

PS 10000 series: register list for devices with KE firmware from V3.02 (check the installed version in your device's MENU in item INFO HW. SW)

Modbus address (dec)	Modbus address (hex)	Read coils (0x01)	Read holding registers (0x03)	Write single coil (0x05)	Write single register (0x06)	Write multiple registers (0x10)	Description	Access	Data type	Data length in bytes	Number of registers	Data	Example	Profibus slot	Profibus index	Profibus Index (hex)	EtherCAT SDO PDO?
0	0x0000	x					Device class	R	uint16	2	1		See programming guide in section "A"	1	0	0x0100	x
1	0x0001	x					Device type	R	char	40	20	ASCII	PS 10500-10	1	1	0x0101	x
21	0x0015	x					Manufacturer	R	char	40	20	ASCII		1	2	0x0102	x
41	0x0029	x					Manufacturer address	R	char	40	20	ASCII		1	3	0x0103	x
61	0x003D	x					Manufacturer ZIP code	R	char	40	20	ASCII		1	4	0x0104	x
81	0x0051	x					Manufacturer phone number	R	char	40	20	ASCII		1	5	0x0105	x
101	0x0065	x					Manufacturer website	R	char	40	20	ASCII		1	6	0x0106	x
121	0x0079	x					Nominal voltage	R	float	4	2	Floating point number IEEE754	500	1	7	0x0107	x
123	0x007B	x					Nominal current	R	float	4	2	Floating point number IEEE754	10	1	8	0x0108	x
125	0x007D	x					Nominal power	R	float	4	2	Floating point number IEEE754	1500	1	9	0x0109	x
127	0x007F	x					Max. Internal resistance	R	float	4	2	Floating point number IEEE754	6000	1	10	0x010A	x
129	0x0081	x					Min. Internal resistance	R	float	4	2	Floating point number IEEE754	0.03	1	11	0x010B	x
131	0x0083	x					Article no.	R	char	40	20	ASCII	06230944	1	12	0x010C	x
151	0x0097	x					Serial no.	R	char	40	20	ASCII	1234560001	1	13	0x010D	x
171	0x00AB	x		x			User text	RW	char	40	20	ASCII		1	14	0x010E	x
191	0x00BF	x					Firmware version (KE)	R	char	40	20	ASCII		1	15	0x010F	x
211	0x00D3	x					Firmware version (HMI)	R	char	40	20	ASCII		1	16	0x0110	x
231	0x00E7	x					Firmware version (DR)	R	char	40	20	ASCII		1	17	0x0111	x

402	0x0192	x				Remote mode	RW	uint(16)	2	1	Coll : Remote	0x0000 = off; 0xFF00 = on	2	1	0x0200	x
405	0x0195	x				DC output/input	RW	uint(16)	2	1	Coll : Output/input	0x0000 = off; 0xFF00 = on	2	4	0x0203	x
407	0x0197	x				Condition of DC output/input after power fail alarm	RW	uint(16)	2	1	Coll : Auto-On	0x0000 = off; 0xFF00 = auto	3	30	0x031C	x
408	0x0198	x			x	Condition of DC output/input after powering the device	RW	uint(16)	2	1	Reg : Power-On	0xFFFF = off; 0xFFFE = restore	2	6	0x0205	x
409	0x0199	x			x	Operation mode (UIP/UIR)	RW	uint(16)	2	1	Coll : Operation mode	0x0000 = UIP; 0xFF00 = UIR	2	7	0x0206	x
410	0x019A				x	Restart of the device (warm start)	W	uint(16)	2	1	Coll : Restart	0xFF00 = execute	2	8	0x0207	x
411	0x019B				x	Acknowledge alarms	W	uint(16)	2	1	Coll : Alarms	0xFF00 = acknowledge	2	9	0x0208	x
416	0x01A0	x			x	Analog interface: Reference voltage (pin VREF)	RW	uint(16)	2	1	Coll : VREF	0x0000 = 10V; 0xFF00 = 5V	2	14	0x020D	x
417	0x01A1	x			x	Analog interface: REM-SB level	RW	uint(16)	2	1	Coll : REM-SB Level	0x0000 = normal; 0xFF00 = inverted	2	12	0x020B	x
418	0x01A2				x	Analog interface: REM-SB action	W	uint(16)	2	1	Coll : REM-SB Action	0x0000 = off; 0xFF00 = auto	2	13	0x020C	x
425	0x01A9	x			x	Condition of DC output/input after leaving remote	R	uint(16)	2	1	Coll : Condition	0x0000 = off; 0xFF00 = unchanged	2	42	0x0229	
427	0x01AB				x	Voltage Controller Speed	RW	uint(16)	2	1	Level	0x0000 = Normal (default); 0x0001 = Slow; 0x0002 = Fast;	2	60	0x023B	x
428	0x01AC	x			x	SEMI F47	RW	uint(16)	2	1	On/Off	0x0000 = off; 0x0001 = on;	2	61	0x023C	x
432	0x01B0	x			x	Reset device to factory settings	RW	uint(16)	2	1	Coll : Condition	0xFF00 = Trigger reset.	2	43	0x022A	x
440	0x01B8				x	Analog interