ASCII					R	The 13th and 13th value of serial number High 8 bits for 14th value Low 8 bits for 14th value	End User	1	2048
044C	Serial_Number_rsvd						R	Reserved			
044D	Hardware_Version0	ASCII					R	The 1st and 2nd value of Hardware_Version High 8 bits for 1st value Low 8 bits for 2nd value	End User	1	8192
044E	Hardware_Version1	ASCII					R	The 3rd and 4th value of Hardware_Version High 8 bits for 3rd value Low 8 bits for 4th value	End User	1	16384
044F	Software_Version_Stage_COM	ASCII					R	Software_Version_Stage_COM: ASCII code is saved in low 8 bits Offical version is default as "V"	End User	1	32768
0450	Software_Version_Major_COM	ASCII					R	Software_Version_Major_COM In one system, major version of all chips should be same or it will be considered as fault. High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	65536
0451	Software_Version_Custom_COM	ASCII					R	Software_Version_Custom_COM Offical version is default as "00" In one system, customized version of all chips should be same or it will be considered as fault. High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	131072
0452	Software_Version_Minor_COM	ASCII					R	Software_Version_Minor_COM High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	262144
0453	Software_Version_Stage_Master	ASCII					R	Software_Version_Stage_Master ASCII code is saved in low 8 bits Offical version is default as "V"	End User	1	524288
0454	Software_Version_Major_Master	ASCII					R	Software_Version_Major_Master In one system, major version of all chips should be same or it will be considered as fault. High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	1048576
0455	Software_Version_Custom_Master	ASCII					R	Software_Version_Custom_Master Offical version is default as "00" In one system, customized version of all chips should be same or it will be considered as fault. High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	2097152
0456	Software_Version_Minor_Master	ASCII					R	Software_Version_Minor_Master High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	4194304
0457	Software_Version_Stage_Slave	ASCII					R	Software_Version_Stage_Slave ASCII code is saved in low 8 bits Offical version is default as "V"	End User	1	8388608
0458	Software_Version_Major_Slave	ASCII					R	Software_Version_Major_Slave In one system, major version of all chips should be same or it will be considered as fault. High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	16777216
0459	Software_Version_Custom_Slave	ASCII					R	Software_Version_Custom_Slave Offical version is default as "00" In one system, customized version of all chips should be same or it will be considered as fault. High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	33554432
045A	Software_Version_Minor_Slave	ASCII					R	Software_Version_Minor_Slave High 8 bits for Hi Byte value Low 8 bits for Low Byte value	End User	1	67108864
045B	Safety_Version_Major	U16					R	Country code Version_Major	End User	1	134217728
045C	Safety_version_Minor	U16					R	Country code version_Minor	End User	1	268435456
045D	Boot_Version_COM										0
045E	Boot_Version_Master										0
045F	Boot_Version_Slave										0
0460											0
0461											0
0462											0
0463											0
0464											0
0465											0
0466											0
0467											0
0468											0
0469											0
046A											0
046B											0
046C											0
046D											0
046E											0
046F											0
0470											0
0471											0
0472											0
0473											0
0474											0
0475											0
0476											0
0477											0
0478											0
0479											0
047A											0
047B											0
047C											0
047D											0
047E											0
047F											0
On Grid Output(0x0480-0x04FF)											
0480								These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register, bit4 controls the 5th register in this	End User		
0481									End User		
0482									End User		

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
0483	AddressMask_Realtime_GridOutput1	U64					R	field 0:Not Effectieffective 1:Effective	End User	00000118	2304613F
0484	Frequency_Grid	U16	0,01	Hz			R	Frequency_Grid	End User	1	16
0485	ActivePower_Output_Total	I16	0,01	kW			R	Total Active power.Charge is positive,Discharge is negative	End User	1	32
0486	ReactivePower_Output_Total	I16	0,01	kW			R	Total Reactive power.Leadng is positive , lagging is negative	End User		0
0487	ApparentPower_Output_Total	I16	0,01	kW			R	Total apparent power.Positive to discharge, negative to charge.	End User		0
0488	ActivePower_PCC_Total	I16	0,01	kW			R	Totall PCC active power, positive to fed into the grid,negative to draw from the grid,	End User	1	256
0489	ReactivePower_PCC_Total	I16	0,01	kW			R	ReactivePower_PCC_Total.Leadng is positive , lagging is negative	End User		0
048A	ApparentPower_PCC_Total	I16	0,01	kW			R	ApparentPower_PCC_Total.positive to fed into the grid,negative to draw from the grid,	End User		0
048B	GridOutput_Rsvd1						R	GridOutput_Rsvd1 reserved	End User		0
048C	GridOutput_Rsvd2						R	GridOutput_Rsvd2 reserved	End User		0
048D	Voltage_Phase_R	U16	0,1	V			R	Voltage_Phase_R	End User	1	8192
048E	Current_Output_R	U16	0,01	A			R	Current_Output_R	End User	1	16384
048F	ActivePower_Output_R	I16	0,01	kW			R	ActivePower_Output_R.Positive to discharge, negative to charge.	End User		0
0490	ReactivePower_Output_R	I16	0,01	kW			R	ReactivePower_Output_R.Leadng is positive , lagging is negative	End User		0
0491	PowerFactor_Output_R	I16	0,001	p.u.			R	PowerFactor_Output_R.Leadng is positive , lagging is negative	End User		0
0492	Current_PCC_R	U16	0,01	A			R	Current_PCC_R	End User	1	262144
0493	ActivePower_PCC_R	I16	0,01	kW			R	ActivePower_PCC_R	End User		0
0494	ReactivePower_PCC_R	I16	0,01	kW			R	ActivePower_PCC_R.Leadng is positive , lagging is negative	End User		0
0495	PowerFactor_PCC_R	I16	0,001	p.u.			R	PowerFactor_PCC_R.Leadng is positive , lagging is negative	End User		0
0496	R_Rsvd1						R	R_Rsvd1	End User		0
0497	R_Rsvd2						R	R_Rsvd2	End User		0
0498	Voltage_Phase_S	U16	0,1	V			R	Voltage_Phase_S	End User	1	16777216
0499	Current_Output_S	U16	0,01	A			R	Current_Output_S	End User	1	33554432
049A	ActivePower_Output_S	I16	0,01	kW			R	ActivePower_Output_S.Positive to discharge, negative to charge.	End User		0
049B	ReactivePower_Output_S	I16	0,01	kW			R	ReactivePower_Output_S.Leadng is positive , lagging is negative	End User		0
049C	PowerFactor_Output_S	I16	0,001	p.u.			R	PowerFactor_Output_S.Leadng is positive , lagging is negative	End User		0
049D	Current_PCC_S	U16	0,01	A			R	Current_PCC_S	End User	1	536870912
049E	ActivePower_PCC_S	I16	0,01	kW			R	ActivePower_PCC_S.Positive to discharge, negative to charge.	End User		0
049F	ReactivePower_PCC_S	I16	0,01	kW			R	ReactivePower_PCC_S.Leadng is positive , lagging is negative	End User		0
04A0	PowerFactor_PCC_S	I16	0,001	p.u.			R	PowerFactor_PCC_S.Leadng is positive , lagging is negative	End User		0
04A1	S_Rsvd1						R	S_Rsvd1	End User		0
04A2	S_Rsvd2						R	S_Rsvd2	End User		0
04A3	Voltage_Phase_T	U16	0,1	V			R	Voltage_Phase_T	End User	1	34359738368
04A4	Current_Output_T	U16	0,01	A			R	Current_Output_T	End User	1	68719476736
04A5	ActivePower_Output_T	I16	0,01	kW			R	ActivePower_Output_T.Positive to discharge, negative to charge.	End User		0
04A6	ReactivePower_Output_T	I16	0,01	kW			R	ReactivePower_Output_T.Leadng is positive , lagging is negative	End User		0
04A7	PowerFactor_Output_T	I16	0,001	p.u.			R	PowerFactor_Output_T.Leadng is positive , lagging is negative	End User		0
04A8	Current_PCC_T	U16	0,01	A			R	Current_PCC_T	End User	1	1,09951E+12
04A9	ActivePower_PCC_T	I16	0,01	kW			R	ActivePower_PCC_T.Positive to discharge, negative to charge.	End User		0
04AA	ReactivePower_PCC_T	I16	0,01	kW			R	ReactivePower_PCC_T.Leadng is positive , lagging is negative	End User		0
04AB	PowerFactor_PCC_T	I16	0,001	p.u.			R	PowerFactor_PCC_T.Leadng is positive , lagging is negative	End User		0
04AC	T_Rsvd1						R	T_Rsvd1	End User		0
04AD	T_Rsvd2						R	T_Rsvd2	End User		0
04AE	ActivePower_PV_Ext	U16	0,01	kW			R	External PV active power			
04AF	ActivePower_Load_Sys	U16	0,01	kW			R	Total system load power			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
050E	ApparentPower_Load_R	I16	0,01	kVA			R	Load Apparent power of Phase R Consumed by load is positive Feedback from load is negative	End User		0
050F	LoadPeakRatio_R	U16	0,01	p.u.			R	R相Negative载峰 value比	End User		0
0510	ESR_Rsvd1						R	ESR_Rsvd1	End User		0
0511	ESR_Rsvd2						R	ESR_Rsvd2	End User		0
0512	Voltage_Output_S	U16	0,1	V			R	Voltage_Output_S	End User	1	262144
0513	Current_Load_S	I16	0,01	A			R	Current_Load_S	End User	1	524288
0514	ActivePower_Load_S	I16	0,01	kW			R	Load Active power of Phase S Consumed by load is positive Feedback from load is negative	End User	1	1048576
0515	ReactivePower_Load_S	I16	0,01	kW			R	ReactivePower_Load_S Leading is positive Lagging is negative	End User		0
0516	ApparentPower_Load_S	I16	0,01	kVA			R	Load Apparent power of Phase S Consumed by load is positive Feedback from load is negative	End User		0
0517	LoadPeakRatio_S	U16	0,01	p.u.			R	S相Negative载峰 value比	End User		0
0518	ESS_Rsvd1						R	ESS_Rsvd1	End User		0
0519	ESS_Rsvd2						R	ESS_Rsvd2	End User		0
051A	Voltage_Output_T	U16	0,1	V			R	Voltage_Output_T	End User	1	67108864
051B	Current_Load_T	I16	0,01	A			R	Current_Load_T	End User	1	134217728
051C	ActivePower_Load_T	I16	0,01	kW			R	Load Active power of Phase T Consumed by load is positive Feedback from load is negative	End User	1	268435456
051D	ReactivePower_Load_T	I16	0,01	kW			R	ReactivePower_Load_T Leading is positive Lagging is negative	End User		0
051E	ApparentPower_Load_T	I16	0,01	kVA			R	Load Apparent power of Phase T Consumed by load is positive Feedback from load is negative	End User		0
051F	LoadPeakRatio_T	U16	0,01	p.u.			R	LoadPeakRatio_T	End User		0
0520	EST_Rsvd1						R	EST_Rsvd1	End User		0
0521	EST_Rsvd2						R	EST_Rsvd2	End User		0
0522											
0523											
0524											
0525											
0526											
0527											
0528											
0529											
052A											
052B											
052C											
052D											
052E											
052F											
0530											
0531											
0532											
0533											
0534											
0535											
0536											
0537											
0538											
0539											
053A											
053B											
053C											
053D											
053E											
053F											
PVInput(0x0580-0x05FF)											
0580	AddressMask_Realtime_Input_PV1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effective	End User	00000000	0000FFFF
0581									End User		
0582									End User		
0583									End User		
0584	Voltage_PV1	U16	0,1	V			R	Voltage_PV1	End User	1	16
0585	Current_PV1	U16	0,01	A			R	Current_PV1	End User	1	32
0586	Power_PV1	U16	0,01	kW			R	Power_PV1	End User	1	64
0587	Voltage_PV2	U16	0,1	V			R	Voltage_PV2	End User	1	128
0588	Current_PV2	U16	0,01	A			R	Current_PV2	End User	1	256
0589	Power_PV2	U16	0,01	kW			R	Power_PV2	End User	1	512
058A	Voltage_PV3	U16	0,1	V			R	Voltage_PV3	End User	1	1024
058B	Current_PV3	U16	0,01	A			R	Current_PV3	End User	1	2048
058C	Power_PV3	U16	0,01	kW			R	Power_PV3	End User	1	4096
058D	Voltage_PV4	U16	0,1	V			R	Voltage_PV4	End User	1	8192
058E	Current_PV4	U16	0,01	A			R	Current_PV4	End User	1	16384
058F	Power_PV4	U16	0,01	kW			R	Power_PV4	End User	1	32768
0590	Voltage_PV5	U16	0,1	V			R	Voltage_PV5	End User		0
0591	Current_PV5	U16	0,01	A			R	Current_PV5	End User		0
0592	Power_PV5	U16	0,01	kW			R	Power_PV5	End User		0
0593	Voltage_PV6	U16	0,1	V			R	Voltage_PV6	End User		0
0594	Current_PV6	U16	0,01	A			R	Current_PV6	End User		0
0595	Power_PV6	U16	0,01	kW			R	Power_PV6	End User		0
0596	Voltage_PV7	U16	0,1	V			R	Voltage_PV7	End User		0
0597	Current_PV7	U16	0,01	A			R	Current_PV7	End User		0
0598	Power_PV7	U16	0,01	kW			R	Power_PV7	End User		0
0599	Voltage_PV8	U16	0,1	V			R	Voltage_PV8	End User		0
059A	Current_PV8	U16	0,01	A			R	Current_PV8	End User		0
059B	Power_PV8	U16	0,01	kW			R	Power_PV8	End User		0
059C	Voltage_PV9	U16	0,1	V			R	Voltage_PV9	End User		0
059D	Current_PV9	U16	0,01	A			R	Current_PV9	End User		0
059E	Power_PV9	U16	0,01	kW			R	Power_PV9	End User		0

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
059F	Voltage_PV10	U16	0,1	V			R	Voltage_PV10	End User		0
05A0	Current_PV10	U16	0,01	A			R	Current_PV10	End User		0
05A1	Power_PV10	U16	0,01	kW			R	Power_PV10	End User		0
05A2	Voltage_PV11	U16	0,1	V			R	Voltage_PV11	End User		0
05A3	Current_PV11	U16	0,01	A			R	Current_PV11	End User		0
05A4	Power_PV11	U16	0,01	kW			R	Power_PV11	End User		0
05A5	Voltage_PV12	U16	0,1	V			R	Voltage_PV12	End User		0
05A6	Current_PV12	U16	0,01	A			R	Current_PV12	End User		0
05A7	Power_PV12	U16	0,01	kW			R	Power_PV12	End User		0
05A8	Voltage_PV13	U16	0,1	V			R	Voltage_PV13	End User		0
05A9	Current_PV13	U16	0,01	A			R	Current_PV13	End User		0
05AA	Power_PV13	U16	0,01	kW			R	Power_PV13	End User		0
05AB	Voltage_PV14	U16	0,1	V			R	Voltage_PV14	End User		0
05AC	Current_PV14	U16	0,01	A			R	Current_PV14	End User		0
05AD	Power_PV14	U16	0,01	kW			R	Power_PV14	End User		0
05AE	Voltage_PV15	U16	0,1	V			R	Voltage_PV15	End User		0
05AF	Current_PV15	U16	0,01	A			R	Current_PV15	End User		0
05B0	Power_PV15	U16	0,01	kW			R	Power_PV15	End User		0
05B1	Voltage_PV16	U16	0,1	V			R	Voltage_PV16	End User		0
05B2	Current_PV16	U16	0,01	A			R	Current_PV16	End User		0
05B3	Power_PV16	U16	0,01	kW			R	Power_PV16	End User		0
05B4											
05B5											
05B6											
05B7											
05B8											
05B9											
05BA											
05BB											
05BC											
05BD											
05BE											
05BF											
05C0	AddressMask_Realtime_Input_PV2	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effictive	End User	00000000	0000000F
05C1									End User		
05C2									End User		
05C3									End User		
05C4											0
05C5											0
05C6											0
05C7											0
05C8											0
05C9											0
05CA											0
05CB											0
05CC											0
05CD											0
05CE											0
05CF											0
05D0											0
05D1											0
05D2											0
05D3											0
05D4											0
05D5											0
05D6											0
05D7											0
05D8											0
05D9											0
05DA											0
05DB											0
05DC											0
05DD											0
05DE											0
05DF											0
05E0											0
05E1											0
05E2											0
05E3											0
05E4											0
05E5											0
05E6											0
05E7											0
05E8											0
05E9											0
05EA											0
05EB											0
05EC											0
05ED											0
05EE											0
05EF											0
05F0											0
05F1											0
05F2											0
05F3											0
BatteryInput(0x0600-0x067F)											
0600								These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field,	End User		
0601									End User		
0602									End User		

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
0603	AddressMask_Realtime_Input_Bat1	U64					R	Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effective	End User	00000000	FFFFFFF
0604	Voltage_Bat1	U16	0,1	V			R	Voltage_Bat1	End User	1	16
0605	Current_Bat1	I16	0,01	A			R	Current_Bat1, charge is positive , discharge is negative	End User	1	32
0606	Power_Bat1	I16	0,01	kW			R	Power_Bat1,charge is positive , discharge is negative	End User	1	64
0607	Temperature_Env_Bat1	I16	1	°C			R	Temperature_Env_Bat1	End User	1	128
0608	SOC_Bat1	U16	1	%			R	SOC_Bat1	End User	1	256
0609	SOH_Bat1	U16	1	%			R	SOH_Bat1	End User	1	512
060A	ChargeCycle_Bat1	U16	1	cycle			R	ChargeCycle_Bat1	End User	1	1024
060B	Voltage_Bat2	U16	0,1	V			R	Voltage_Bat2	End User	1	2048
060C	Current_Bat2	I16	0,01	A			R	Current_Bat2	End User	1	4096
060D	Power_Bat2	I16	0,01	kW			R	Power_Bat2	End User	1	8192
060E	Temperature_Env_Bat2	I16	1	°C			R	Temperature_Env_Bat2	End User	1	16384
060F	SOC_Bat2	U16	1	%			R	SOC_Bat2	End User	1	32768
0610	SOH_Bat2	U16	1	%			R	SOH_Bat2	End User	1	65536
0611	ChargeCycle_Bat2	U16	1	cycle			R	ChargeCycle_Bat2	End User	1	131072
0612	Voltage_Bat3	U16	0,1	V			R	Voltage_Bat3	End User	1	262144
0613	Current_Bat3	I16	0,01	A			R	Current_Bat3	End User	1	524288
0614	Power_Bat3	I16	0,01	kW			R	Power_Bat3	End User	1	1048576
0615	Temperature_Env_Bat3	I16	1	°C			R	Temperature_Env_Bat3	End User	1	2097152
0616	SOC_Bat3	U16	1	%			R	SOC_Bat3	End User	1	4194304
0617	SOH_Bat3	U16	1	%			R	SOH_Bat3	End User	1	8388608
0618	ChargeCycle_Bat3	U16	1	cycle			R	ChargeCycle_Bat3	End User	1	16777216
0619	Voltage_Bat4	U16	0,1	V			R	Voltage_Bat4	End User	1	33554432
061A	Current_Bat4	I16	0,01	A			R	Current_Bat4	End User	1	67108864
061B	Power_Bat4	I16	0,01	kW			R	Power_Bat4	End User	1	134217728
061C	Temperature_Env_Bat4	I16	1	°C			R	Temperature_Env_Bat4	End User	1	268435456
061D	SOC_Bat4	U16	1	%			R	SOC_Bat4	End User	1	536870912
061E	SOH_Bat4	U16	1	%			R	SOH_Bat4	End User	1	1073741824
061F	ChargeCycle_Bat4	U16	1	cycle			R	ChargeCycle_Bat4	End User	1	2147483648
0620	Voltage_Bat5	U16	0,1	V			R	Voltage_Bat5	End User		0
0621	Current_Bat5	I16	0,01	A			R	Current_Bat5	End User		0
0622	Power_Bat5	I16	0,01	kW			R	Power_Bat5	End User		0
0623	Temperature_Env_Bat5	I16	1	°C			R	Temperature_Env_Bat5	End User		0
0624	SOC_Bat5	U16	1	%			R	SOC_Bat5	End User		0
0625	SOH_Bat5	U16	1	%			R	SOH_Bat5	End User		0
0626	ChargeCycle_Bat5	U16	1	cycle			R	ChargeCycle_Bat5	End User		0
0627	Voltage_Bat6	U16	0,1	V			R	Voltage_Bat6	End User		0
0628	Current_Bat6	I16	0,01	A			R	Current_Bat6	End User		0
0629	Power_Bat6	I16	0,01	kW			R	Power_Bat6	End User		0
062A	Temperature_Env_Bat6	I16	1	°C			R	Temperature_Env_Bat6	End User		0
062B	SOC_Bat6	U16	1	%			R	SOC_Bat6	End User		0
062C	SOH_Bat6	U16	1	%			R	SOH_Bat6	End User		0
062D	ChargeCycle_Bat6	U16	1	cycle			R	ChargeCycle_Bat6	End User		0
062E	Voltage_Bat7	U16	0,1	V			R	Voltage_Bat7	End User		0
062F	Current_Bat7	I16	0,01	A			R	Current_Bat7	End User		0
0630	Power_Bat7	I16	0,01	kW			R	Power_Bat7	End User		0
0631	Temperature_Env_Bat7	I16	1	°C			R	Temperature_Env_Bat7	End User		0
0632	SOC_Bat7	U16	1	%			R	SOC_Bat7	End User		0
0633	SOH_Bat7	U16	1	%			R	SOH_Bat7	End User		0
0634	ChargeCycle_Bat7	U16	1	cycle			R	ChargeCycle_Bat7	End User		0
0635	Voltage_Bat8	U16	0,1	V			R	Voltage_Bat8	End User		0
0636	Current_Bat8	I16	0,01	A			R	Current_Bat8	End User		0
0637	Power_Bat8	I16	0,01	kW			R	Power_Bat8	End User		0
0638	Temperature_Env_Bat8	I16	1	°C			R	Temperature_Env_Bat8	End User		0
0639	SOC_Bat8	U16	1	%			R	SOC_Bat8	End User		0
063A	SOH_Bat8	U16	1	%			R	SOH_Bat8	End User		0
063B	ChargeCycle_Bat8	U16	1	cycle			R	ChargeCycle_Bat8	End User		0
063C											
063D											
063E											
063F											
0640	AddressMask_Realtime_Input_Bat2	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effective	End User	00000000	0000000F
0641									End User		
0642									End User		
0643									End User		
0644	Voltage_Bat9	U16	0,1	V			R	Voltage_Bat9	End User		0
0645	Current_Bat9	I16	0,01	A			R	Current_Bat9	End User		0
0646	Power_Bat9	I16	0,01	kW			R	Power_Bat9	End User		0
0647	Temperature_Env_Bat9	I16	1	°C			R	Temperature_Env_Bat9	End User		0
0648	SOC_Bat9	U16	1	%			R	SOC_Bat9	End User		0
0649	SOH_Bat9	U16	1	%			R	SOH_Bat9	End User		0
064A	ChargeCycle_Bat9	U16	1	cycle			R	ChargeCycle_Bat9	End User		0
064B	Voltage_Bat10	U16	0,1	V			R	Voltage_Bat10	End User		0
064C	Current_Bat10	I16	0,01	A			R	Current_Bat10	End User		0
064D	Power_Bat10	I16	0,01	kW			R	Power_Bat10	End User		0
064E	Temperature_Env_Bat10	I16	1	°C			R	Temperature_Env_Bat10	End User		0
064F	SOC_Bat10	U16	1	%			R	SOC_Bat10	End User		0
0650	SOH_Bat10	U16	1	%			R	SOH_Bat10	End User		0
0651	ChargeCycle_Bat10	U16	1	cycle			R	ChargeCycle_Bat10	End User		0
0652	Voltage_Bat11	U16	0,1	V			R	Voltage_Bat11	End User		0
0653	Current_Bat11	I16	0,01	A			R	Current_Bat11	End User		0
0654	Power_Bat11	I16	0,01	kW			R	Power_Bat11	End User		0
0655	Temperature_Env_Bat11	I16	1	°C			R	Temperature_Env_Bat11	End User		0
0656	SOC_Bat11	U16	1	%			R	SOC_Bat11	End User		0
0657	SOH_Bat11	U16	1	%			R	SOH_Bat11	End User		0
0658	ChargeCycle_Bat11	U16	1	cycle			R	ChargeCycle_Bat11	End User		0
0659	Voltage_Bat12	U16	0,1	V			R	Voltage_Bat12	End User		0
065A	Current_Bat12	I16	0,01	A			R	Current_Bat12	End User		0
065B	Power_Bat12	I16	0,01	kW			R	Power_Bat12	End User		0
065C	Temperature_Env_Bat12	I16	1	°C			R	Temperature_Env_Bat12	End User		0
065D	SOC_Bat12	U16	1	%			R	SOC_Bat12	End User		0

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
065E	SOH_Bat12	U16	1	%			R	SOH_Bat12	End User		0
065F	ChargeCycle_Bat12	U16	1	cycle			R	ChargeCycle_Bat12	End User		0
Generation(0x0680-0x06BF)											
0680	AddressMask_Realtime_ElectricityStatistics1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effective	End User	00000000	0FFFFFFF
0681									End User		
0682									End User		
0683									End User		
0684	PV_Generation_Today	U32	0,01	kWh			R	PV_Generation_Today	End User	1	16
0685									End User	1	32
0686	PV_Generation_Total	U32	0,1	kWh			R	PV_Generation_Total	End User	1	64
0687									End User	1	128
0688	Load_Consumption_Today	U32	0,01	kWh			R	Load_Consumption_Today	End User	1	256
0689									End User	1	512
068A	Load_Consumption_Total	U32	0,1	kWh			R	Load_Consumption_Total	End User	1	1024
068B									End User	1	2048
068C	Energy_Purchase_Today	U32	0,01	kWh			R	Energy_Purchase_Today	End User	1	4096
068D									End User	1	8192
068E	Energy_Purchase_Total	U32	0,1	kWh			R	Energy_Purchase_Total	End User	1	16384
068F									End User	1	32768
0690	Energy_Selling_Today	U32	0,01	kWh			R	Energy_Selling_Today	End User	1	65536
0691									End User	1	131072
0692	Energy_Selling_Total	U32	0,1	kWh			R	Energy_Selling_Total	End User	1	262144
0693									End User	1	524288
0694	Bat_Charge_Today	U32	0,01	kWh			R	Bat_Charge_Today	End User	1	1048576
0695									End User	1	2097152
0696	Bat_Charge_Total	U32	0,1	kWh			R	Bat_Charge_Total	End User	1	4194304
0697									End User	1	8388608
0698	Bat_Discharge_Today	U32	0,01	kWh			R	Bat_Discharge_Today	End User	1	16777216
0699									End User	1	33554432
069A	Bat_Discharge_Total	U32	0,1	kWh			R	Bat_Discharge_Total	End User	1	67108864
069B									End User	1	134217728
069C											
069D											
069E											
069F											
06A0											
06A1											
06A2											
06A3											
06A4											
06A5											
06A6											
06A7											
06A8											
06A9											
06AA											
06AB											
06AC											
06AD											
06AE											
06AF											
06B0											
06B1											
06B2											
06B3											
06B4											
06B5											
06B6											
06B7											
06B8											
06B9											
06BA											
06BB											
06BC											
06BD											
06BE											
06BF											
Internal Info(0x06C0-0x06FF)											
06C0	AddressMask_Realtime_ClassifiedInfo1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effective	Installer	00000000	00007FFF
06C1									Installer		
06C2									Installer		
06C3									Installer		
06C4	GFCI	U16	1	mA			R	GFCI	Installer	1	16
06C5	Current_Bus_Balance	I16	0,01	A			R	Current_Bus_Balance	Installer	1	32
06C6	DCI_R	I16	1	mA			R	DCI_R	Installer	1	64
06C7	DCI_S	I16	1	mA			R	DCI_S	Installer	1	128
06C8	DCI_T	I16	1	mA			R	DCI_T	Installer	1	256
06C9	DCV_R	I16	1	mV			R	DCV_R	Installer	1	512
06CA	DCV_S	I16	1	mV			R	DCV_S	Installer	1	1024
06CB	DCV_T	I16	1	mV			R	DCV_T	Installer	1	2048
06CC	Voltage_Bus	U16	0,1	V			R	Voltage_Bus	Installer	1	4096
06CD	Voltage_Bus_P	U16	0,1	V			R	Voltage_Bus_P	Installer	1	8192
06CE	Voltage_Bus_N	U16	0,1	V			R	Voltage_Bus_N	Installer	1	16384
06CF	Voltage_Bus_LLC	U16	0,1	V			R	Voltage_Bus_LLC	Installer		0
06D0	Current_BuckBoost	I16	0,01	A			R	Current_BuckBoost	Installer		0
06D1	Voltage_Bus_P_Half	U16	0,1	V			R	Voltage_Bus_P_Half			
06D2	Voltage_Bus_N_Half	U16	0,1	V			R	Voltage_Bus_N_Half			
06D3	FlyingCap_Voltage1	U16	0,1	V			R	FlyingCap_Voltage1			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
06D4	FlyingCap_Voltage2	U16	0,1	V			R	FlyingCap_Voltage2			
06D5	FlyingCap_Voltage3	U16	0,1	V			R	FlyingCap_Voltage3			
06D6	FlyingCap_Voltage4	U16	0,1	V			R	FlyingCap_Voltage4			
06D7	FlyingCap_Voltage5	U16	0,1	V			R	FlyingCap_Voltage5			
06D8	FlyingCap_Voltage6	U16	0,1	V			R	FlyingCap_Voltage6			
06D9	FlyingCap_Voltage7	U16	0,1	V			R	FlyingCap_Voltage7			
06DA	FlyingCap_Voltage8	U16	0,1	V			R	FlyingCap_Voltage8			
06DB	FlyingCap_Voltage9	U16	0,1	V			R	FlyingCap_Voltage9			
06DC	FlyingCap_Voltage10	U16	0,1	V			R	FlyingCap_Voltage10			
06DD	FlyingCap_Voltage11	U16	0,1	V			R	FlyingCap_Voltage11			
06DE	FlyingCap_Voltage12	U16	0,1	V			R	FlyingCap_Voltage12			
06DF	FlyingCap_Voltage13	U16	0,1	V			R	FlyingCap_Voltage13			
06E0	FlyingCap_Voltage14	U16	0,1	V			R	FlyingCap_Voltage14			
06E1	FlyingCap_Voltage15	U16	0,1	V			R	FlyingCap_Voltage15			
06E2	FlyingCap_Voltage16	U16	0,1	V			R	FlyingCap_Voltage16			
06E3											
06E4											
06E5											
06E6											
06E7											
06E8											
06E9											
06EA											
06EB											
06EC											
06ED											
06EE											
06EF											
06F0											
06F1											
06F2											
06F3											
06F4											
06F5											
06F6											
06F7											
06F8											
06F9											
06FA											
06FB											
06FC											
06FD											
06FE											
06FF											
Junction board Info(0x0700-0x077F)											
0700	AddressMask_Realtime_CombinerInfo1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effective 1:Effective	Installer	00000000	0000000F
0701									Installer		
0702									Installer		
0703									Installer		
0704	Voltage_Group1	U16	0,1	V			R	Voltage_Group1		0	0
0705	Current_Group1_Branch1	U16	0,01	A			R	Current_Group1_Branch1			
0706	Current_Group1_Branch2	U16	0,01	A			R	Current_Group1_Branch2			
0707	Voltage_Group2	U16	0,1	V			R	Voltage_Group2			
0708	Current_Group2_Branch1	U16	0,01	A			R	Current_Group2_Branch1			
0709	Current_Group2_Branch2	U16	0,01	A			R	Current_Group2_Branch2			
070A	Voltage_Group3	U16	0,1	V			R	Voltage_Group3			
070B	Current_Group3_Branch1	U16	0,01	A			R	Current_Group3_Branch1			
070C	Current_Group3_Branch2	U16	0,01	A			R	Current_Group3_Branch2			
070D	Voltage_Group4	U16	0,1	V			R	Voltage_Group4			
070E	Current_Group4_Branch1	U16	0,01	A			R	Current_Group4_Branch1			
070F	Current_Group4_Branch2	U16	0,01	A			R	Current_Group4_Branch2			
0710	Voltage_Group5	U16	0,1	V			R	Voltage_Group5			
0711	Current_Group5_Branch1	U16	0,01	A			R	Current_Group5_Branch1			
0712	Current_Group5_Branch2	U16	0,01	A			R	Current_Group5_Branch2			
0713	Voltage_Group6	U16	0,1	V			R	Voltage_Group6			
0714	Current_Group6_Branch1	U16	0,01	A			R	Current_Group6_Branch1			
0715	Current_Group6_Branch2	U16	0,01	A			R	Current_Group6_Branch2			
0716	Voltage_Group7	U16	0,1	V			R	Voltage_Group7			
0717	Current_Group7_Branch1	U16	0,01	A			R	Current_Group7_Branch1			
0718	Current_Group7_Branch2	U16	0,01	A			R	Current_Group7_Branch2			
0719	Voltage_Group8	U16	0,1	V			R	Voltage_Group8			
071A	Current_Group8_Branch1	U16	0,01	A			R	Current_Group8_Branch1			
071B	Current_Group8_Branch2	U16	0,01	A			R	Current_Group8_Branch2			
071C	Voltage_Group9	U16	0,1	V			R	Voltage_Group9			
071D	Current_Group9_Branch1	U16	0,01	A			R	Current_Group9_Branch1			
071E	Current_Group9_Branch2	U16	0,01	A			R	Current_Group9_Branch2			
071F	Voltage_Group10	U16	0,1	V			R	Voltage_Group10			
0720	Current_Group10_Branch1	U16	0,01	A			R	Current_Group10_Branch1			
0721	Current_Group10_Branch2	U16	0,01	A			R	Current_Group10_Branch2			
0722	Voltage_Group11	U16	0,1	V			R	Voltage_Group11			
0723	Current_Group11_Branch1	U16	0,01	A			R	Current_Group11_Branch1			
0724	Current_Group11_Branch2	U16	0,01	A			R	Current_Group11_Branch2			
0725	Voltage_Group12	U16	0,1	V			R	Voltage_Group12			
0726	Current_Group12_Branch1	U16	0,01	A			R	Current_Group12_Branch1			
0727	Current_Group12_Branch2	U16	0,01	A			R	Current_Group12_Branch2			
0728	Voltage_Group13	U16	0,1	V			R	Voltage_Group13			
0729	Current_Group13_Branch1	U16	0,01	A			R	Current_Group13_Branch1			
072A	Current_Group13_Branch2	U16	0,01	A			R	Current_Group13_Branch2			
072B	Voltage_Group14	U16	0,1	V			R	Voltage_Group14			
072C	Current_Group14_Branch1	U16	0,01	A			R	Current_Group14_Branch1			
072D	Current_Group14_Branch2	U16	0,01	A			R	Current_Group14_Branch2			
072E	Voltage_Group15	U16	0,1	V			R	Voltage_Group15			
072F	Current_Group15_Branch1	U16	0,01	A			R	Current_Group15_Branch1			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
0730	Current_Group15_Branch2	U16	0,01	A			R	Current_Group15_Branch2			
0731	Voltage_Group16	U16	0,1	V			R	Voltage_Group16			
0732	Current_Group16_Branch1	U16	0,01	A			R	Current_Group16_Branch1			
0733	Current_Group16_Branch2	U16	0,01	A			R	Current_Group16_Branch2			
0734											
0735											
0736											
0737											
0738											
0739											
073A											
073B											
073C											
073D											
073E											
073F											
0740	AddressMask_Realtime_CombinerInfo1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effictive	Installer	00000000	0000000F
0741									Installer		
0742									Installer		
0743									Installer		
0744										0	0
0745											
0746											
0747											
0748											
0749											
074A											
074B											
074C											
074D											
074E											
074F											
0750											
0751											
0752											
0753											
0754											
0755											
0756											
0757											
0758											
0759											
075A											
075B											
075C											
075D											
075E											
075F											
0760											
0761											
0762											
0763											
0764											
0765											
0766											
0767											
0768											
0769											
076A											
076B											
076C											
076D											
076E											
076F											
0770											
0771											
0772											
0773											
0774											
0775											
0776											
0777											
0778											
0779											
077A											
077B											
077C											
077D											
077E											
077F											
Parameter Configuration(0x1000-0x17FF)											
Basic Parameter Configuration(0x1000-0x10FF)											
1000	AddressMask_Config_Basic1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effictive	Installer	00FF63FE	001EFFFF
1001									Installer		
1002									Installer		
1003									Installer		
1004	SysTimeConfig_Year	U16		年	0	99	RW	SysTimeConfig_Year	Installer	1	16
1005	SysTimeConfig_Month	U16		月	1	12	RW	SysTimeConfig_Month	Installer	1	32
1006	SysTimeConfig_Date	U16		日	1	31	RW	SysTimeConfig_Date	Installer	1	64

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
1007	SysTimeConfig_Hour	U16		时	0	23	RW	SysTimeConfig_Hour	Installer	1	128
1008	SysTimeConfig_Minute	U16		分	0	59	RW	SysTimeConfig_Minute	Installer	1	256
1009	SysTimeConfig_Second	U16		Second	0	59	RW	SysTimeConfig_Second	Installer	1	512
100A	SysTimeConfig_Control	U16			1	1	RW	Write value "1" to this register to update the value in above Shadow Register to system time. Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	1	1024
100B	RS485Config_Address	U16			1	247	RW	RS485Config_Address	Installer	1	2048
100C	RS485Config_Baud	U16			0	4	RW	RS485 Baudrate ; 0:4800bps 1:9600bps(Default) 2:19200bps 3:38400bps 4:57600bps	Installer	1	4096
100D	RS485Config_StopBit	U16			0	2	RW	RS485Config_StopBit 0:1(default) 1:1.5 2:2	Installer	1	8192
100E	RS485Config_ParityBit	U16			0	4	RW	RS485Config_ParityBit 0:None(Default) 1:Even 2:Odd 3:Mark 4:Space	Installer	1	16384
100F	RS485Config_Control	U16			1	1	RW	Write value "1" to this register to update the value in above Shadow Register to RS485 configuration. Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	1	32768
1010	PV_InputMode_Config	U16			0	1	RW	PV_InputMode_Config 0:Parallel 1:Indepent(Default)	Installer		0
1011	InputType_Channel0_Config	U16			0	255	RW	InputType_Channel0_Config 0 means do not use this channel 1~127 means this channel is PV panle input 128~255 means this channel is battery input If values of two or above chanel are the same ,it means these channels are in parallel.	Installer	1	131072
1012	InputType_Channel1_Config	U16			0	255	RW	InputType_Channel1_Config	Installer	1	262144
1013	InputType_Channel2_Config	U16			0	255	RW	InputType_Channel2_Config	Installer	1	524288
1014	InputType_Channel3_Config	U16			0	255	RW	InputType_Channel3_Config	Installer	1	1048576
1015	InputType_Channel4_Config	U16			0	255	RW	InputType_Channel4_Config	Installer		0
1016	InputType_Channel5_Config	U16			0	255	RW	InputType_Channel5_Config	Installer		0
1017	InputType_Channel6_Config	U16			0	255	RW	InputType_Channel6_Config	Installer		0
1018	InputType_Channel7_Config	U16			0	255	RW	InputType_Channel7_Config	Installer		0
1019	InputType_Channel8_Config	U16			0	255	RW	InputType_Channel8_Config	Installer		0
101A	InputType_Channel9_Config	U16			0	255	RW	InputType_Channel9_Config	Installer		0
101B	InputType_Channel10_Config	U16			0	255	RW	InputType_Channel10_Config	Installer		0
101C	InputType_Channel11_Config	U16			0	255	RW	InputType_Channel11_Config	Installer		0
101D	InputType_Channel12_Config	U16			0	255	RW	InputType_Channel12_Config	Installer		0
101E	InputType_Channel13_Config	U16			0	255	RW	InputType_Channel13_Config	Installer		0
101F	InputType_Channel14_Config	U16			0	255	RW	InputType_Channel14_Config	Installer		0
1020	InputType_Channel15_Config	U16			0	255	RW	InputType_Channel15_Config	Installer		0
1021	InputType_Control	U16			1	1	RW	Write value "1" to this register to update the value in above Shadow Register to input channel type configuration. Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	1	8589934592
1022	SafetyUpdateFromUSB_Control	U16			1	1	RW	Write value "1" to take safety country parameters from pen drive Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	1	17179869184
1023	AntiReflux_Control	U16			0	1	RW	AntiReflux_Control	Installer	1	34359738368
1024	AntiReflux_Power	U16	1	%Pn	0	65535	RW	AntiReflux_Power	Installer	1	68719476736
1025	IVCurveScan_Control	U16			0	1	RW	IVCurveScan_Control	Installer	1	1,37439E+11
1026	IVCurveScan_Period	U16	1	Minute	5	65535	RW	IVCurveScan_Period	Installer	1	2,74878E+11
1027	IVCurveScan_Oneshot	U16			1	1	RW	IVCurveScan_Oneshot Write value "1" to enable IV curve scan for one time Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	1	5,49756E+11
1028	IVCurveScan_ReadChannel	U16			0	31	RW	IVCurveScan_ReadChannel	Installer	1	1,09951E+12
1029	EPS_Control	U16			0	2	RW	EPS_Control 0:Disable (Default) 1:Enable EPS, disable cold start 2:Enable EPS,Enable cold start	Installer	1	2,19902E+12
102A	EPS_WaitTime	U16	1	Second	0	65535	RW	EPS wait time(reserved function)	Installer		0
102B	BatteryActive_Control	U16			0	1	RW	BatteryActive_Control	Installer		0

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
102C	BatteryActive_Oneshot	U16			1	1	RW	BatteryActive_Oneshot Write value "1" to enable batter active for one time Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	0	0
102D	CT_Auto_Calibrate	U16			1	1	RW	CT_Auto_Calibrate Write value "1" to enable CT Calibrate for one time Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	1	3,51844E+13
102E	Italy_AutoTest	U16			1	2	RW	Italy_AutoTest Write value: 0x0001:execute standard test ; 0x0002:execute fast test ; Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	1	7,03687E+13
102F		U16					RW				0
1030	EnergyStatistics_Date_Year	U16	1	Year	0	19	RW	EnergyStatistics_Date_Year. The value means the difference compared to current system time. 0:Year(current system Year value) ; 1:1 year before system time year ; ... 19:19 years before system time year.		1	2,81475E+14
1031	EnergyStatistics_Date_Month	U16	1	Month	1	12	RW	EnergyStatistics_Date_Month		1	5,6295E+14
1032	EnergyStatistics_Date_Date	U16	1	Day	1	31	RW	EnergyStatistics_Date_Date.		1	1,1259E+15
1033	EnergyStatistics_Config	U16					RW	EnergyStatistics_Config Hi Byte:Set EnergyStatistics time. 0x01:Daily,Data 1~24 ; 0x02:Every Month,Data 1~31 ; 0x03:Every Year,Data 1~12 ; 0x04:Life time,Data 1~20 ; Other: invalid. Low byte:Select EnergyStatistics parameter. 0x01:PV Generation ; 0x02:Load Consumption ; 0x03:System Import ; 0x04:System Export ; 0x05: Battery charge ; 0x06: Battery discharge ; Other: invalid.		1	2,2518E+15
1034	Language	U16			0	65535	RW	Language Selection 0: 1:		1	4,5036E+15
1035	Parallel_Control	U16			0	1	RW	0:Disable parallel connection 1:Enable parallel connection		1	9,0072E+15
1036	Parallel_Master_Slave	U16			0	1	RW	0:Set this inverter as slave 1:Set this inverter as Master		1	1,80144E+16
1037	Parallel_Address	U16			0	10	RW	Address in parallel connection		1	3,60288E+16
1038	UnbalancedSupport_Control	U16			0	1	RW	3phase 4wire, UnbalancedSupport_Control 0:Disable UnbalancedSupport 1:Enable UnbalancedSupport			0
1039											0
103A											0
103B											0
103C											0
103D											0
103E											
103F											
1040	AddressMask_Config_Basic2	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register. bit4 controls the 5th register in this field	Installer	00000000	000BFFFF
1041									Installer		
1042									Installer		
1043									Installer		
1044	BatConfig_ID	U16			0	7	RW	The ID value in this register means the physcial battery input port. Write this value to this register to set the physcial battery input port parameter.	Installer	1	16
1045	BatConfig_Address	U16					RW	If multiple battery are connected in the system , this register is used to mark the battery address connected on the pyscial battery input port.	Installer	1	32
1046	BatConfig_Potocol	U16			0	65535	RW	Battery Parameter-Communication protocol: 0:Sofar Inner BMS/DEFAULT 1:PylonTech/PYLON 2:SOFAR BMS/GENERAL 3:AMASS 4:LG 5:Alpha.ESS 6:CATL	Installer	1	64
1047	BatConfig_Voltage_Over	U16	0,1	V	0	65535	RW	Battery Parameter-Over voltage protection value	Installer	1	128
1048	BatConfig_Voltage_Charge	U16	0,1	V	0	65535	RW	Battery Parameter-Charge Voltage	Installer	1	256
1049	BatConfig_Voltage_Lack	U16	0,1	V	0	65535	RW	Battery Parameter-Low voltage protection value For Lead Acid Battery	Installer	1	512
104A	BatConfig_Voltage_Discharge_Stop	U16	0,1	V	0	65535	RW	Battery Parameter-Mimimum discharge voltage	Installer	1	1024
104B	BatConfig_Current_Charge_Limit	U16	0,01	A	0	65535	RW	Battery Parameter-Maximum Charge current limit	Installer	1	2048
104C	BatConfig_Current_Discharge_Limit	U16	0,01	A	0	65535	RW	Battery Parameter-Maximum discharge current limit	Installer	1	4096
104D	BatConfig_Depth_of_Discharge	U16	1	%	1	90	RW	DOD means maximum discharge capacity when grid is ON,When SOC<1-DOD,inverter will stop discharge, DOD<=EOD.	Installer	1	8192
104E	BatConfig_End_of_Discharge	U16	1	%	1	90	RW	EOD means maximum discharge capacity when grid is ON,When SOC<1-DOD,inverter will stop discharge.	Installer	1	16384
104F	BatConfig_Capacity	U16	1	Ah	1	65535	RW	Battery Parameter- Battery Capacity(Default 50)	Installer	1	32768
1050	BatConfig_Voltage_Nominal	U16	0,1	V	0	65535	RW	Battery Parameter-Rated BatteryVoltage(Default 0)	Installer	1	65536

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
1051	BatConfig_Cell_Type	U16	1		0	3	RW	BatConfig_Cell_Type 0:Lead Acid(Default) 1:LiFePO4 2:Li(NiCoMn)O2 3:Li2TiO3	Installer	1	131072
1052	BatConfig_Impedance	U16	±	mΩ	0	65535	RW	Battery Parameter lead acid resistance value ; Default value:50mΩ ; Internal Resistance+cable resistance	Installer	0	0
1053	BatConfig_Control	U16					RW	Battery Parameter write control ; Write value "1" to this register to update the value in Battery Shadow Register to battery parameter configuration. Write value "2" to this register to reset the value in Battery Shadow Register as BatConfig_Potocol Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	Installer	1	524288
1054											
1055											
1056											
1057											
1058											
1059											
105A											
105B											
105C											
105D											
105E											
105F											
1060											
1061											
1062											
1063											
1064											
1065											
1066											
1067											
1068											
1069											
106A											
106B											
106C											
106D											
106E											
106F											
1070											
1071											
1072											
1073											
1074											
1075											
1076											
1077											
1078											
1079											
107A											
107B											
107C											
107D											
107E											
107F											
Remote Control(0x1100-0x12FF)											
1100	AddressMask_Config_Remote1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effictive	End User	00000000	0000000F
1101									End User		
1102									End User		
1103									End User		
1104	Remote_On_Off_Control	U16			0	1	RW	Remote_On_Off_Control 0x0000:OFF 0x0001:ON	End User	0	0
1105									End User		
1106									End User		
1107									End User		
1108									End User		
1109									End User		
110A									End User		
110B									End User		
110C									End User		
110D									End User		
110E									End User		
110F									End User		
1110	Energy_Storage_Mode_Control	U16			0	4	RW	Energy_Storage_Mode_Control 0:1.Self-use Mode 1:Time of Use Mode 2:Timing Mode 3:Passive Mode 4:peaking Shaving Mode This register is used to change inverter mode.	End User		
1111	Timing_ID	U16			0	3	RW	Timing_ID ; Smaller ID has higher priority. Write value to this register to select the timing ID	End User		
1112	Timing_On_Off_Control	U16			0	1	RW	Timing-charge/discharge enable control ; Bit0:Charge Enable Bit1:Discharge Enable	End User		
1113	Timing_Charge_Start	U16	1 1	Hour Minute	0 0	23 59	RW	Hi Byte:Charge Start Hour Low byte:Charge Start Minute	End User		

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
1114	Timing_Charge_End	U16	1 1	Hour Minute	0 0	23 59	RW	Hi Byte.End ChargeHour Low byte.End ChargeMinute	End User		
1115	Timing_Discharge_Start	U16	1 1	Hour Minute	0 0	23 59	RW	Hi Byte.Charge start Hour Low byte.Charge start Minute	End User		
1116	Timing_Discharge_End	U16	1 1	Hour Minute	0 0	23 59	RW	Hi Byte.Charge End Hour Low byte.Charge End Minute	End User		
1117	Timing_Power_Charge	U32	1	W	1	4294967296	RW	Timing-Charge power	End User		
1118									End User		
1119	Timing_Power_Discharge	U32	1	W	1	4294967296	RW	Timing-Disharge power	End User		
111A									End User		
111B	Timing_Rsvd1							Timing-Reserved 1	End User		
111C	Timing_Rsvd2							Timing-Reserved 2	End User		
111D	Timing_Rsvd3							Timing-Reserved 3	End User		
111E	Timing_Rsvd4							Timing-Reserved 4	End User		
111F	Timing_Control	U16			1	1	RW	Write value "1" to this register to update the value in above Shadow Register to Timing mode configuration; Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	End User		
1120	TOU_ID	U16			0	7	RW	Smaller ID has higher priority Write value to this register to select the Time of Use-Rules ID	End User		
1121	TOU_On_Off_Control	U16			0	1	RW	Time of Use-Rules Enable ; 0:Disable 1:Enable	End User		
1122	TOU_Charge_Start	U16	1 1	Hour Minute	0 0	23 59	RW	Hi Byte.Charge Start Hour Low byte.Charge Start Minute	End User		
1123	TOU_Charge_End	U16	1 1	Hour Minute	0 0	23 59	RW	Hi Byte.End ChargeHour Low byte.End ChargeMinute	End User		
1124	TOU_Charge_Target_SOC	U16	1	%	30	100	RW	Time of Use-End SOC of force charge ; When battery SOC reach this value ,inverter stop charging and enter Self-Use Mode, it will also disable discharge..	End User		
1125	TOU_Charge_Power	U32	1	W	1	4294967296	RW	Time of Use-Force Charge power ; Setting velse can not be higher than inverter rated power.	End User		
1126									End User		
1127	TOU_Executed_Date_Start	U16	1 1	月 日	1 1	12 31	RW	Hi Byte.Rules start Month Low byte.Rules start Date	End User		
1128	TOU_Executed_Date_End	U16	1 1	月 日	1 1	12 31	RW	Hi Byte.Rules end Month Low byte.Rules end Date	End User		
1129	TOU_Executed_Day_of_Week	U16					RW	Time of Use-Rules Executed in week ; 0:Not Effective 1: Effective Bit0:Monday Bit1:Tuesday Bit2:Wednesday Bit3: Thursday Bit4:Friday Bit5:Saturday Bit6:Sunday	End User		
112A	TOU_Rsvd1							Time of Use-Reserved 1	End User		
112B	TOU_Rsvd2							Time of Use-Reserved 2	End User		
112C	TOU_Rsvd3							Time of Use-Reserved 3	End User		
112D	TOU_Rsvd4							Time of Use-Reserved 4	End User		
112E	TOU_Rsvd5							Time of Use-Reserved 5	End User		
112F	TOU_Control	U16			1	1	RW	Time of Use- Write CControl ; Write value "1" to this register to update the value in above Shadow Register to Time of Use configuration ; Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFC:fail,no response 0xFFFD:fail,this function is forbidden 0xFFFE:fail,fail to save parameters 0xFFFF:fail,error in input parameters	End User		
1130	Peak_Shaving_Discharge_Threshold	U32	1	W	100		RW	Peak_Shaving_Discharge_Threshold	End User		
1131									End User		
1132	Peak_Shaving_Charge_Threshold	U32	1	W	100		RW	Peak_Shaving_Charge_Threshold	End User		
1133									End User		
1134											
1135											
1136											
1137											
1138											
1139											
113A											
113B											
113C											
113D											
113E											
113F											
1140	AddressMask_Config_Remote2	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field	End User	00000000	0000000F
1141									End User		
1142									End User		
1143									End User		
1144										0	0
1145											
1146											
1147											
1148											
1149											
114A											
114B											
114C											
114D											
114E											
114F											
1150											
1151											
1152											
1153											
1154											

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
1155											
1156											
1157											
1158											
1159											
115A											
115B											
115C											
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116A											
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1177											
1178											
1179											
117A											
117B											
117C											
117D											
117E											
117F											
1180	AddressMask_Config_Remote3	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register. bit4 controls the 5th register in this field	End User	00000000	0000000F
1181									End User		
1182									End User		
1183									End User		
1184	Passive_Timeout	U16	1	Second	0	65535	RW	Passive Mode_Timeout Control ; Default value:0 ; Set the delay time for timeout,if inverter does not receive any communication in this delay time, inverter will execute the timeout action set in1185. Set value 0 in this register to disable this timeout function.	End User	0	0
1185	Passive_Timeout_Action	U16			0	1	RW	Passive Mode_Timeout Action ; 0:Standby 1:Enter previous storage mode set before inverter entering passive mode.	End User		
1186	Passive_Rsvd1							Passive Mode_Reserved1	End User		
1187	Passive_Manual_Gdes	I32	1	W	-2147483648	2147483647	RW	Manual Mode Desired grid power(Gdes) ; Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
1188									End User		
1189	Passive_Manual_Blo	I32	1	W	-2147483648	2147483647	RW	Manual Mode : Battery minmum charge/dicharge power(Blo) ; Positive value means Charge ; Negative value means Discharge.	End User		
118A									End User		
118B	Passive_Manual_Bup	I32	1	W	-2147483648	2147483647	RW	Manual Mode Battery maximum charge/dicharge power(Bup) ; Positive value means Charge ; Negative value means Discharge.	End User		
118C									End User		
118D	Passive_Manual_Gdzup	I32	1	W	-2147483648	2147483647	RW	Manual Mode: Allowed feeding back power to grid(Gdzup) ; Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
118E									End User		
118F	Passive_Manual_Gdzlo	I32	1	W	-2147483648	2147483647	RW	Manual Mode : Allowed purchasing power from grid (Gdzlo) ; Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
1190									End User		
1191	Passive_Scheduler_Gdes_Ante	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode : Desired grid power(Gdes_Ante) ; Scheduler Parameter,effective in Scheduler time interval. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
1192									End User		
1193	Passive_Scheduler_Blo_Ante	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode : Battery minimum charge/dicharge power(Blo_Ante) ; Scheduler Parameter,effective in Scheduler time interval.. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
1194									End User		
1195	Passive_Scheduler_Bup_Ante	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode Battery maximum charge/dicharge power(Bup_Ante) ; Scheduler Parameter,effective in Scheduler time interval. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
1196									End User		
1197	Passive_Scheduler_Gdzup_Ante	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode: Allowed feeding back power to grid(Gdzup_Ante) ; Scheduler Parameter,effective in Scheduler time interval. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
1198									End User		
1199	Passive_Scheduler_Gdzlo_Ante	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode:Allowed purchasing power from grid (Gdzlo_Ante) ; Scheduler Parameter,effective in Scheduler time interval. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
119A									End User		
119B	Passive_Scheduler_Gdes_Post	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode: desired grid power(Gdes_Post) ; Scheduler Parameter,effective after scheduler time interval. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
119C									End User		
119D	Passive_Scheduler_Blo_Post	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode Battery minumu charge/disharge power(Blo_Post) ; Scheduler Parameter,effective after scheduler time interval.	End User		

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
119E	Passive_Scheduler_Bio_Post	I32	1	W	-2147483648	2147483647	RW	Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
119F	Passive_Scheduler_Bup_Post	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode Battery maximum charge/discharge power(Bup_Post) ;	End User		
11A0								Scheduler Parameter Parameter,effective after scheduler time interval. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
11A1	Passive_Scheduler_Gdzup_Post	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode: allowed power feeding back to grid(Gdzup_Post) ;	End User		
11A2								Scheduler Parameter,effective after scheduler time interval. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
11A3	Passive_Scheduler_Gdzlo_Post	I32	1	W	-2147483648	2147483647	RW	Scheduler Mode: allowed power purchasing from grid(Gdzlo_Post) ;	End User		
11A4								Scheduler Parameter,effective after scheduler time interval. Positive value mean power direction from grid to hybrid system Negative value mean power direction from hybrid system to grid .	End User		
11A5	Passive_Scheduler_StartTime	U32	1	Second	0	4294967296	RW	Scheduler start time StartTime format is unix time As inverter system time is GMT in default, so when you set this parameter, please note the time zone, StartTime=(local Unix Time) ±(difference(in seconds) between local time and UTC/GMT)	End User		
11A6								End User			
11A7	Passive_Scheduler_DurationTime	U32	1	Second	0	4294967296	RW	DurationTime of Scheduler Mode	End User		
11A8									End User		
11A9	Passive_Scheduler_ManagementMode	U16			0	2	RW	Passive_Scheduler_ManagementMode ; 0:Auto Mode 1:Manual Mode 2:Scheduler Mode Other value will be invalid	End User		
11AA											
11AB											
11AC											
11AD											
11AE											
11AF											
11B0											
11B1											
11B2											
11B3											
11B4											
11B5											
11B6											
11B7											
11B8											
11B9											
11BA											
11BB											
11BC											
11BD											
11BE											
11BF											
11C0	AddressMask_Config_Remote4	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field	End User	00000000	0000000F
11C1									End User		
11C2									End User		
11C3									End User		
11C4										0	0
11C5											
Inverter Read Only Result(0x1300-0x15FF)											
1300	AddressMask_Config_ReadOnly_Resu lt1	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field		00000000	0000000F
1301											
1302											
1303											
1304	Italay_Autotest_Result1	U16	0,1	V			R	Italay_Autotest59.s1. Set level 1Over voltage protection value.		0	0
1305	Italay_Autotest_Result2	U16	1	ms			R	Italay_Autotest59.s1. Set level 1 Over voltage protection time.			
1306	Italay_Autotest_Result3	U16	0,1	V			R	Italay_Autotest59.s1. Level 1 Over voltage protection value test result.			
1307	Italay_Autotest_Result4	U16	1	ms			R	Italay_Autotest59.s1. Level 1 Over voltage protection time test result.			
1308	Italay_Autotest_Result5	U16	0,1	V			R	Italay_Autotest59.s2. Set level 2 Over voltage protection value.			
1309	Italay_Autotest_Result6	U16	1	ms			R	Italay_Autotest59.s2. Set level 2 Over voltage protection time.			
130A	Italay_Autotest_Result7	U16	0,1	V			R	Italay_Autotest59.s2. Level 2 Over voltage protection value test result.			
130B	Italay_Autotest_Result8	U16	1	ms			R	Italay_Autotest59.s2. Level 2 Over voltage protection time test result.			
130C	Italay_Autotest_Result9	U16	0,1	V			R	Italay_Autotest27.s1. Set level 1 low voltage protection value.			
130D	Italay_Autotest_Result10	U16	1	ms			R	Italay_Autotest27.s1. Set level 1 low voltage protection time.			
130E	Italay_Autotest_Result11	U16	0,1	V			R	Italay_Autotest27.s1. Level 1 low voltage protection value test result.			
130F	Italay_Autotest_Result12	U16	1	ms			R	Italay_Autotest27.s1. Level 1 low voltage protection time test result.			
1310	Italay_Autotest_Result13	U16	0,1	V			R	Italay_Autotest27.s2. Set level 2 low voltage protection value.			
1311	Italay_Autotest_Result14	U16	1	ms			R	Italay_Autotest27.s2. Set level 2 low voltage protection time.			
1312	Italay_Autotest_Result15	U16	0,1	V			R	Italay_Autotest27.s2. Level 2 low voltage protection value test result.			
1313	Italay_Autotest_Result16	U16	1	ms			R	Italay_Autotest27.s2. Level 2 low voltage protection time test result.			
1314	Italay_Autotest_Result17	U16	0,01	Hz			R	Italay_Autotest81>s1. Set level 1over frequency protection value.			
1315	Italay_Autotest_Result18	U16	1	ms			R	Italay_Autotest81>s1. Set level 1over frequency protection time.			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
1316	Italay_Autotest_Result19	U16	0,01	Hz			R	Italay_Autotest81>s1. Level 1 over frequency protection value test result.			
1317	Italay_Autotest_Result20	U16	1	ms			R	Italay_Autotest81>s1. Level 1 over frequency protection time test result.			
1318	Italay_Autotest_Result21	U16	0,01	Hz			R	Italay_Autotest81>s2. Set level 2 over frequency protection value.			
1319	Italay_Autotest_Result22	U16	1	ms			R	Italay_Autotest81>s2. Set level 2 over frequency protection time.			
131A	Italay_Autotest_Result23	U16	0,01	Hz			R	Italay_Autotest81>s2. Level 2 over frequency protection value test result.			
131B	Italay_Autotest_Result24	U16	1	ms			R	Italay_Autotest81>s2. Level 2 over frequency protection time test result.			
131C	Italay_Autotest_Result25	U16	0,01	Hz			R	Italay_Autotest81<s1. Set level 1low frequency protection value.			
131D	Italay_Autotest_Result26	U16	1	ms			R	Italay_Autotest81<s1. Set level 1low frequency protection time.			
131E	Italay_Autotest_Result27	U16	0,01	Hz			R	Italay_Autotest81<s1. Level 1 low frequency protection value test result.			
131F	Italay_Autotest_Result28	U16	1	ms			R	Italay_Autotest81<s1. Level 1 low frequency protection time test result.			
1320	Italay_Autotest_Result29	U16	0,01	Hz			R	Italay_Autotest81<s2. Set level 2 low frequency protection value.			
1321	Italay_Autotest_Result30	U16	1	ms			R	Italay_Autotest81<s2. Set level 2 low frequency protection time.			
1322	Italay_Autotest_Result31	U16	0,01	Hz			R	Italay_Autotest81<s2. Level 2 low frequency protection value test result.			
1323	Italay_Autotest_Result32	U16	1	ms			R	Italay_Autotest81<s2. Level 2 low frequency protection time test result.			
1324	Italay_Autotest_Result33							Italay_Autotest_Result33			
1325	Italay_Autotest_Result34							Italay_Autotest_Result34			
1326	Italay_Autotest_Result35							Italay_Autotest_Result35			
1327	Italay_Autotest_Result36							Italay_Autotest_Result36			
1328	Italay_Autotest_Result37							Italay_Autotest_Result37			
1329	Italay_Autotest_Result38							Italay_Autotest_Result38			
132A	Italay_Autotest_Result39							Italay_Autotest_Result39			
132B	Italay_Autotest_Result40							Italay_Autotest_Result40			
132C	Italay_Autotest_Result41							Italay_Autotest_Result41			
132D	Italay_Autotest_Result42							Italay_Autotest_Result42			
132E	Italay_Autotest_Result43							Italay_Autotest_Result43			
132F	Italay_Autotest_Result44							Italay_Autotest_Result44			
1330	Italay_Autotest_Result45							Italay_Autotest_Result45			
1331	Italay_Autotest_Result46							Italay_Autotest_Result46			
1332	Italay_Autotest_Result47							Italay_Autotest_Result47			
1333	Italay_Autotest_Result48							Italay_Autotest_Result48			
1340	AddressMask_Config_ReadOnly_Resu lt2	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectitive 1:Effective		00000000	0000000F
1341											
1342											
1343											
1344	IVCurve_Voltage1	U16	0,1	V			R	IVCurve_Voltage1		0	0
1345	IVCurve_Current1	U16	0,01	A			R	IVCurve_Current1			
1346	IVCurve_Voltage2	U16	0,1	V			R	IVCurve_Voltage2			
1347	IVCurve_Current2	U16	0,01	A			R	IVCurve_Current2			
1348	IVCurve_Voltage3	U16	0,1	V			R	IVCurve_Voltage3			
1349	IVCurve_Current3	U16	0,01	A			R	IVCurve_Current3			
134A	IVCurve_Voltage4	U16	0,1	V			R	IVCurve_Voltage4			
134B	IVCurve_Current4	U16	0,01	A			R	IVCurve_Current4			
134C	IVCurve_Voltage5	U16	0,1	V			R	IVCurve_Voltage5			
134D	IVCurve_Current5	U16	0,01	A			R	IVCurve_Current5			
134E	IVCurve_Voltage6	U16	0,1	V			R	IVCurve_Voltage6			
134F	IVCurve_Current6	U16	0,01	A			R	IVCurve_Current6			
1350	IVCurve_Voltage7	U16	0,1	V			R	IVCurve_Voltage7			
1351	IVCurve_Current7	U16	0,01	A			R	IVCurve_Current7			
1352	IVCurve_Voltage8	U16	0,1	V			R	IVCurve_Voltage8			
1353	IVCurve_Current8	U16	0,01	A			R	IVCurve_Current8			
1354	IVCurve_Voltage9	U16	0,1	V			R	IVCurve_Voltage9			
1355	IVCurve_Current9	U16	0,01	A			R	IVCurve_Current9			
1356	IVCurve_Voltage10	U16	0,1	V			R	IVCurve_Voltage10			
1357	IVCurve_Current10	U16	0,01	A			R	IVCurve_Current10			
1358	IVCurve_Voltage11	U16	0,1	V			R	IVCurve_Voltage11			
1359	IVCurve_Current11	U16	0,01	A			R	IVCurve_Current11			
135A	IVCurve_Voltage12	U16	0,1	V			R	IVCurve_Voltage12			
135B	IVCurve_Current12	U16	0,01	A			R	IVCurve_Current12			
135C	IVCurve_Voltage13	U16	0,1	V			R	IVCurve_Voltage13			
135D	IVCurve_Current13	U16	0,01	A			R	IVCurve_Current13			
135E	IVCurve_Voltage14	U16	0,1	V			R	IVCurve_Voltage14			
135F	IVCurve_Current14	U16	0,01	A			R	IVCurve_Current14			
1360	IVCurve_Voltage15	U16	0,1	V			R	IVCurve_Voltage15			
1361	IVCurve_Current15	U16	0,01	A			R	IVCurve_Current15			
1362	IVCurve_Voltage16	U16	0,1	V			R	IVCurve_Voltage16			
1363	IVCurve_Current16	U16	0,01	A			R	IVCurve_Current16			
1364	IVCurve_Voltage17	U16	0,1	V			R	IVCurve_Voltage17			
1365	IVCurve_Current17	U16	0,01	A			R	IVCurve_Current17			
1366	IVCurve_Voltage18	U16	0,1	V			R	IVCurve_Voltage18			
1367	IVCurve_Current18	U16	0,01	A			R	IVCurve_Current18			
1368	IVCurve_Voltage19	U16	0,1	V			R	IVCurve_Voltage19			
1369	IVCurve_Current19	U16	0,01	A			R	IVCurve_Current19			
136A	IVCurve_Voltage20	U16	0,1	V			R	IVCurve_Voltage20			
136B	IVCurve_Current20	U16	0,01	A			R	IVCurve_Current20			
136C	IVCurve_Voltage21	U16	0,1	V			R	IVCurve_Voltage21			
136D	IVCurve_Current21	U16	0,01	A			R	IVCurve_Current21			
136E	IVCurve_Voltage22	U16	0,1	V			R	IVCurve_Voltage22			
136F	IVCurve_Current22	U16	0,01	A			R	IVCurve_Current22			
1370	IVCurve_Voltage23	U16	0,1	V			R	IVCurve_Voltage23			
1371	IVCurve_Current23	U16	0,01	A			R	IVCurve_Current23			
1372	IVCurve_Voltage24	U16	0,1	V			R	IVCurve_Voltage24			
1373	IVCurve_Current24	U16	0,01	A			R	IVCurve_Current24			
1374	IVCurve_Voltage25	U16	0,1	V			R	IVCurve_Voltage25			
1375	IVCurve_Current25	U16	0,01	A			R	IVCurve_Current25			
1376	IVCurve_Voltage26	U16	0,1	V			R	IVCurve_Voltage26			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
1377	IVCurve_Current26	U16	0,01	A			R	IVCurve_Current26			
1378	IVCurve_Voltage27	U16	0,1	V			R	IVCurve_Voltage27			
1379	IVCurve_Current27	U16	0,01	A			R	IVCurve_Current27			
137A	IVCurve_Voltage28	U16	0,1	V			R	IVCurve_Voltage28			
137B	IVCurve_Current28	U16	0,01	A			R	IVCurve_Current28			
137C	IVCurve_Voltage29	U16	0,1	V			R	IVCurve_Voltage29			
137D	IVCurve_Current29	U16	0,01	A			R	IVCurve_Current29			
137E	IVCurve_Voltage30	U16	0,1	V			R	IVCurve_Voltage30			
137F	IVCurve_Current30	U16	0,01	A			R	IVCurve_Current30			
1380	AddressMask_Config_ReadOnly_Resu lt3	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectitive 1:Effective		00000000	0000000F
1381											
1382											
1383											
1384	IVCurve_Voltage31	U16	0,1	V			R	IVCurve_Voltage31		0	0
1385	IVCurve_Current31	U16	0,01	A			R	IVCurve_Current31			
1386	IVCurve_Voltage32	U16	0,1	V			R	IVCurve_Voltage32			
1387	IVCurve_Current32	U16	0,01	A			R	IVCurve_Current32			
1388	IVCurve_Voltage33	U16	0,1	V			R	IVCurve_Voltage33			
1389	IVCurve_Current33	U16	0,01	A			R	IVCurve_Current33			
138A	IVCurve_Voltage34	U16	0,1	V			R	IVCurve_Voltage34			
138B	IVCurve_Current34	U16	0,01	A			R	IVCurve_Current34			
138C	IVCurve_Voltage35	U16	0,1	V			R	IVCurve_Voltage35			
138D	IVCurve_Current35	U16	0,01	A			R	IVCurve_Current35			
138E	IVCurve_Voltage36	U16	0,1	V			R	IVCurve_Voltage36			
138F	IVCurve_Current36	U16	0,01	A			R	IVCurve_Current36			
1390	IVCurve_Voltage37	U16	0,1	V			R	IVCurve_Voltage37			
1391	IVCurve_Current37	U16	0,01	A			R	IVCurve_Current37			
1392	IVCurve_Voltage38	U16	0,1	V			R	IVCurve_Voltage38			
1393	IVCurve_Current38	U16	0,01	A			R	IVCurve_Current38			
1394	IVCurve_Voltage39	U16	0,1	V			R	IVCurve_Voltage39			
1395	IVCurve_Current39	U16	0,01	A			R	IVCurve_Current39			
1396	IVCurve_Voltage40	U16	0,1	V			R	IVCurve_Voltage40			
1397	IVCurve_Current40	U16	0,01	A			R	IVCurve_Current40			
1398	IVCurve_Voltage41	U16	0,1	V			R	IVCurve_Voltage41			
1399	IVCurve_Current41	U16	0,01	A			R	IVCurve_Current41			
139A	IVCurve_Voltage42	U16	0,1	V			R	IVCurve_Voltage42			
139B	IVCurve_Current42	U16	0,01	A			R	IVCurve_Current42			
139C	IVCurve_Voltage43	U16	0,1	V			R	IVCurve_Voltage43			
139D	IVCurve_Current43	U16	0,01	A			R	IVCurve_Current43			
139E	IVCurve_Voltage44	U16	0,1	V			R	IVCurve_Voltage44			
139F	IVCurve_Current44	U16	0,01	A			R	IVCurve_Current44			
13A0	IVCurve_Voltage45	U16	0,1	V			R	IVCurve_Voltage45			
13A1	IVCurve_Current45	U16	0,01	A			R	IVCurve_Current45			
13A2	IVCurve_Voltage46	U16	0,1	V			R	IVCurve_Voltage46			
13A3	IVCurve_Current46	U16	0,01	A			R	IVCurve_Current46			
13A4	IVCurve_Voltage47	U16	0,1	V			R	IVCurve_Voltage47			
13A5	IVCurve_Current47	U16	0,01	A			R	IVCurve_Current47			
13A6	IVCurve_Voltage48	U16	0,1	V			R	IVCurve_Voltage48			
13A7	IVCurve_Current48	U16	0,01	A			R	IVCurve_Current48			
13A8	IVCurve_Voltage49	U16	0,1	V			R	IVCurve_Voltage49			
13A9	IVCurve_Current49	U16	0,01	A			R	IVCurve_Current49			
13AA	IVCurve_Voltage50	U16	0,1	V			R	IVCurve_Voltage50			
13AB	IVCurve_Current50	U16	0,01	A			R	IVCurve_Current50			
13AC	IVCurve_Voltage51	U16	0,1	V			R	IVCurve_Voltage51			
13AD	IVCurve_Current51	U16	0,01	A			R	IVCurve_Current51			
13AE	IVCurve_Voltage52	U16	0,1	V			R	IVCurve_Voltage52			
13AF	IVCurve_Current52	U16	0,01	A			R	IVCurve_Current52			
13B0	IVCurve_Voltage53	U16	0,1	V			R	IVCurve_Voltage53			
13B1	IVCurve_Current53	U16	0,01	A			R	IVCurve_Current53			
13B2	IVCurve_Voltage54	U16	0,1	V			R	IVCurve_Voltage54			
13B3	IVCurve_Current54	U16	0,01	A			R	IVCurve_Current54			
13B4	IVCurve_Voltage55	U16	0,1	V			R	IVCurve_Voltage55			
13B5	IVCurve_Current55	U16	0,01	A			R	IVCurve_Current55			
13B6	IVCurve_Voltage56	U16	0,1	V			R	IVCurve_Voltage56			
13B7	IVCurve_Current56	U16	0,01	A			R	IVCurve_Current56			
13B8	IVCurve_Voltage57	U16	0,1	V			R	IVCurve_Voltage57			
13B9	IVCurve_Current57	U16	0,01	A			R	IVCurve_Current57			
13BA	IVCurve_Voltage58	U16	0,1	V			R	IVCurve_Voltage58			
13BB	IVCurve_Current58	U16	0,01	A			R	IVCurve_Current58			
13BC	IVCurve_Voltage59	U16	0,1	V			R	IVCurve_Voltage59			
13BD	IVCurve_Current59	U16	0,01	A			R	IVCurve_Current59			
13BE	IVCurve_Voltage60	U16	0,1	V			R	IVCurve_Voltage60			
13BF	IVCurve_Current60	U16	0,01	A			R	IVCurve_Current60			
13C0	AddressMask_Config_ReadOnly_Resu lt4	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectitive 1:Effective		00000000	0000000F
13C1											
13C2											
13C3											
13C4	IVCurve_Voltage61	U16	0,1	V			R	IVCurve_Voltage61		0	0
13C5	IVCurve_Current61	U16	0,01	A			R	IVCurve_Current61			
13C6	IVCurve_Voltage62	U16	0,1	V			R	IVCurve_Voltage62			
13C7	IVCurve_Current62	U16	0,01	A			R	IVCurve_Current62			
13C8	IVCurve_Voltage63	U16	0,1	V			R	IVCurve_Voltage63			
13C9	IVCurve_Current63	U16	0,01	A			R	IVCurve_Current63			
13CA	IVCurve_Voltage64	U16	0,1	V			R	IVCurve_Voltage64			
13CB	IVCurve_Current64	U16	0,01	A			R	IVCurve_Current64			
13CC	IVCurve_Voltage65	U16	0,1	V			R	IVCurve_Voltage65			
13CD	IVCurve_Current65	U16	0,01	A			R	IVCurve_Current65			
13CE	IVCurve_Voltage66	U16	0,1	V			R	IVCurve_Voltage66			
13CF	IVCurve_Current66	U16	0,01	A			R	IVCurve_Current66			
13D0	IVCurve_Voltage67	U16	0,1	V			R	IVCurve_Voltage67			
13D1	IVCurve_Current67	U16	0,01	A			R	IVCurve_Current67			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
13D2	IVCurve_Voltage68	U16	0,1	V			R	IVCurve_Voltage68			
13D3	IVCurve_Current68	U16	0,01	A			R	IVCurve_Current68			
13D4	IVCurve_Voltage69	U16	0,1	V			R	IVCurve_Voltage69			
13D5	IVCurve_Current69	U16	0,01	A			R	IVCurve_Current69			
13D6	IVCurve_Voltage70	U16	0,1	V			R	IVCurve_Voltage70			
13D7	IVCurve_Current70	U16	0,01	A			R	IVCurve_Current70			
13D8	IVCurve_Voltage71	U16	0,1	V			R	IVCurve_Voltage71			
13D9	IVCurve_Current71	U16	0,01	A			R	IVCurve_Current71			
13DA	IVCurve_Voltage72	U16	0,1	V			R	IVCurve_Voltage72			
13DB	IVCurve_Current72	U16	0,01	A			R	IVCurve_Current72			
13DC	IVCurve_Voltage73	U16	0,1	V			R	IVCurve_Voltage73			
13DD	IVCurve_Current73	U16	0,01	A			R	IVCurve_Current73			
13DE	IVCurve_Voltage74	U16	0,1	V			R	IVCurve_Voltage74			
13DF	IVCurve_Current74	U16	0,01	A			R	IVCurve_Current74			
13E0	IVCurve_Voltage75	U16	0,1	V			R	IVCurve_Voltage75			
13E1	IVCurve_Current75	U16	0,01	A			R	IVCurve_Current75			
13E2	IVCurve_Voltage76	U16	0,1	V			R	IVCurve_Voltage76			
13E3	IVCurve_Current76	U16	0,01	A			R	IVCurve_Current76			
13E4	IVCurve_Voltage77	U16	0,1	V			R	IVCurve_Voltage77			
13E5	IVCurve_Current77	U16	0,01	A			R	IVCurve_Current77			
13E6	IVCurve_Voltage78	U16	0,1	V			R	IVCurve_Voltage78			
13E7	IVCurve_Current78	U16	0,01	A			R	IVCurve_Current78			
13E8	IVCurve_Voltage79	U16	0,1	V			R	IVCurve_Voltage79			
13E9	IVCurve_Current79	U16	0,01	A			R	IVCurve_Current79			
13EA	IVCurve_Voltage80	U16	0,1	V			R	IVCurve_Voltage80			
13EB	IVCurve_Current80	U16	0,01	A			R	IVCurve_Current80			
13EC	IVCurve_Voltage81	U16	0,1	V			R	IVCurve_Voltage81			
13ED	IVCurve_Current81	U16	0,01	A			R	IVCurve_Current81			
13EE	IVCurve_Voltage82	U16	0,1	V			R	IVCurve_Voltage82			
13EF	IVCurve_Current82	U16	0,01	A			R	IVCurve_Current82			
13F0	IVCurve_Voltage83	U16	0,1	V			R	IVCurve_Voltage83			
13F1	IVCurve_Current83	U16	0,01	A			R	IVCurve_Current83			
13F2	IVCurve_Voltage84	U16	0,1	V			R	IVCurve_Voltage84			
13F3	IVCurve_Current84	U16	0,01	A			R	IVCurve_Current84			
13F4	IVCurve_Voltage85	U16	0,1	V			R	IVCurve_Voltage85			
13F5	IVCurve_Current85	U16	0,01	A			R	IVCurve_Current85			
13F6	IVCurve_Voltage86	U16	0,1	V			R	IVCurve_Voltage86			
13F7	IVCurve_Current86	U16	0,01	A			R	IVCurve_Current86			
13F8	IVCurve_Voltage87	U16	0,1	V			R	IVCurve_Voltage87			
13F9	IVCurve_Current87	U16	0,01	A			R	IVCurve_Current87			
13FA	IVCurve_Voltage88	U16	0,1	V			R	IVCurve_Voltage88			
13FB	IVCurve_Current88	U16	0,01	A			R	IVCurve_Current88			
13FC	IVCurve_Voltage89	U16	0,1	V			R	IVCurve_Voltage89			
13FD	IVCurve_Current89	U16	0,01	A			R	IVCurve_Current89			
13FE	IVCurve_Voltage90	U16	0,1	V			R	IVCurve_Voltage90			
13FF	IVCurve_Current90	U16	0,01	A			R	IVCurve_Current90			
1400	AddressMask_Config_ReadOnly_Resu lt5	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectictive 1:Effictive		00000000	0000000F
1401											
1402											
1403											
1404	IVCurve_Voltage91	U16	0,1	V			R	IVCurve_Voltage91		0	0
1405	IVCurve_Current91	U16	0,01	A			R	IVCurve_Current91			
1406	IVCurve_Voltage92	U16	0,1	V			R	IVCurve_Voltage92			
1407	IVCurve_Current92	U16	0,01	A			R	IVCurve_Current92			
1408	IVCurve_Voltage93	U16	0,1	V			R	IVCurve_Voltage93			
1409	IVCurve_Current93	U16	0,01	A			R	IVCurve_Current93			
140A	IVCurve_Voltage94	U16	0,1	V			R	IVCurve_Voltage94			
140B	IVCurve_Current94	U16	0,01	A			R	IVCurve_Current94			
140C	IVCurve_Voltage95	U16	0,1	V			R	IVCurve_Voltage95			
140D	IVCurve_Current95	U16	0,01	A			R	IVCurve_Current95			
140E	IVCurve_Voltage96	U16	0,1	V			R	IVCurve_Voltage96			
140F	IVCurve_Current96	U16	0,01	A			R	IVCurve_Current96			
1410	IVCurve_Voltage97	U16	0,1	V			R	IVCurve_Voltage97			
1411	IVCurve_Current97	U16	0,01	A			R	IVCurve_Current97			
1412	IVCurve_Voltage98	U16	0,1	V			R	IVCurve_Voltage98			
1413	IVCurve_Current98	U16	0,01	A			R	IVCurve_Current98			
1414	IVCurve_Voltage99	U16	0,1	V			R	IVCurve_Voltage99			
1415	IVCurve_Current99	U16	0,01	A			R	IVCurve_Current99			
1416	IVCurve_Voltage100	U16	0,1	V			R	IVCurve_Voltage100			
1417	IVCurve_Current100	U16	0,01	A			R	IVCurve_Current100			
1418	IVCurve_Voltage101	U16	0,1	V			R	IVCurve_Voltage101			
1419	IVCurve_Current101	U16	0,01	A			R	IVCurve_Current101			
141A	IVCurve_Voltage102	U16	0,1	V			R	IVCurve_Voltage102			
141B	IVCurve_Current102	U16	0,01	A			R	IVCurve_Current102			
141C	IVCurve_Voltage103	U16	0,1	V			R	IVCurve_Voltage103			
141D	IVCurve_Current103	U16	0,01	A			R	IVCurve_Current103			
141E	IVCurve_Voltage104	U16	0,1	V			R	IVCurve_Voltage104			
141F	IVCurve_Current104	U16	0,01	A			R	IVCurve_Current104			
1420	IVCurve_Voltage105	U16	0,1	V			R	IVCurve_Voltage105			
1421	IVCurve_Current105	U16	0,01	A			R	IVCurve_Current105			
1422	IVCurve_Voltage106	U16	0,1	V			R	IVCurve_Voltage106			
1423	IVCurve_Current106	U16	0,01	A			R	IVCurve_Current106			
1424	IVCurve_Voltage107	U16	0,1	V			R	IVCurve_Voltage107			
1425	IVCurve_Current107	U16	0,01	A			R	IVCurve_Current107			
1426	IVCurve_Voltage108	U16	0,1	V			R	IVCurve_Voltage108			
1427	IVCurve_Current108	U16	0,01	A			R	IVCurve_Current108			
1428	IVCurve_Voltage109	U16	0,1	V			R	IVCurve_Voltage109			
1429	IVCurve_Current109	U16	0,01	A			R	IVCurve_Current109			
142A	IVCurve_Voltage110	U16	0,1	V			R	IVCurve_Voltage110			
142B	IVCurve_Current110	U16	0,01	A			R	IVCurve_Current110			
142C	IVCurve_Voltage111	U16	0,1	V			R	IVCurve_Voltage111			
142D	IVCurve_Current111	U16	0,01	A			R	IVCurve_Current111			
142E	IVCurve_Voltage112	U16	0,1	V			R	IVCurve_Voltage112			
142F	IVCurve_Current112	U16	0,01	A			R	IVCurve_Current112			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
1430	IVCurve_Voltage113	U16	0,1	V			R	IVCurve_Voltage113			
1431	IVCurve_Current113	U16	0,01	A			R	IVCurve_Current113			
1432	IVCurve_Voltage114	U16	0,1	V			R	IVCurve_Voltage114			
1433	IVCurve_Current114	U16	0,01	A			R	IVCurve_Current114			
1434	IVCurve_Voltage115	U16	0,1	V			R	IVCurve_Voltage115			
1435	IVCurve_Current115	U16	0,01	A			R	IVCurve_Current115			
1436	IVCurve_Voltage116	U16	0,1	V			R	IVCurve_Voltage116			
1437	IVCurve_Current116	U16	0,01	A			R	IVCurve_Current116			
1438	IVCurve_Voltage117	U16	0,1	V			R	IVCurve_Voltage117			
1439	IVCurve_Current117	U16	0,01	A			R	IVCurve_Current117			
143A	IVCurve_Voltage118	U16	0,1	V			R	IVCurve_Voltage118			
143B	IVCurve_Current118	U16	0,01	A			R	IVCurve_Current118			
143C	IVCurve_Voltage119	U16	0,1	V			R	IVCurve_Voltage119			
143D	IVCurve_Current119	U16	0,01	A			R	IVCurve_Current119			
143E	IVCurve_Voltage120	U16	0,1	V			R	IVCurve_Voltage120			
143F	IVCurve_Current120	U16	0,01	A			R	IVCurve_Current120			
1440	AddressMask_Config_ReadOnly_Resu lt6	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field, Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effective 1:Effective		00000000	0000000F
1441											
1442											
1443											
1444	IVCurve_Voltage121	U16	0,1	V			R	IVCurve_Voltage121		0	0
1445	IVCurve_Current121	U16	0,01	A			R	IVCurve_Current121			
1446	IVCurve_Voltage122	U16	0,1	V			R	IVCurve_Voltage122			
1447	IVCurve_Current122	U16	0,01	A			R	IVCurve_Current122			
1448	IVCurve_Voltage123	U16	0,1	V			R	IVCurve_Voltage123			
1449	IVCurve_Current123	U16	0,01	A			R	IVCurve_Current123			
144A	IVCurve_Voltage124	U16	0,1	V			R	IVCurve_Voltage124			
144B	IVCurve_Current124	U16	0,01	A			R	IVCurve_Current124			
144C	IVCurve_Voltage125	U16	0,1	V			R	IVCurve_Voltage125			
144D	IVCurve_Current125	U16	0,01	A			R	IVCurve_Current125			
144E	IVCurve_Voltage126	U16	0,1	V			R	IVCurve_Voltage126			
144F	IVCurve_Current126	U16	0,01	A			R	IVCurve_Current126			
1450	IVCurve_Voltage127	U16	0,1	V			R	IVCurve_Voltage127			
1451	IVCurve_Current127	U16	0,01	A			R	IVCurve_Current127			
1452	IVCurve_Voltage128	U16	0,1	V			R	IVCurve_Voltage128			
1453	IVCurve_Current128	U16	0,01	A			R	IVCurve_Current128			
1454	IVCurve_Voltage129	U16	0,1	V			R	IVCurve_Voltage129			
1455	IVCurve_Current129	U16	0,01	A			R	IVCurve_Current129			
1456	IVCurve_Voltage130	U16	0,1	V			R	IVCurve_Voltage130			
1457	IVCurve_Current130	U16	0,01	A			R	IVCurve_Current130			
1458	IVCurve_Voltage131	U16	0,1	V			R	IVCurve_Voltage131			
1459	IVCurve_Current131	U16	0,01	A			R	IVCurve_Current131			
145A	IVCurve_Voltage132	U16	0,1	V			R	IVCurve_Voltage132			
145B	IVCurve_Current132	U16	0,01	A			R	IVCurve_Current132			
145C	IVCurve_Voltage133	U16	0,1	V			R	IVCurve_Voltage133			
145D	IVCurve_Current133	U16	0,01	A			R	IVCurve_Current133			
145E	IVCurve_Voltage134	U16	0,1	V			R	IVCurve_Voltage134			
145F	IVCurve_Current134	U16	0,01	A			R	IVCurve_Current134			
1460	IVCurve_Voltage135	U16	0,1	V			R	IVCurve_Voltage135			
1461	IVCurve_Current135	U16	0,01	A			R	IVCurve_Current135			
1462	IVCurve_Voltage136	U16	0,1	V			R	IVCurve_Voltage136			
1463	IVCurve_Current136	U16	0,01	A			R	IVCurve_Current136			
1464	IVCurve_Voltage137	U16	0,1	V			R	IVCurve_Voltage137			
1465	IVCurve_Current137	U16	0,01	A			R	IVCurve_Current137			
1466	IVCurve_Voltage138	U16	0,1	V			R	IVCurve_Voltage138			
1467	IVCurve_Current138	U16	0,01	A			R	IVCurve_Current138			
1468	IVCurve_Voltage139	U16	0,1	V			R	IVCurve_Voltage139			
1469	IVCurve_Current139	U16	0,01	A			R	IVCurve_Current139			
146A	IVCurve_Voltage140	U16	0,1	V			R	IVCurve_Voltage140			
146B	IVCurve_Current140	U16	0,01	A			R	IVCurve_Current140			
146C	IVCurve_Voltage141	U16	0,1	V			R	IVCurve_Voltage141			
146D	IVCurve_Current141	U16	0,01	A			R	IVCurve_Current141			
146E	IVCurve_Voltage142	U16	0,1	V			R	IVCurve_Voltage142			
146F	IVCurve_Current142	U16	0,01	A			R	IVCurve_Current142			
1470	IVCurve_Voltage143	U16	0,1	V			R	IVCurve_Voltage143			
1471	IVCurve_Current143	U16	0,01	A			R	IVCurve_Current143			
1472	IVCurve_Voltage144	U16	0,1	V			R	IVCurve_Voltage144			
1473	IVCurve_Current144	U16	0,01	A			R	IVCurve_Current144			
1474	IVCurve_Voltage145	U16	0,1	V			R	IVCurve_Voltage145			
1475	IVCurve_Current145	U16	0,01	A			R	IVCurve_Current145			
1476	IVCurve_Voltage146	U16	0,1	V			R	IVCurve_Voltage146			
1477	IVCurve_Current146	U16	0,01	A			R	IVCurve_Current146			
1478	IVCurve_Voltage147	U16	0,1	V			R	IVCurve_Voltage147			
1479	IVCurve_Current147	U16	0,01	A			R	IVCurve_Current147			
147A	IVCurve_Voltage148	U16	0,1	V			R	IVCurve_Voltage148			
147B	IVCurve_Current148	U16	0,01	A			R	IVCurve_Current148			
147C	IVCurve_Voltage149	U16	0,1	V			R	IVCurve_Voltage149			
147D	IVCurve_Current149	U16	0,01	A			R	IVCurve_Current149			
147E	IVCurve_Voltage150	U16	0,1	V			R	IVCurve_Voltage150			
147F	IVCurve_Current150	U16	0,01	A			R	IVCurve_Current150			
1480	HistoryEventList_ID1	U16					R	The history event 1st			
1481	HistoryEventList_yM1	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1482	HistoryEventList_dH1	U16					R	Hi Byte:Date ; Low byte:Hour.			
1483	HistoryEventList_ms1	U16					R	Hi Byte:Minute ; Low byte:Second.			
1484	HistoryEventList_ID2	U16					R	The history event 2nd			
1485	HistoryEventList_yM2	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1486	HistoryEventList_dH2	U16					R	Hi Byte:Date ; Low byte:Hour.			
1487	HistoryEventList_ms2	U16					R	Hi Byte:Minute ; Low byte:Second.			
1488	HistoryEventList_ID3	U16					R	The history event 3rd			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
1489	HistoryEventList_yM3	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
148A	HistoryEventList_dH3	U16					R	Hi Byte:Date ; Low byte:Hour.			
148B	HistoryEventList_ms3	U16					R	Hi Byte:Minute ; Low byte:Second.			
148C	HistoryEventList_ID4	U16					R	The history event 4th			
148D	HistoryEventList_yM4	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
148E	HistoryEventList_dH4	U16					R	Hi Byte:Date ; Low byte:Hour.			
148F	HistoryEventList_ms4	U16					R	Hi Byte:Minute ; Low byte:Second.			
1490	HistoryEventList_ID5	U16					R	The history event 5th			
1491	HistoryEventList_yM5	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1492	HistoryEventList_dH5	U16					R	Hi Byte:Date ; Low byte:Hour.			
1493	HistoryEventList_ms5	U16					R	Hi Byte:Minute ; Low byte:Second.			
1494	HistoryEventList_ID6	U16					R	The history event 6th			
1495	HistoryEventList_yM6	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1496	HistoryEventList_dH6	U16					R	Hi Byte:Date ; Low byte:Hour.			
1497	HistoryEventList_ms6	U16					R	Hi Byte:Minute ; Low byte:Second.			
1498	HistoryEventList_ID7	U16					R	The history event 7th			
1499	HistoryEventList_yM7	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
149A	HistoryEventList_dH7	U16					R	Hi Byte:Date ; Low byte:Hour.			
149B	HistoryEventList_ms7	U16					R	Hi Byte:Minute ; Low byte:Second.			
149C	HistoryEventList_ID8	U16					R	The history event 8th			
149D	HistoryEventList_yM8	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
149E	HistoryEventList_dH8	U16					R	Hi Byte:Date ; Low byte:Hour.			
149F	HistoryEventList_ms8	U16					R	Hi Byte:Minute ; Low byte:Second.			
14A0	HistoryEventList_ID9	U16					R	The history event 9th			
14A1	HistoryEventList_yM9	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14A2	HistoryEventList_dH9	U16					R	Hi Byte:Date ; Low byte:Hour.			
14A3	HistoryEventList_ms9	U16					R	Hi Byte:Minute ; Low byte:Second.			
14A4	HistoryEventList_ID10	U16					R	The history event 10th			
14A5	HistoryEventList_yM10	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14A6	HistoryEventList_dH10	U16					R	Hi Byte:Date ; Low byte:Hour.			
14A7	HistoryEventList_ms10	U16					R	Hi Byte:Minute ; Low byte:Second.			
14A8	HistoryEventList_ID11	U16					R	The history event 11th			
14A9	HistoryEventList_yM11	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14AA	HistoryEventList_dH11	U16					R	Hi Byte:Date ; Low byte:Hour.			
14AB	HistoryEventList_ms11	U16					R	Hi Byte:Minute ; Low byte:Second.			
14AC	HistoryEventList_ID12	U16					R	The history event 12th			
14AD	HistoryEventList_yM12	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14AE	HistoryEventList_dH12	U16					R	Hi Byte:Date ; Low byte:Hour.			
14AF	HistoryEventList_ms12	U16					R	Hi Byte:Minute ; Low byte:Second.			
14B0	HistoryEventList_ID13	U16					R	The history event 13th			
14B1	HistoryEventList_yM13	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14B2	HistoryEventList_dH13	U16					R	Hi Byte:Date ; Low byte:Hour.			
14B3	HistoryEventList_ms13	U16					R	Hi Byte:Minute ; Low byte:Second.			
14B4	HistoryEventList_ID14	U16					R	The history event 14th			
14B5	HistoryEventList_yM14	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14B6	HistoryEventList_dH14	U16					R	Hi Byte:Date ; Low byte:Hour.			
14B7	HistoryEventList_ms14	U16					R	Hi Byte:Minute ; Low byte:Second.			
14B8	HistoryEventList_ID15	U16					R	The history event 15th			
14B9	HistoryEventList_yM15	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14BA	HistoryEventList_dH15	U16					R	Hi Byte:Date ; Low byte:Hour.			
14BB	HistoryEventList_ms15	U16					R	Hi Byte:Minute ; Low byte:Second.			
14BC	HistoryEventList_ID16	U16					R	The history event 16th			
14BD	HistoryEventList_yM16	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14BE	HistoryEventList_dH16	U16					R	Hi Byte:Date ; Low byte:Hour.			
14BF	HistoryEventList_ms16	U16					R	Hi Byte:Minute ; Low byte:Second.			
14C0	HistoryEventList_ID17	U16					R	The history event 17th			
14C1	HistoryEventList_yM17	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14C2	HistoryEventList_dH17	U16					R	Hi Byte:Date ; Low byte:Hour.			
14C3	HistoryEventList_ms17	U16					R	Hi Byte:Minute ; Low byte:Second.			
14C4	HistoryEventList_ID18	U16					R	The history event 18th			
14C5	HistoryEventList_yM18	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14C6	HistoryEventList_dH18	U16					R	Hi Byte:Date ; Low byte:Hour.			
14C7	HistoryEventList_ms18	U16					R	Hi Byte:Minute ; Low byte:Second.			
14C8	HistoryEventList_ID19	U16					R	The history event 19th			
14C9	HistoryEventList_yM19	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
14CA	HistoryEventList_dH19	U16					R	Hi Byte:Date ; Low byte:Hour.			
14CB	HistoryEventList_ms19	U16					R	Hi Byte:Minute ; Low byte:Second.			
14CC	HistoryEventList_ID20	U16					R	The history event 20th			
14CD	HistoryEventList_yM20	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14CE	HistoryEventList_dH20	U16					R	Hi Byte:Date ; Low byte:Hour.			
14CF	HistoryEventList_ms20	U16					R	Hi Byte:Minute ; Low byte:Second.			
14D0	HistoryEventList_ID21	U16					R	The history event 21th			
14D1	HistoryEventList_yM21	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14D2	HistoryEventList_dH21	U16					R	Hi Byte:Date ; Low byte:Hour.			
14D3	HistoryEventList_ms21	U16					R	Hi Byte:Minute ; Low byte:Second.			
14D4	HistoryEventList_ID22	U16					R	The history event 22th			
14D5	HistoryEventList_yM22	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14D6	HistoryEventList_dH22	U16					R	Hi Byte:Date ; Low byte:Hour.			
14D7	HistoryEventList_ms22	U16					R	Hi Byte:Minute ; Low byte:Second.			
14D8	HistoryEventList_ID23	U16					R	The history event 23th			
14D9	HistoryEventList_yM23	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14DA	HistoryEventList_dH23	U16					R	Hi Byte:Date ; Low byte:Hour.			
14DB	HistoryEventList_ms23	U16					R	Hi Byte:Minute ; Low byte:Second.			
14DC	HistoryEventList_ID24	U16					R	The history event 24th			
14DD	HistoryEventList_yM24	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14DE	HistoryEventList_dH24	U16					R	Hi Byte:Date ; Low byte:Hour.			
14DF	HistoryEventList_ms24	U16					R	Hi Byte:Minute ; Low byte:Second.			
14E0	HistoryEventList_ID25	U16					R	The history event 25th			
14E1	HistoryEventList_yM25	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14E2	HistoryEventList_dH25	U16					R	Hi Byte:Date ; Low byte:Hour.			
14E3	HistoryEventList_ms25	U16					R	Hi Byte:Minute ; Low byte:Second.			
14E4	HistoryEventList_ID26	U16					R	The history event 26th			
14E5	HistoryEventList_yM26	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14E6	HistoryEventList_dH26	U16					R	Hi Byte:Date ; Low byte:Hour.			
14E7	HistoryEventList_ms26	U16					R	Hi Byte:Minute ; Low byte:Second.			
14E8	HistoryEventList_ID27	U16					R	The history event 27th			
14E9	HistoryEventList_yM27	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14EA	HistoryEventList_dH27	U16					R	Hi Byte:Date ; Low byte:Hour.			
14EB	HistoryEventList_ms27	U16					R	Hi Byte:Minute ; Low byte:Second.			
14EC	HistoryEventList_ID28	U16					R	The history event 28th			
14ED	HistoryEventList_yM28	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14EE	HistoryEventList_dH28	U16					R	Hi Byte:Date ; Low byte:Hour.			
14EF	HistoryEventList_ms28	U16					R	Hi Byte:Minute ; Low byte:Second.			
14F0	HistoryEventList_ID29	U16					R	The history event 29th			
14F1	HistoryEventList_yM29	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14F2	HistoryEventList_dH29	U16					R	Hi Byte:Date ; Low byte:Hour.			
14F3	HistoryEventList_ms29	U16					R	Hi Byte:Minute ; Low byte:Second.			
14F4	HistoryEventList_ID30	U16					R	The history event 30th			
14F5	HistoryEventList_yM30	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14F6	HistoryEventList_dH30	U16					R	Hi Byte:Date ; Low byte:Hour.			
14F7	HistoryEventList_ms30	U16					R	Hi Byte:Minute ; Low byte:Second.			
14F8	HistoryEventList_ID31	U16					R	The history event 31th			
14F9	HistoryEventList_yM31	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14FA	HistoryEventList_dH31	U16					R	Hi Byte:Date ; Low byte:Hour.			
14FB	HistoryEventList_ms31	U16					R	Hi Byte:Minute ; Low byte:Second.			
14FC	HistoryEventList_ID32	U16					R	The history event 32th			
14FD	HistoryEventList_yM32	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
14FE	HistoryEventList_dH32	U16					R	Hi Byte:Date ; Low byte:Hour.			
14FF	HistoryEventList_ms32	U16					R	Hi Byte:Minute ; Low byte:Second.			
1500	HistoryEventList_ID33	U16					R	The history event 33th			
1501	HistoryEventList_yM33	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1502	HistoryEventList_dH33	U16					R	Hi Byte:Date ; Low byte:Hour.			
1503	HistoryEventList_ms33	U16					R	Hi Byte:Minute ; Low byte:Second.			
1504	HistoryEventList_ID34	U16					R	The history event 34th			
1505	HistoryEventList_yM34	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1506	HistoryEventList_dH34	U16					R	Hi Byte:Date ; Low byte:Hour.			
1507	HistoryEventList_ms34	U16					R	Hi Byte:Minute ; Low byte:Second.			
1508	HistoryEventList_ID35	U16					R	The history event 35th			
1509	HistoryEventList_yM35	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
150A	HistoryEventList_dH35	U16					R	Hi Byte:Date ; Low byte:Hour.			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
150B	HistoryEventList_ms35	U16					R	Hi Byte:Minute ; Low byte:Second.			
150C	HistoryEventList_ID36	U16					R	The history event 36th			
150D	HistoryEventList_yM36	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
150E	HistoryEventList_dH36	U16					R	Hi Byte:Date ; Low byte:Hour.			
150F	HistoryEventList_ms36	U16					R	Hi Byte:Minute ; Low byte:Second.			
1510	HistoryEventList_ID37	U16					R	The history event 37th			
1511	HistoryEventList_yM37	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1512	HistoryEventList_dH37	U16					R	Hi Byte:Date ; Low byte:Hour.			
1513	HistoryEventList_ms37	U16					R	Hi Byte:Minute ; Low byte:Second.			
1514	HistoryEventList_ID38	U16					R	The history event 38th			
1515	HistoryEventList_yM38	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1516	HistoryEventList_dH38	U16					R	Hi Byte:Date ; Low byte:Hour.			
1517	HistoryEventList_ms38	U16					R	Hi Byte:Minute ; Low byte:Second.			
1518	HistoryEventList_ID39	U16					R	The history event 39th			
1519	HistoryEventList_yM39	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
151A	HistoryEventList_dH39	U16					R	Hi Byte:Date ; Low byte:Hour.			
151B	HistoryEventList_ms39	U16					R	Hi Byte:Minute ; Low byte:Second.			
151C	HistoryEventList_ID40	U16					R	The history event 40th			
151D	HistoryEventList_yM40	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
151E	HistoryEventList_dH40	U16					R	Hi Byte:Date ; Low byte:Hour.			
151F	HistoryEventList_ms40	U16					R	Hi Byte:Minute ; Low byte:Second.			
1520	HistoryEventList_ID41	U16					R	The history event 41th			
1521	HistoryEventList_yM41	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1522	HistoryEventList_dH41	U16					R	Hi Byte:Date ; Low byte:Hour.			
1523	HistoryEventList_ms41	U16					R	Hi Byte:Minute ; Low byte:Second.			
1524	HistoryEventList_ID42	U16					R	The history event 42th			
1525	HistoryEventList_yM42	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1526	HistoryEventList_dH42	U16					R	Hi Byte:Date ; Low byte:Hour.			
1527	HistoryEventList_ms42	U16					R	Hi Byte:Minute ; Low byte:Second.			
1528	HistoryEventList_ID43	U16					R	The history event 43th			
1529	HistoryEventList_yM43	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
152A	HistoryEventList_dH43	U16					R	Hi Byte:Date ; Low byte:Hour.			
152B	HistoryEventList_ms43	U16					R	Hi Byte:Minute ; Low byte:Second.			
152C	HistoryEventList_ID44	U16					R	The history event 44th			
152D	HistoryEventList_yM44	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
152E	HistoryEventList_dH44	U16					R	Hi Byte:Date ; Low byte:Hour.			
152F	HistoryEventList_ms44	U16					R	Hi Byte:Minute ; Low byte:Second.			
1530	HistoryEventList_ID45	U16					R	The history event 45th			
1531	HistoryEventList_yM45	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1532	HistoryEventList_dH45	U16					R	Hi Byte:Date ; Low byte:Hour.			
1533	HistoryEventList_ms45	U16					R	Hi Byte:Minute ; Low byte:Second.			
1534	HistoryEventList_ID46	U16					R	The history event 46th			
1535	HistoryEventList_yM46	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1536	HistoryEventList_dH46	U16					R	Hi Byte:Date ; Low byte:Hour.			
1537	HistoryEventList_ms46	U16					R	Hi Byte:Minute ; Low byte:Second.			
1538	HistoryEventList_ID47	U16					R	The history event 47th			
1539	HistoryEventList_yM47	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
153A	HistoryEventList_dH47	U16					R	Hi Byte:Date ; Low byte:Hour.			
153B	HistoryEventList_ms47	U16					R	Hi Byte:Minute ; Low byte:Second.			
153C	HistoryEventList_ID48	U16					R	The history event 48th			
153D	HistoryEventList_yM48	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
153E	HistoryEventList_dH48	U16					R	Hi Byte:Date ; Low byte:Hour.			
153F	HistoryEventList_ms48	U16					R	Hi Byte:Minute ; Low byte:Second.			
1540	HistoryEventList_ID49	U16					R	The history event 49th			
1541	HistoryEventList_yM49	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1542	HistoryEventList_dH49	U16					R	Hi Byte:Date ; Low byte:Hour.			
1543	HistoryEventList_ms49	U16					R	Hi Byte:Minute ; Low byte:Second.			
1544	HistoryEventList_ID50	U16					R	The history event 50th			
1545	HistoryEventList_yM50	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1546	HistoryEventList_dH50	U16					R	Hi Byte:Date ; Low byte:Hour.			
1547	HistoryEventList_ms50	U16					R	Hi Byte:Minute ; Low byte:Second.			
1548	HistoryEventList_ID51	U16					R	The history event 51th			
1549	HistoryEventList_yM51	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
154A	HistoryEventList_dH51	U16					R	Hi Byte:Date ; Low byte:Hour.			
154B	HistoryEventList_ms51	U16					R	Hi Byte:Minute ; Low byte:Second.			
154C	HistoryEventList_ID52	U16					R	The history event 52th			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
154D	HistoryEventList_yM52	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
154E	HistoryEventList_dH52	U16					R	Hi Byte:Date ; Low byte:Hour.			
154F	HistoryEventList_ms52	U16					R	Hi Byte:Minute ; Low byte:Second.			
1550	HistoryEventList_ID53	U16					R	The history event 53th			
1551	HistoryEventList_yM53	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1552	HistoryEventList_dH53	U16					R	Hi Byte:Date ; Low byte:Hour.			
1553	HistoryEventList_ms53	U16					R	Hi Byte:Minute ; Low byte:Second.			
1554	HistoryEventList_ID54	U16					R	The history event 54th			
1555	HistoryEventList_yM54	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1556	HistoryEventList_dH54	U16					R	Hi Byte:Date ; Low byte:Hour.			
1557	HistoryEventList_ms54	U16					R	Hi Byte:Minute ; Low byte:Second.			
1558	HistoryEventList_ID55	U16					R	The history event 55th			
1559	HistoryEventList_yM55	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
155A	HistoryEventList_dH55	U16					R	Hi Byte:Date ; Low byte:Hour.			
155B	HistoryEventList_ms55	U16					R	Hi Byte:Minute ; Low byte:Second.			
155C	HistoryEventList_ID56	U16					R	The history event 56th			
155D	HistoryEventList_yM56	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
155E	HistoryEventList_dH56	U16					R	Hi Byte:Date ; Low byte:Hour.			
155F	HistoryEventList_ms56	U16					R	Hi Byte:Minute ; Low byte:Second.			
1560	HistoryEventList_ID57	U16					R	The history event 57th			
1561	HistoryEventList_yM57	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1562	HistoryEventList_dH57	U16					R	Hi Byte:Date ; Low byte:Hour.			
1563	HistoryEventList_ms57	U16					R	Hi Byte:Minute ; Low byte:Second.			
1564	HistoryEventList_ID58	U16					R	The history event 58th			
1565	HistoryEventList_yM58	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1566	HistoryEventList_dH58	U16					R	Hi Byte:Date ; Low byte:Hour.			
1567	HistoryEventList_ms58	U16					R	Hi Byte:Minute ; Low byte:Second.			
1568	HistoryEventList_ID59	U16					R	The history event 59th			
1569	HistoryEventList_yM59	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
156A	HistoryEventList_dH59	U16					R	Hi Byte:Date ; Low byte:Hour.			
156B	HistoryEventList_ms59	U16					R	Hi Byte:Minute ; Low byte:Second.			
156C	HistoryEventList_ID60	U16					R	The history event 60th			
156D	HistoryEventList_yM60	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
156E	HistoryEventList_dH60	U16					R	Hi Byte:Date ; Low byte:Hour.			
156F	HistoryEventList_ms60	U16					R	Hi Byte:Minute ; Low byte:Second.			
1570	HistoryEventList_ID61	U16					R	The history event 61th			
1571	HistoryEventList_yM61	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1572	HistoryEventList_dH61	U16					R	Hi Byte:Date ; Low byte:Hour.			
1573	HistoryEventList_ms61	U16					R	Hi Byte:Minute ; Low byte:Second.			
1574	HistoryEventList_ID62	U16					R	The history event 62th			
1575	HistoryEventList_yM62	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1576	HistoryEventList_dH62	U16					R	Hi Byte:Date ; Low byte:Hour.			
1577	HistoryEventList_ms62	U16					R	Hi Byte:Minute ; Low byte:Second.			
1578	HistoryEventList_ID63	U16					R	The history event 63th			
1579	HistoryEventList_yM63	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
157A	HistoryEventList_dH63	U16					R	Hi Byte:Date ; Low byte:Hour.			
157B	HistoryEventList_ms63	U16					R	Hi Byte:Minute ; Low byte:Second.			
157C	HistoryEventList_ID64	U16					R	The history event 64th			
157D	HistoryEventList_yM64	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
157E	HistoryEventList_dH64	U16					R	Hi Byte:Date ; Low byte:Hour.			
157F	HistoryEventList_ms64	U16					R	Hi Byte:Minute ; Low byte:Second.			
1580	HistoryEventList_ID65	U16					R	The history event 65th			
1581	HistoryEventList_yM65	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1582	HistoryEventList_dH65	U16					R	Hi Byte:Date ; Low byte:Hour.			
1583	HistoryEventList_ms65	U16					R	Hi Byte:Minute ; Low byte:Second.			
1584	HistoryEventList_ID66	U16					R	The history event 66th			
1585	HistoryEventList_yM66	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1586	HistoryEventList_dH66	U16					R	Hi Byte:Date ; Low byte:Hour.			
1587	HistoryEventList_ms66	U16					R	Hi Byte:Minute ; Low byte:Second.			
1588	HistoryEventList_ID67	U16					R	The history event 67th			
1589	HistoryEventList_yM67	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
158A	HistoryEventList_dH67	U16					R	Hi Byte:Date ; Low byte:Hour.			
158B	HistoryEventList_ms67	U16					R	Hi Byte:Minute ; Low byte:Second.			
158C	HistoryEventList_ID68	U16					R	The history event 68th			
158D	HistoryEventList_yM68	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
158E	HistoryEventList_dH68	U16					R	Hi Byte:Date ; Low byte:Hour.			
158F	HistoryEventList_ms68	U16					R	Hi Byte:Minute ; Low byte:Second.			
1590	HistoryEventList_ID69	U16					R	The history event 69th			
1591	HistoryEventList_yM69	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1592	HistoryEventList_dH69	U16					R	Hi Byte:Date ; Low byte:Hour.			
1593	HistoryEventList_ms69	U16					R	Hi Byte:Minute ; Low byte:Second.			
1594	HistoryEventList_ID70	U16					R	The history event 70th			
1595	HistoryEventList_yM70	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1596	HistoryEventList_dH70	U16					R	Hi Byte:Date ; Low byte:Hour.			
1597	HistoryEventList_ms70	U16					R	Hi Byte:Minute ; Low byte:Second.			
1598	HistoryEventList_ID71	U16					R	The history event 71th			
1599	HistoryEventList_yM71	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
159A	HistoryEventList_dH71	U16					R	Hi Byte:Date ; Low byte:Hour.			
159B	HistoryEventList_ms71	U16					R	Hi Byte:Minute ; Low byte:Second.			
159C	HistoryEventList_ID72	U16					R	The history event 72th			
159D	HistoryEventList_yM72	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
159E	HistoryEventList_dH72	U16					R	Hi Byte:Date ; Low byte:Hour.			
159F	HistoryEventList_ms72	U16					R	Hi Byte:Minute ; Low byte:Second.			
15A0	HistoryEventList_ID73	U16					R	The history event 73th			
15A1	HistoryEventList_yM73	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15A2	HistoryEventList_dH73	U16					R	Hi Byte:Date ; Low byte:Hour.			
15A3	HistoryEventList_ms73	U16					R	Hi Byte:Minute ; Low byte:Second.			
15A4	HistoryEventList_ID74	U16					R	The history event 74th			
15A5	HistoryEventList_yM74	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15A6	HistoryEventList_dH74	U16					R	Hi Byte:Date ; Low byte:Hour.			
15A7	HistoryEventList_ms74	U16					R	Hi Byte:Minute ; Low byte:Second.			
15A8	HistoryEventList_ID75	U16					R	The history event 75th			
15A9	HistoryEventList_yM75	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15AA	HistoryEventList_dH75	U16					R	Hi Byte:Date ; Low byte:Hour.			
15AB	HistoryEventList_ms75	U16					R	Hi Byte:Minute ; Low byte:Second.			
15AC	HistoryEventList_ID76	U16					R	The history event 76th			
15AD	HistoryEventList_yM76	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15AE	HistoryEventList_dH76	U16					R	Hi Byte:Date ; Low byte:Hour.			
15AF	HistoryEventList_ms76	U16					R	Hi Byte:Minute ; Low byte:Second.			
15B0	HistoryEventList_ID77	U16					R	The history event 77th			
15B1	HistoryEventList_yM77	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15B2	HistoryEventList_dH77	U16					R	Hi Byte:Date ; Low byte:Hour.			
15B3	HistoryEventList_ms77	U16					R	Hi Byte:Minute ; Low byte:Second.			
15B4	HistoryEventList_ID78	U16					R	The history event 78th			
15B5	HistoryEventList_yM78	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15B6	HistoryEventList_dH78	U16					R	Hi Byte:Date ; Low byte:Hour.			
15B7	HistoryEventList_ms78	U16					R	Hi Byte:Minute ; Low byte:Second.			
15B8	HistoryEventList_ID79	U16					R	The history event 79th			
15B9	HistoryEventList_yM79	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15BA	HistoryEventList_dH79	U16					R	Hi Byte:Date ; Low byte:Hour.			
15BB	HistoryEventList_ms79	U16					R	Hi Byte:Minute ; Low byte:Second.			
15BC	HistoryEventList_ID80	U16					R	The history event 80th			
15BD	HistoryEventList_yM80	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15BE	HistoryEventList_dH80	U16					R	Hi Byte:Date ; Low byte:Hour.			
15BF	HistoryEventList_ms80	U16					R	Hi Byte:Minute ; Low byte:Second.			
15C0	HistoryEventList_ID81	U16					R	The history event 81th			
15C1	HistoryEventList_yM81	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15C2	HistoryEventList_dH81	U16					R	Hi Byte:Date ; Low byte:Hour.			
15C3	HistoryEventList_ms81	U16					R	Hi Byte:Minute ; Low byte:Second.			
15C4	HistoryEventList_ID82	U16					R	The history event 82th			
15C5	HistoryEventList_yM82	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15C6	HistoryEventList_dH82	U16					R	Hi Byte:Date ; Low byte:Hour.			
15C7	HistoryEventList_ms82	U16					R	Hi Byte:Minute ; Low byte:Second.			
15C8	HistoryEventList_ID83	U16					R	The history event 83th			
15C9	HistoryEventList_yM83	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15CA	HistoryEventList_dH83	U16					R	Hi Byte:Date ; Low byte:Hour.			
15CB	HistoryEventList_ms83	U16					R	Hi Byte:Minute ; Low byte:Second.			
15CC	HistoryEventList_ID84	U16					R	The history event 84th			
15CD	HistoryEventList_yM84	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15CE	HistoryEventList_dH84	U16					R	Hi Byte:Date ; Low byte:Hour.			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
15CF	HistoryEventList_ms84	U16					R	Hi Byte:Minute ; Low byte:Second.			
15D0	HistoryEventList_ID85	U16					R	The history event 85th			
15D1	HistoryEventList_yM85	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15D2	HistoryEventList_dH85	U16					R	Hi Byte:Date ; Low byte:Hour.			
15D3	HistoryEventList_ms85	U16					R	Hi Byte:Minute ; Low byte:Second.			
15D4	HistoryEventList_ID86	U16					R	The history event 86th			
15D5	HistoryEventList_yM86	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15D6	HistoryEventList_dH86	U16					R	Hi Byte:Date ; Low byte:Hour.			
15D7	HistoryEventList_ms86	U16					R	Hi Byte:Minute ; Low byte:Second.			
15D8	HistoryEventList_ID87	U16					R	The history event 87th			
15D9	HistoryEventList_yM87	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15DA	HistoryEventList_dH87	U16					R	Hi Byte:Date ; Low byte:Hour.			
15DB	HistoryEventList_ms87	U16					R	Hi Byte:Minute ; Low byte:Second.			
15DC	HistoryEventList_ID88	U16					R	The history event 88th			
15DD	HistoryEventList_yM88	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15DE	HistoryEventList_dH88	U16					R	Hi Byte:Date ; Low byte:Hour.			
15DF	HistoryEventList_ms88	U16					R	Hi Byte:Minute ; Low byte:Second.			
15E0	HistoryEventList_ID89	U16					R	The history event 89th			
15E1	HistoryEventList_yM89	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15E2	HistoryEventList_dH89	U16					R	Hi Byte:Date ; Low byte:Hour.			
15E3	HistoryEventList_ms89	U16					R	Hi Byte:Minute ; Low byte:Second.			
15E4	HistoryEventList_ID90	U16					R	The history event 90th			
15E5	HistoryEventList_yM90	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15E6	HistoryEventList_dH90	U16					R	Hi Byte:Date ; Low byte:Hour.			
15E7	HistoryEventList_ms90	U16					R	Hi Byte:Minute ; Low byte:Second.			
15E8	HistoryEventList_ID91	U16					R	The history event 91th			
15E9	HistoryEventList_yM91	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15EA	HistoryEventList_dH91	U16					R	Hi Byte:Date ; Low byte:Hour.			
15EB	HistoryEventList_ms91	U16					R	Hi Byte:Minute ; Low byte:Second.			
15EC	HistoryEventList_ID92	U16					R	The history event 92th			
15ED	HistoryEventList_yM92	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15EE	HistoryEventList_dH92	U16					R	Hi Byte:Date ; Low byte:Hour.			
15EF	HistoryEventList_ms92	U16					R	Hi Byte:Minute ; Low byte:Second.			
15F0	HistoryEventList_ID93	U16					R	The history event 93th			
15F1	HistoryEventList_yM93	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15F2	HistoryEventList_dH93	U16					R	Hi Byte:Date ; Low byte:Hour.			
15F3	HistoryEventList_ms93	U16					R	Hi Byte:Minute ; Low byte:Second.			
15F4	HistoryEventList_ID94	U16					R	The history event 94th			
15F5	HistoryEventList_yM94	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15F6	HistoryEventList_dH94	U16					R	Hi Byte:Date ; Low byte:Hour.			
15F7	HistoryEventList_ms94	U16					R	Hi Byte:Minute ; Low byte:Second.			
15F8	HistoryEventList_ID95	U16					R	The history event 95th			
15F9	HistoryEventList_yM95	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15FA	HistoryEventList_dH95	U16					R	Hi Byte:Date ; Low byte:Hour.			
15FB	HistoryEventList_ms95	U16					R	Hi Byte:Minute ; Low byte:Second.			
15FC	HistoryEventList_ID96	U16					R	The history event 96th			
15FD	HistoryEventList_yM96	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
15FE	HistoryEventList_dH96	U16					R	Hi Byte:Date ; Low byte:Hour.			
15FF	HistoryEventList_ms96	U16					R	Hi Byte:Minute ; Low byte:Second.			
1600	HistoryEventList_ID97	U16					R	The history event 97th			
1601	HistoryEventList_yM97	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1602	HistoryEventList_dH97	U16					R	Hi Byte:Date ; Low byte:Hour.			
1603	HistoryEventList_ms97	U16					R	Hi Byte:Minute ; Low byte:Second.			
1604	HistoryEventList_ID98	U16					R	The history event 98th			
1605	HistoryEventList_yM98	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
1606	HistoryEventList_dH98	U16					R	Hi Byte:Date ; Low byte:Hour.			
1607	HistoryEventList_ms98	U16					R	Hi Byte:Minute ; Low byte:Second.			
1608	HistoryEventList_ID99	U16					R	The history event 99th			
1609	HistoryEventList_yM99	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
160A	HistoryEventList_dH99	U16					R	Hi Byte:Date ; Low byte:Hour.			
160B	HistoryEventList_ms99	U16					R	Hi Byte:Minute ; Low byte:Second.			
160C	HistoryEventList_ID100	U16					R	The history event 100th			
160D	HistoryEventList_yM100	U16					R	Hi Byte:Year (two value in decimal) ; Low byte:Month.			
160E	HistoryEventList_dH100	U16					R	Hi Byte:Date ; Low byte:Hour.			
160F	HistoryEventList_ms100	U16					R	Hi Byte:Minute ; Low byte:Second.			
1610	EnergyStatistics1	U32	0.01	kWh			R	History energy statistics data1th.			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation
1611	EnergyStatistics1	U32	0,01	kWh			R	Refer to EnergyStatistics_Config (1033) for the date.		
1612	EnergyStatistics2	U32	0,01	kWh			R	History energy statistics data2th.		
1613					Refer to EnergyStatistics_Config (1033) for the date.					
1614	EnergyStatistics3	U32	0,01	kWh			R	History energy statistics data3th.		
1615					Refer to EnergyStatistics_Config (1033) for the date.					
1616	EnergyStatistics4	U32	0,01	kWh			R	History energy statistics data4th.		
1617					Refer to EnergyStatistics_Config (1033) for the date.					
1618	EnergyStatistics5	U32	0,01	kWh			R	History energy statistics data5th.		
1619					Refer to EnergyStatistics_Config (1033) for the date.					
161A	EnergyStatistics6	U32	0,01	kWh			R	History energy statistics data6th.		
161B					Refer to EnergyStatistics_Config (1033) for the date.					
161C	EnergyStatistics7	U32	0,01	kWh			R	History energy statistics data7th.		
161D					Refer to EnergyStatistics_Config (1033) for the date.					
161E	EnergyStatistics8	U32	0,01	kWh			R	History energy statistics data8th.		
161F					Refer to EnergyStatistics_Config (1033) for the date.					
1620	EnergyStatistics9	U32	0,01	kWh			R	History energy statistics data9th.		
1621					Refer to EnergyStatistics_Config (1033) for the date.					
1622	EnergyStatistics10	U32	0,01	kWh			R	History energy statistics data10th.		
1623					Refer to EnergyStatistics_Config (1033) for the date.					
1624	EnergyStatistics11	U32	0,01	kWh			R	History energy statistics data11th.		
1625					Refer to EnergyStatistics_Config (1033) for the date.					
1626	EnergyStatistics12	U32	0,01	kWh			R	History energy statistics data12th.		
1627					Refer to EnergyStatistics_Config (1033) for the date.					
1628	EnergyStatistics13	U32	0,01	kWh			R	History energy statistics data13th.		
1629					Refer to EnergyStatistics_Config (1033) for the date.					
162A	EnergyStatistics14	U32	0,01	kWh			R	History energy statistics data14th.		
162B					Refer to EnergyStatistics_Config (1033) for the date.					
162C	EnergyStatistics15	U32	0,01	kWh			R	History energy statistics data15th.		
162D					Refer to EnergyStatistics_Config (1033) for the date.					
162E	EnergyStatistics16	U32	0,01	kWh			R	History energy statistics data16th.		
162F					Refer to EnergyStatistics_Config (1033) for the date.					
1630	EnergyStatistics17	U32	0,01	kWh			R	History energy statistics data17th.		
1631					Refer to EnergyStatistics_Config (1033) for the date.					
1632	EnergyStatistics18	U32	0,01	kWh			R	History energy statistics data18th.		
1633					Refer to EnergyStatistics_Config (1033) for the date.					
1634	EnergyStatistics19	U32	0,01	kWh			R	History energy statistics data19th.		
1635					Refer to EnergyStatistics_Config (1033) for the date.					
1636	EnergyStatistics20	U32	0,01	kWh			R	History energy statistics data20th.		
1637					Refer to EnergyStatistics_Config (1033) for the date.					
1638	EnergyStatistics21	U32	0,01	kWh			R	History energy statistics data21th.		
1639					Refer to EnergyStatistics_Config (1033) for the date.					
163A	EnergyStatistics22	U32	0,01	kWh			R	History energy statistics data22th.		
163B					Refer to EnergyStatistics_Config (1033) for the date.					
163C	EnergyStatistics23	U32	0,01	kWh			R	History energy statistics data23th.		
163D					Refer to EnergyStatistics_Config (1033) for the date.					
163E	EnergyStatistics24	U32	0,01	kWh			R	History energy statistics data24th.		
163F					Refer to EnergyStatistics_Config (1033) for the date.					
1640	EnergyStatistics25	U32	0,01	kWh			R	History energy statistics data25th.		
1641					Refer to EnergyStatistics_Config (1033) for the date.					
1642	EnergyStatistics26	U32	0,01	kWh			R	History energy statistics data26th.		
1643					Refer to EnergyStatistics_Config (1033) for the date.					
1644	EnergyStatistics27	U32	0,01	kWh			R	History energy statistics data27th.		
1645					Refer to EnergyStatistics_Config (1033) for the date.					
1646	EnergyStatistics28	U32	0,01	kWh			R	History energy statistics data28th.		
1647					Refer to EnergyStatistics_Config (1033) for the date.					
1648	EnergyStatistics29	U32	0,01	kWh			R	History energy statistics data29th.		
1649					Refer to EnergyStatistics_Config (1033) for the date.					
164A	EnergyStatistics30	U32	0,01	kWh			R	History energy statistics data30th.		
164B					Refer to EnergyStatistics_Config (1033) for the date.					
164C	EnergyStatistics31	U32	0,01	kWh			R	History energy statistics data31th.		
164D					Refer to EnergyStatistics_Config (1033) for the date.					
164E	EnergyStatistics32	U32	0,01	kWh			R	History energy statistics data32th.		
164F					Refer to EnergyStatistics_Config (1033) for the date.					
1650	EnergyStatistics33	U32	0,01	kWh			R	History energy statistics data33th.		
1651					Refer to EnergyStatistics_Config (1033) for the date.					
1652	EnergyStatistics34	U32	0,01	kWh			R	History energy statistics data34th.		
1653					Refer to EnergyStatistics_Config (1033) for the date.					
1654	EnergyStatistics35	U32	0,01	kWh			R	History energy statistics data35th.		
1655					Refer to EnergyStatistics_Config (1033) for the date.					
1656	EnergyStatistics36	U32	0,01	kWh			R	History energy statistics data36th.		
1657					Refer to EnergyStatistics_Config (1033) for the date.					
1658	EnergyStatistics37	U32	0,01	kWh			R	History energy statistics data37th.		
1659					Refer to EnergyStatistics_Config (1033) for the date.					
165A	EnergyStatistics38	U32	0,01	kWh			R	History energy statistics data38th.		
165B					Refer to EnergyStatistics_Config (1033) for the date.					
165C	EnergyStatistics39	U32	0,01	kWh			R	History energy statistics data39th.		
165D					Refer to EnergyStatistics_Config (1033) for the date.					
165E	EnergyStatistics40	U32	0,01	kWh			R	History energy statistics data40th.		
165F					Refer to EnergyStatistics_Config (1033) for the date.					

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
BMS Area(0x9000-0x9FFF)											
9000	AddressMask_BMS1_System	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectiective 1:Effective		00000000	0000000F
9001											
9002											
9003											
9004	BMS_Sys_Time	U16					R	BMS system time Bit0-5:second,range:0-59 Bit6-11:minute,range:0-59 Bit12-16:hour,range:0-23 Bit17-21:day,range1-31 Bit22-25:month,range1-12 Bit26-31:year,range0-63(起始于2000年)		0	0
9005	BMS_Sys_Date	U16					R	BMS_Sys_Date			
9006	BMS_CAN_Version	U16					R	BMS_CAN_Version			
9007	BMS_Manufacture_Name0	U16					R	BMS_Manufacture_Name0			
9008	BMS_Manufacture_Name1	U16					R	BMS_Manufacture_Name1			
9009	BMS_Manufacture_Name2	U16					R	BMS_Manufacture_Name2			
900A	BMS_Manufacture_Name3	U16					R	BMS_Manufacture_Name3			
900B	BMS_Version	U16					R	BMS_Version			
900C	Cell_Type	U16					R	Cell_Type			
900D	BaPack_Number	U16					R	Hi 8 bits:pack No. in parallel low 8 bits:pack No. in series			
900E	Realtime_Capacity	U16	1	%			R	Realtime_Capacity			
900F	Total_Voltage	U16	0,1	V			R	Total_Voltage			
9010	Total_Current	U16	0,1	A			R	Total_Current			
9011	Cell_Average_Temperature	U16	0,1	°C			R	Cell_Average_Temperature			
9012	SOC	U16	1	%			R	SOC			
9013	SOH	U16	1	%			R	SOH			
9014	BMS_Sys_Protect0	U16					R	BMS_Sys_Protect0			
9015	BMS_Sys_Protect1	U16					R	BMS_Sys_Protect1			
9016	BMS_Sys_Alarm0	U16					R	BMS_Sys_Alarm0			
9017	BMS_Sys_Alarm1	U16					R	BMS_Sys_Alarm1			
9018											
9019											
901A											
901B											
901C											
901D											
901E											
901F											
9020	BMS_Inquire	U16					RW	Battery query control word Hi 8 bits:sequence No. of fault range:0-5,0 means the latest fault Low 8 bits:query battery pack No. Range:0-5,0 means the the first pack Read this register to get the status of previous Write operation: 0x0000:Success 0x0001:In operation 0xFFFFB:fail ,controller refuses to responses(maybe controller is busy or configuration fail) 0xFFFFC:fail,no response 0xFFFFD:fail,this function is forbidden 0xFFFFE:fail,fail to save parameters 0xFFFFF:fail,error in input parameters			
9021											
9022											
9023											
9024											
9025											
9026											
9027											
9028											
9029											
902A											
902B											
902C											
902D											
902E											
902F											
9030											
9031											
9032											
9033											
9034											
9035											
9036											
9037											
9038											
9039											
903A											
903B											
903C											
903D											
903E											

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
903F	AddressMask_BMS2_Realtime	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectieective 1:Effective		00000000	0000000F
9040											
9041											
9042											
9043											
9044	Pack_RT_Timestamp	U32					R	Pack_RT_Timestamp		0	0
9045											
9046	Pack_RT_SN0	U16					R	Pack_RT_SN0			
9047	Pack_RT_SN1	U16					R	Pack_RT_SN1			
9048	Pack_RT_SN2	U16					R	Pack_RT_SN2			
9049	Pack_RT_SN3	U16					R	Pack_RT_SN3			
904A	Pack_RT_SN4	U16					R	Pack_RT_SN4			
904B	Pack_RT_SN5	U16					R	Pack_RT_SN5			
904C	Pack_RT_SN6	U16					R	Pack_RT_SN6			
904D	Pack_RT_SN7	U16					R	Pack_RT_SN7			
904E	Pack_RT_SN8	U16					R	Pack_RT_SN8			
904F	Pack_RT_SN9	U16					R	Pack_RT_SN9			
9050	Pack_RT_Cell_Voltage1	U16	0,01	V			R	Pack_RT_Cell_Voltage1			
9051	Pack_RT_Cell_Voltage2	U16	0,01	V			R	Pack_RT_Cell_Voltage2			
9052	Pack_RT_Cell_Voltage3	U16	0,01	V			R	Pack_RT_Cell_Voltage3			
9053	Pack_RT_Cell_Voltage4	U16	0,01	V			R	Pack_RT_Cell_Voltage4			
9054	Pack_RT_Cell_Voltage5	U16	0,01	V			R	Pack_RT_Cell_Voltage5			
9055	Pack_RT_Cell_Voltage6	U16	0,01	V			R	Pack_RT_Cell_Voltage6			
9056	Pack_RT_Cell_Voltage7	U16	0,01	V			R	Pack_RT_Cell_Voltage7			
9057	Pack_RT_Cell_Voltage8	U16	0,01	V			R	Pack_RT_Cell_Voltage8			
9058	Pack_RT_Cell_Voltage9	U16	0,01	V			R	Pack_RT_Cell_Voltage9			
9059	Pack_RT_Cell_Voltage10	U16	0,01	V			R	Pack_RT_Cell_Voltage10			
905A	Pack_RT_Cell_Voltage11	U16	0,01	V			R	Pack_RT_Cell_Voltage11			
905B	Pack_RT_Cell_Voltage12	U16	0,01	V			R	Pack_RT_Cell_Voltage12			
905C	Pack_RT_Cell_Voltage13	U16	0,01	V			R	Pack_RT_Cell_Voltage13			
905D	Pack_RT_Cell_Voltage14	U16	0,01	V			R	Pack_RT_Cell_Voltage14			
905E	Pack_RT_Cell_Voltage15	U16	0,01	V			R	Pack_RT_Cell_Voltage15			
905F	Pack_RT_Cell_Voltage16	U16	0,01	V			R	Pack_RT_Cell_Voltage16			
9060	Pack_RT_Cell_Voltage17	U16	0,01	V			R	Pack_RT_Cell_Voltage17			
9061	Pack_RT_Cell_Voltage18	U16	0,01	V			R	Pack_RT_Cell_Voltage18			
9062	Pack_RT_Cell_Voltage19	U16	0,01	V			R	Pack_RT_Cell_Voltage19			
9063	Pack_RT_Cell_Voltage20	U16	0,01	V			R	Pack_RT_Cell_Voltage20			
9064	Pack_RT_Cell_Voltage21	U16	0,01	V			R	Pack_RT_Cell_Voltage21			
9065	Pack_RT_Cell_Voltage22	U16	0,01	V			R	Pack_RT_Cell_Voltage22			
9066	Pack_RT_Cell_Voltage23	U16	0,01	V			R	Pack_RT_Cell_Voltage23			
9067	Pack_RT_Cell_Voltage24	U16	0,01	V			R	Pack_RT_Cell_Voltage24			
9068	Pack_RT_Cell_Max_Voltage	U16	0,01	V			R	Pack_RT_Cell_Max_Voltage			
9069	Pack_RT_Cell_Min_Voltage	U16	0,01	V			R	Pack_RT_Cell_Min_Voltage			
906A	Pack_RT_Temperature1_Pack	I16	0,1	℃			R	Pack_RT_Temperature1_Pack			
906B	Pack_RT_Temperature2_Pack	I16	0,1	℃			R	Pack_RT_Temperature2_Pack			
906C	Pack_RT_Temperature3_Pack	I16	0,1	℃			R	Pack_RT_Temperature3_Pack			
906D	Pack_RT_Temperature4_Pack	I16	0,1	℃			R	Pack_RT_Temperature4_Pack			
906E	Pack_RT_Temperature_MOS	I16	0,1	℃			R	Pack_RT_Temperature_MOS			
906F	Pack_RT_Temperature_Env	I16	0,1	℃			R	Pack_RT_Temperature_Env			
9070	Pack_RT_Current	I16	0,1	A			R	Pack_RT_Current			
9071	Pack_RT_Remaining_Capacity	U16	0,1	Ah			R	Pack_RT_Remaining_Capacity			
9072	Pack_RT_FullCharge_Capacity	U16	0,1	Ah			R	Pack_RT_FullCharge_Capacity			
9073	Pack_RT_Cycles	U16	1	times			R	Pack_RT_Cycles			
9074	Pack_RT_Balance_State	U16					R	Pack_RT_Balance_State			
9075	Pack_RT_Alarm_State	U16					R	Pack_RT_Alarm_State			
9076	Pack_RT_Protect_State	U16					R	Pack_RT_Protect_State			
9077	Pack_RT_Fault_State	U16					R	Pack_RT_Fault_State			
9078											
9079											
907A											
907B											
907C											
907D											
907E											
907F											
9080	AddressMask_BMS3_Fault	U64					R	These four registers (64 bits) control the effectiveness of 64 registers (including these 4 register themselves) in this field. Bit0~3 controls these four register, bit4 controls the 5th register in this field 0:Not Effectieective 1:Effective		00000000	0000000F
9081											
9082											
9083											
9084	Pack_Fault_Timestamp	U32					R	Pack_Fault_Timestamp		0	0
9085											
9086	Pack_Fault_SN0	U16					R	Pack_Fault_SN0			
9087	Pack_Fault_SN1	U16					R	Pack_Fault_SN1			
9088	Pack_Fault_SN2	U16					R	Pack_Fault_SN2			
9089	Pack_Fault_SN3	U16					R	Pack_Fault_SN3			
908A	Pack_Fault_SN4	U16					R	Pack_Fault_SN4			
908B	Pack_Fault_SN5	U16					R	Pack_Fault_SN5			
908C	Pack_Fault_SN6	U16					R	Pack_Fault_SN6			
908D	Pack_Fault_SN7	U16					R	Pack_Fault_SN7			
908E	Pack_Fault_SN8	U16					R	Pack_Fault_SN8			
908F	Pack_Fault_SN9	U16					R	Pack_Fault_SN9			
9090	Pack_Fault_Cell_Voltage1	U16	0,01	V			R	Pack_Fault_Cell_Voltage1			
9091	Pack_Fault_Cell_Voltage2	U16	0,01	V			R	Pack_Fault_Cell_Voltage2			
9092	Pack_Fault_Cell_Voltage3	U16	0,01	V			R	Pack_Fault_Cell_Voltage3			
9093	Pack_Fault_Cell_Voltage4	U16	0,01	V			R	Pack_Fault_Cell_Voltage4			
9094	Pack_Fault_Cell_Voltage5	U16	0,01	V			R	Pack_Fault_Cell_Voltage5			
9095	Pack_Fault_Cell_Voltage6	U16	0,01	V			R	Pack_Fault_Cell_Voltage6			
9096	Pack_Fault_Cell_Voltage7	U16	0,01	V			R	Pack_Fault_Cell_Voltage7			
9097	Pack_Fault_Cell_Voltage8	U16	0,01	V			R	Pack_Fault_Cell_Voltage8			
9098	Pack_Fault_Cell_Voltage9	U16	0,01	V			R	Pack_Fault_Cell_Voltage9			
9099	Pack_Fault_Cell_Voltage10	U16	0,01	V			R	Pack_Fault_Cell_Voltage10			
909A	Pack_Fault_Cell_Voltage11	U16	0,01	V			R	Pack_Fault_Cell_Voltage11			

Register	Name	类型	accuracy	Unit	minimum	Maximum	Read or Write	Remark	User or Installer	Mask calculation	
909B	Pack_Fault_Cell_Voltage12	U16	0,01	V			R	Pack_Fault_Cell_Voltage12			
909C	Pack_Fault_Cell_Voltage13	U16	0,01	V			R	Pack_Fault_Cell_Voltage13			
909D	Pack_Fault_Cell_Voltage14	U16	0,01	V			R	Pack_Fault_Cell_Voltage14			
909E	Pack_Fault_Cell_Voltage15	U16	0,01	V			R	Pack_Fault_Cell_Voltage15			
909F	Pack_Fault_Cell_Voltage16	U16	0,01	V			R	Pack_Fault_Cell_Voltage16			
90A0	Pack_Fault_Cell_Voltage17	U16	0,01	V			R	Pack_Fault_Cell_Voltage17			
90A1	Pack_Fault_Cell_Voltage18	U16	0,01	V			R	Pack_Fault_Cell_Voltage18			
90A2	Pack_Fault_Cell_Voltage19	U16	0,01	V			R	Pack_Fault_Cell_Voltage19			
90A3	Pack_Fault_Cell_Voltage20	U16	0,01	V			R	Pack_Fault_Cell_Voltage20			
90A4	Pack_Fault_Cell_Voltage21	U16	0,01	V			R	Pack_Fault_Cell_Voltage21			
90A5	Pack_Fault_Cell_Voltage22	U16	0,01	V			R	Pack_Fault_Cell_Voltage22			
90A6	Pack_Fault_Cell_Voltage23	U16	0,01	V			R	Pack_Fault_Cell_Voltage23			
90A7	Pack_Fault_Cell_Voltage24	U16	0,01	V			R	Pack_Fault_Cell_Voltage24			
90A8	Pack_Fault_Cell_Max_Voltage	U16	0,01	V			R	Pack_Fault_Cell_Max_Voltage			
90A9	Pack_Fault_Cell_Min_Voltage	U16	0,01	V			R	Pack_Fault_Cell_Min_Voltage			
90AA	Pack_Fault_Temperature1_Pack	I16	0,1	°C			R	Pack_Fault_Temperature1_Pack			
90AB	Pack_Fault_Temperature2_Pack	I16	0,1	°C			R	Pack_Fault_Temperature2_Pack			
90AC	Pack_Fault_Temperature3_Pack	I16	0,1	°C			R	Pack_Fault_Temperature3_Pack			
90AD	Pack_Fault_Temperature4_Pack	I16	0,1	°C			R	Pack_Fault_Temperature4_Pack			
90AE	Pack_Fault_Temperature_MOS	I16	0,1	°C			R	Pack_Fault_Temperature_MOS			
90AF	Pack_Fault_Temperature_Env	I16	0,1	°C			R	Pack_Fault_Temperature_Env			
90B0	Pack_Fault_Current	I16	0,1	A			R	Pack_Fault_Current			
90B1	Pack_Fault_Remaining_Capacity	U16	0,1	Ah			R	Pack_Fault_Remaining_Capacity			
90B2	Pack_Fault_FullCharge_Capacity	U16	0,1	Ah			R	Pack_Fault_FullCharge_Capacity			
90B3	Pack_Fault_Total_Voltage	U16	0,1	V			R	Pack_Fault_Total_Voltage			
90B4	Pack_Alarm_State	U16					R	Pack_Alarm_State			
90B5	Pack_Protect_State	U16					R	Pack_Protect_State			
90B6	Pack_Fault_State	U16					R	Pack_Fault_State			
90B7											
90B8											
90B9											
90BA											
90BB											
90BC											
90BD											
90BE											
90BF											

SOFAR HYD 5 ... 20K-3PH Modbus Protocol - Fault Description

Table	Byte	Bit	Name	Error Code	Remark	Alarm source	Classification	Note
Fault1	byte 0	bit 0	GridOVP	001	GridOVP	DSPM	grid	
		bit 1	GridUVP	002	GridUVP	DSPM		
		bit 2	GridOFP	003	GridOFP	DSPM		
		bit 3	GridUFP	004	GridUFP	DSPM		
		bit 4	GFCI	005	GFCI	DSPM&S		
		bit 5	OVRT	006	OVRT	DSPM		
		bit 6	LVRT	007	LVRT	DSPM		
		bit 7	IslandFault	008	IslandFault	DSPM		
	byte 1	bit 0	GridOVPIstant1	009	GridOVPIstant1	DSPM		
		bit 1	GridOVPIstant2	010	GridOVPIstant2	DSPM		
		bit 2	VGridLineFault	011	VGridLineFault	DSPM		
		bit 3	InvOVP	012	InvOVP	DSPM		
		bit 4		013				
		bit 5		014				
		bit 6		015				
		bit 7		016				
Fault2	byte 0	bit 0	HwADFaultIGrid	017	HwADFaultIGrid	DSPM	sampling error	
		bit 1	HwADFaultDCI(AC)	018	HwADFaultDCI(AC)	DSPM		
		bit 2	HwADFaultVGrid(DC)	019	HwADFaultVGrid(DC)	DSPS		
		bit 3	HwADFaultVGrid(AC)	020	HwADFaultVGrid(AC)	DSPM		
		bit 4	GFCIDeviceFault(DC)	021	GFCIDeviceFault(DC)	DSPS		
		bit 5	GFCIDeviceFault(AC)	022	GFCIDeviceFault(AC)	DSPM		
		bit 6	HwADFaultDCV	023	HwADFaultDCV	DSPM		
		bit 7	HwADFaultIdc	024	HwADFaultIdc	DSPS		
	byte 1	bit 0	HwADFaultDCI(DC)	025	HwADFaultDCI(DC)	DSPS		
		bit 1	HwADFaultIdcBranch	026	HwADFaultIdcBranch	DSPS		
		bit 2		027				
		bit 3		028				
		bit 4	ConsistentFault_GFCI	029	ConsistentFault_GFCI	DSPS		
		bit 5	ConsistentFault_Vgrid	030	ConsistentFault_Vgrid	DSPS		
		bit 6	ConsistentFault_DCI	031	ConsistentFault_DCI	DSPS		
		bit 7		032				
Fault3	byte 0	bit 0	SpiCommFault(DC)	033	SpiCommFault(DC)			
		bit 1	SpiCommFault(AC)	034	SpiCommFault(AC)			
		bit 2	SChip_Fault	035	SChip_Fault			
		bit 3	MChip_Fault	036	MChip_Fault			
		bit 4	HwAuxPowerFault	037	HwAuxPowerFault			
		bit 5	InverterSoftStartFail	038	InverterSoftStartFail	DSPM		
		bit 6		039				
		bit 7		040				
	byte 1	bit 0	RelayFail	041	RelayFail	DSPM	System	
		bit 1	IsoFault	042	IsoFault	DSPS		
		bit 2	PEConnectFault	043	PEConnectFault	DSPS		
		bit 3	PvConfigError	044	PvConfigError	DSPS		
		bit 4	CTDisconnect	045	CTDisconnect	DSPM&S		
		bit 5	ReversalConnection	046	ReversalConnection	DSPS		
		bit 6	ParallelFault	047	ParallelFault	DSPM		
		bit 7	SNTypeFault	048	SNTypeFault	DSPM&S		
Fault4	byte 0	bit 0	TempFault_Bat	049	TempFault_Bat	DSPM&S	Temperature	
		bit 1	TempFault_HeatSink1	050	TempFault_HeatSink1	DSPM&S		
		bit 2	TempFault_HeatSink2	051	TempFault_HeatSink2	DSPM&S		
		bit 3	TempFault_HeatSink3	052	TempFault_HeatSink3	DSPM&S		
		bit 4	TempFault_HeatSink4	053	TempFault_HeatSink4	DSPM&S		
		bit 5	TempFault_HeatSink5	054	TempFault_HeatSink5	DSPM&S		
		bit 6	TempFault_HeatSink6	055	TempFault_HeatSink6	DSPM&S		
		bit 7		056				
	byte 1	bit 0	TempFault_Env1	057	TempFault_Env1, enviroment	DSPM&S		
		bit 1	TempFault_Env2	058	TempFault_Env2, enviroment	DSPM&S		
		bit 2	TempFault_Inv1	059	TempFault_Inv1, inverter module	DSPM&S		
		bit 3	TempFault_Inv2	060	TempFault_Inv2, inverter module	DSPM&S		
		bit 4	TempFault_Inv3	061	TempFault_Inv3, inverter module	DSPM&S		
		bit 5		062				
		bit 6		063				
		bit 7		064				
Fault5	byte 0	bit 0	VbusRmsUnbalance	065	VbusRmsUnbalance	DSPM	Voltage	
		bit 1	VbusInstantUnbalance	066	VbusInstantUnbalance	DSPM		
		bit 2	BusUVP	067	BusUVP	DSPM		
		bit 3	BusZVP	068	BusZVP	DSPM		
		bit 4	PVOVP	069	PVOVP	DSPS		
		bit 5	BatOVP	070	BatOVP	DSPS		
		bit 6	LLCBusOVP	071	LLCBusOVP	DSPS		
		bit 7	SwBusRmsOVP	072	SwBusRmsOVP	DSPM		
	byte 1	bit 0	SwBusInstantOVP	073	SwBusInstantOVP	DSPM		
		bit 1	FlyingCapOVP	074	FlyingCapOVP	DSPM&S		
		bit 2		075				
		bit 3		076				
		bit 4		077				
		bit 5		078				
		bit 6		079				
		bit 7		080				
		bit 0	SwBatOCP	081	SwBatOCP	DSPS		
		bit 1	DciOCP	082	DciOCP	DSPM		

Table	Byte	Bit	Name	Error Code	Remark	Alarm source	Classification	Note
Fault6	byte 0	bit 2	SwOCPIstant	083	SwOCPIstant	DSPM	Current	
		bit 3	SwBuckBoostOCP	084	SwBuckBoostOCP	DSPS		
		bit 4	SwAcRmsOCP	085	SwAcRmsOCP	DSPM		
		bit 5	SwPvOCPIstant	086	SwPvOCPIstant	DSPS		
		bit 6	IpvUnbalance	087	IpvUnbalance	DSPS		
		bit 7	IacUnbalance	088	IacUnbalance	DSPM		
		bit 0		089				
	byte 1	bit 1		090				
		bit 2		091				
		bit 3		092				
		bit 4		093				
		bit 5		094				
		bit 6		095				
		bit 7		096				
Fault7	byte 0	bit 0	HwLLCBusOVP	097	HwLLCBusOVP	DSPS	Hardware signal	
		bit 1	HwBusOVP	098	HwBusOVP	DSPM		
		bit 2	HwBuckBoostOCP	099	HwBuckBoostOCP	DSPS		
		bit 3	HwBatOCP	100	HwBatOCP	DSPS		
		bit 4		101				
		bit 5	HwPVOC	102	HwPVOC	DSPS		
		bit 6	HwACOC	103	HwACOC	DSPM		
		bit 7		104				
	byte 1	bit 0		105			Hardware overload	
		bit 1		106				
		bit 2		107				
		bit 3		108				
		bit 4		109				
		bit 5	Overload1	110	Overload1	DSPM		
bit 6		Overload2	111	Overload2	DSPM			
bit 7		Overload3	112	Overload3	DSPM			
Fault8	byte 0	bit 0	OverTempDerating	113	OverTempDerating	DSPM	Derating	Only alarm on inverter , will not trip the inverter fault protection status
		bit 1	FreqDerating	114	FreqDerating	DSPM		
		bit 2	FreqLoading	115	FreqLoading	DSPM		
		bit 3	VoltDerating	116	VoltDerating	DSPM		
		bit 4	VoltLoading	117	VoltLoading	DSPM		
		bit 5		118		DSPM		
		bit 6		119				
		bit 7		120				
	byte 1	bit 0		121			shutdown	
		bit 1		122				
		bit 2		123				
		bit 3	BatLowVoltageAlarm	124	BatLowVoltageAlarm			
		bit 4	BatLowVoltageShut	125	BatLowVoltageShut			
		bit 5		126	BatLowVoltageAlarm_pre alarm			
bit 6			127					
bit 7			128					
Fault9	byte 0	bit 0	unrecoverHwAcOCP	129	unrecoverHwAcOCP	DSPM	permanent	
		bit 1	unrecoverBusOVP	130	unrecoverBusOVP	DSPM		
		bit 2	unrecoverHwBusOVP	131	unrecoverHwBusOVP	DSPM		
		bit 3	unrecoverIpvUnbalance	132	unrecoverIpvUnbalance	DSPS		
		bit 4	unrecoverEPSBatOCP	133	unrecoverEPSBatOCP	DSPM		
		bit 5	unrecoverAcOCPIstant	134	unrecoverAcOCPIstant	DSPM		
		bit 6	unrecoverIacUnbalance	135	unrecoverIacUnbalance	DSPM		
		bit 7		136				
	byte 1	bit 0	unrecoverPvConfigError	137	unrecoverPvConfigError	DSPS		
		bit 1	unrecoverPVOCPIstant	138	unrecoverPVOCPIstant	DSPS		
		bit 2	unrecoverHwPVOC	139	unrecoverHwPVOC	DSPS		
		bit 3	unrecoverRelayFail	140	unrecoverRelayFail	DSPM		
		bit 4	unrecoverVbusUnbalance	141	unrecoverVbusUnbalance	DSPM		
		bit 5	unrecoverSpdFail(DC)	142	unrecoverSpdFail(DC)	DSPS		
bit 6		unrecoverSpdFail(AC)	143	unrecoverSpdFail(AC)	DSPM			
bit 7			144					
Fault10	byte 0	bit 0	USBFault	145	USBFault	ARM	Communication board	
		bit 1	WifiFault	146	WifiFault	ARM		
		bit 2	BluetoothFault	147	BluetoothFault	ARM		
		bit 3	RTCFault	148	RTCFault	ARM		
		bit 4	CommEEPROMFault	149	CommEEPROMFault	ARM		
		bit 5	FlashFault	150	FlashFault	ARM		
		bit 6		151				
		bit 7	SafetyVerFault	152	SafetyVerFault	ARM		
	byte 1	bit 0	SciCommLose(DC)	153	SciCommLose(DC)	ARM		
		bit 1	SciCommLose(AC)	154	SciCommLose(AC)	ARM		
		bit 2	SciCommLose(Fuse)	155	SciCommLose(Fuse)	ARM		
		bit 3	SoftVerError	156	SoftVerError	ARM		
		bit 4	BMS1CommunicatonFault	157	BMS1CommunicatonFault	ARM		
		bit 5	BMS2CommunicatonFault	158	BMS2CommunicatonFault			
bit 6		BMS3CommunicatonFault	159	BMS3CommunicatonFault				
bit 7		BMS4CommunicatonFault	160	BMS4CommunicatonFault				
Fault11	byte 0	bit 0	ForceShutdown	161	ForceShutdown	ARM	Shutdown/derating fom communication board	
		bit 1	RemoteShutdown	162	RemoteShutdown	ARM		
		bit 2	Drms0Shutdown	163	Drms0Shutdown	ARM		
		bit 3		164				
		bit 4	RemoteDerating	165	RemoteDerating	ARM		
		bit 5	LogicInterfaceDerating	166	LogicInterfaceDerating	ARM		
		bit 6	AlarmAntiRefluxing	167	AlarmAntiRefluxing	ARM		
		bit 7		168				

Table	Byte	Bit	Name	Error Code	Remark	Alarm source	Classification	Note
Fault11	byte 1	bit 0	FanFault1	169	FanFault1	ARM	Fan	
		bit 1	FanFault2	170	FanFault2	ARM		
		bit 2	FanFault3	171	FanFault3	ARM		
		bit 3	FanFault4	172	FanFault4	ARM		
		bit 4	FanFault5	173	FanFault5	ARM		
		bit 5	FanFault6	174	FanFault6	ARM		
		bit 6		175				
		bit 7		176				
Fault12	byte 0	bit 0	BMS OVP	177	BMS OVP	BMS	BMS	
		bit 1	BMS UVP	178	BMS UVP	BMS		
		bit 2	BMS OTP	179	BMS OTP	BMS		
		bit 3	BMS UTP	180	BMS UTP	BMS		
		bit 4	BMS OCP	181	BMS OCP	BMS		
		bit 5	BMS Short	182	BMS Short	BMS		
		bit 6		183				
		bit 7		184				
	byte 1	bit 0		185				
		bit 1		186				
		bit 2		187				
		bit 3		188				
		bit 4		189				
		bit 5		190				
Fault13	byte 0	bit 0	StringFuse_Fault0	193	StringFuse_Fault0	FUSE	FUSE	
		bit 1	StringFuse_Fault1	194	StringFuse_Fault1	FUSE		
		bit 2	StringFuse_Fault2	195	StringFuse_Fault2	FUSE		
		bit 3	StringFuse_Fault3	196	StringFuse_Fault3	FUSE		
		bit 4	StringFuse_Fault4	197	StringFuse_Fault4	FUSE		
		bit 5	StringFuse_Fault5	198	StringFuse_Fault5	FUSE		
		bit 6	StringFuse_Fault6	199	StringFuse_Fault6	FUSE		
		bit 7	StringFuse_Fault7	200	StringFuse_Fault7	FUSE		
	byte 1	bit 0	StringFuse_Fault8	201	StringFuse_Fault8	FUSE		
		bit 1	StringFuse_Fault9	202	StringFuse_Fault9	FUSE		
		bit 2	StringFuse_Fault10	203	StringFuse_Fault10	FUSE		
		bit 3	StringFuse_Fault11	204	StringFuse_Fault11	FUSE		
		bit 4	StringFuse_Fault12	205	StringFuse_Fault12	FUSE		
		bit 5	StringFuse_Fault13	206	StringFuse_Fault13	FUSE		
Fault14	byte 0	bit 6	StringFuse_Fault14	207	StringFuse_Fault14	FUSE		
		bit 7	StringFuse_Fault15	208	StringFuse_Fault15	FUSE		
		bit 0	StringFuse_Fault16	209	StringFuse_Fault16	FUSE		
		bit 1	StringFuse_Fault17	210	StringFuse_Fault17	FUSE		
		bit 2	StringFuse_Fault18	211	StringFuse_Fault18	FUSE		
		bit 3	StringFuse_Fault19	212	StringFuse_Fault19	FUSE		
		bit 4	StringFuse_Fault20	213	StringFuse_Fault20	FUSE		
		bit 5	StringFuse_Fault21	214	StringFuse_Fault21	FUSE		
	byte 1	bit 6	StringFuse_Fault22	215	StringFuse_Fault22	FUSE		
		bit 7	StringFuse_Fault23	216	StringFuse_Fault23	FUSE		
		bit 0	StringFuse_Fault24	217	StringFuse_Fault24	FUSE		
		bit 1	StringFuse_Fault25	218	StringFuse_Fault25	FUSE		
		bit 2	StringFuse_Fault26	219	StringFuse_Fault26	FUSE		
		bit 3	StringFuse_Fault27	220	StringFuse_Fault27	FUSE		
Fault15	byte 0	bit 4	StringFuse_Fault28	221	StringFuse_Fault28	FUSE		
		bit 5	StringFuse_Fault29	222	StringFuse_Fault29	FUSE		
		bit 6	StringFuse_Fault30	223	StringFuse_Fault30	FUSE		
		bit 7	StringFuse_Fault31	224	StringFuse_Fault31	FUSE		
	byte 1	bit 0	InputFuse_Fault0	225	InputFuse_Fault0	FUSE		
		bit 1	InputFuse_Fault1	226	InputFuse_Fault1	FUSE		
		bit 2	InputFuse_Fault2	227	InputFuse_Fault2	FUSE		
		bit 3	InputFuse_Fault3	228	InputFuse_Fault3	FUSE		
		bit 4	InputFuse_Fault4	229	InputFuse_Fault4	FUSE		
		bit 5	InputFuse_Fault5	230	InputFuse_Fault5	FUSE		
Fault16	byte 0	bit 6	InputFuse_Fault6	231	InputFuse_Fault6	FUSE		
		bit 7	InputFuse_Fault7	232	InputFuse_Fault7	FUSE		
		bit 0	InputFuse_Fault8	233	InputFuse_Fault8	FUSE		
		bit 1	InputFuse_Fault9	234	InputFuse_Fault9	FUSE		
		bit 2	InputFuse_Fault10	235	InputFuse_Fault10	FUSE		
		bit 3	InputFuse_Fault11	236	InputFuse_Fault11	FUSE		
		bit 4	InputFuse_Fault12	237	InputFuse_Fault12	FUSE		
	byte 1	bit 5	InputFuse_Fault13	238	InputFuse_Fault13	FUSE		
		bit 6	InputFuse_Fault14	239	InputFuse_Fault14	FUSE		
		bit 7	InputFuse_Fault15	240	InputFuse_Fault15	FUSE		
		bit 0	CombinerOverVoltageGroup1				Junction	
		bit 1	CombinerOverVoltageGroup2					
		bit 2	CombinerOverVoltageGroup3					
		bit 3	CombinerOverVoltageGroup4					
		bit 4	CombinerOverVoltageGroup5					
		bit 5	CombinerOverVoltageGroup6					
		bit 6	CombinerOverVoltageGroup7					
		bit 7	CombinerOverVoltageGroup8					
		bit 0	CombinerOverVoltageGroup9					
		bit 1	CombinerOverVoltageGroup10					
		bit 2	CombinerOverVoltageGroup11					
		bit 3	CombinerOverVoltageGroup12					
		bit 4	CombinerOverVoltageGroup13					
		bit 5	CombinerOverVoltageGroup14					

Table	Byte	Bit	Name	Error Code	Remark	Alarm source	Classification	Note
Fault17	byte 0	bit 6	CombinerOverVoltageGroup15				Junction	
		bit 7	CombinerOverVoltageGroup16					
		bit 0	CombinerUnderVoltageGroup1					
		bit 1	CombinerUnderVoltageGroup2					
		bit 2	CombinerUnderVoltageGroup3					
		bit 3	CombinerUnderVoltageGroup4					
		bit 4	CombinerUnderVoltageGroup5					
		bit 5	CombinerUnderVoltageGroup6					
	byte 1	bit 6	CombinerUnderVoltageGroup7					
		bit 7	CombinerUnderVoltageGroup8					
		bit 0	CombinerUnderVoltageGroup9					
		bit 1	CombinerUnderVoltageGroup10					
		bit 2	CombinerUnderVoltageGroup11					
		bit 3	CombinerUnderVoltageGroup12					
		bit 4	CombinerUnderVoltageGroup13					
		bit 5	CombinerUnderVoltageGroup14					
Fault18	byte 0	bit 6	CombinerUnderVoltageGroup15				Junction	
		bit 7	CombinerUnderVoltageGroup16					
		bit 0	CombinerOverCurrent1					
		bit 1	CombinerOverCurrent2					
		bit 2	CombinerOverCurrent3					
		bit 3	CombinerOverCurrent4					
		bit 4	CombinerOverCurrent5					
		bit 5	CombinerOverCurrent6					
	byte 1	bit 6	CombinerOverCurrent7					
		bit 7	CombinerOverCurrent8					
		bit 0	CombinerOverCurrent9					
		bit 1	CombinerOverCurrent10					
		bit 2	CombinerOverCurrent11					
		bit 3	CombinerOverCurrent12					
		bit 4	CombinerOverCurrent13					
		bit 5	CombinerOverCurrent14					
Fault19	byte 0	bit 6	CombinerOverCurrent15				Junction	
		bit 7	CombinerOverCurrent16					
		bit 0	CombinerOverCurrent17					
		bit 1	CombinerOverCurrent18					
		bit 2	CombinerOverCurrent19					
		bit 3	CombinerOverCurrent20					
		bit 4	CombinerOverCurrent21					
		bit 5	CombinerOverCurrent22					
	byte 1	bit 6	CombinerOverCurrent23					
		bit 7	CombinerOverCurrent24					
		bit 0	CombinerOverCurrent25					
		bit 1	CombinerOverCurrent26					
		bit 2	CombinerOverCurrent27					
		bit 3	CombinerOverCurrent28					
		bit 4	CombinerOverCurrent29					
		bit 5	CombinerOverCurrent30					
Fault20	byte 0	bit 6	CombinerOverCurrent31				Junction	
		bit 7	CombinerOverCurrent32					
		bit 0						
		bit 1						
		bit 2						
		bit 3						
		bit 4						
		bit 5						
	byte 1	bit 6						
		bit 7						
		bit 0						
		bit 1						
		bit 2						
		bit 3						
		bit 4						
		bit 5						
Fault21	byte 0	bit 6					Junction	
		bit 7						
		bit 0						
		bit 1						
		bit 2						
		bit 3						
		bit 4						
		bit 5						
	byte 1	bit 6						
		bit 7						
		bit 0						
		bit 1						
		bit 2						
		bit 3						
		bit 4						
		bit 5						
	byte 0	bit 6						
		bit 7						
		bit 0	CombinerRefluxFault1					
		bit 1	CombinerRefluxFault2					
	byte 0	bit 2	CombinerRefluxFault3					
		bit 3	CombinerRefluxFault4					

Table	Byte	Bit	Name	Error Code	Remark	Alarm source	Classification	Note
Fault22	byte 0	bit 4	CombinerRefluxFault5				Junction	
		bit 5	CombinerRefluxFault6					
		bit 6	CombinerRefluxFault7					
		bit 7	CombinerRefluxFault8					
	byte 1	bit 0	CombinerRefluxFault9					
		bit 1	CombinerRefluxFault10					
		bit 2	CombinerRefluxFault11					
		bit 3	CombinerRefluxFault12					
		bit 4	CombinerRefluxFault13					
		bit 5	CombinerRefluxFault14					
		bit 6	CombinerRefluxFault15					
		bit 7	CombinerRefluxFault16					
Fault23	byte 0	bit 0	CombinerRefluxFault17				Junction	
		bit 1	CombinerRefluxFault18					
		bit 2	CombinerRefluxFault19					
		bit 3	CombinerRefluxFault20					
		bit 4	CombinerRefluxFault21					
		bit 5	CombinerRefluxFault22					
		bit 6	CombinerRefluxFault23					
		bit 7	CombinerRefluxFault24					
	byte 1	bit 0	CombinerRefluxFault25					
		bit 1	CombinerRefluxFault26					
		bit 2	CombinerRefluxFault27					
		bit 3	CombinerRefluxFault28					
		bit 4	CombinerRefluxFault29					
		bit 5	CombinerRefluxFault30					
Fault24	byte 0	bit 0					Junction	
		bit 1						
		bit 2						
		bit 3						
		bit 4						
		bit 5						
		bit 6						
		bit 7						
	byte 1	bit 0						
		bit 1						
		bit 2						
		bit 3						
		bit 4						
		bit 5						
Fault25	byte 0	bit 0					Junction	
		bit 1						
		bit 2						
		bit 3						
		bit 4						
		bit 5						
		bit 6						
		bit 7						
	byte 1	bit 0						
		bit 1						
		bit 2						
		bit 3						
		bit 4						
		bit 5						
Fault26	byte 0	bit 0	AFCI0				Pull Arc	
		bit 1	AFCI1					
		bit 2	AFCI2					
		bit 3	AFCI3					
		bit 4	AFCI4					
		bit 5	AFCI5					
		bit 6	AFCI6					
		bit 7	AFCI7					
	byte 1	bit 0	AFCI8					
		bit 1	AFCI9					
		bit 2	AFCI10					
		bit 3	AFCI11					
		bit 4	AFCI12					
		bit 5	AFCI13					
		bit 6	AFCI14					
		bit 7	AFCI15					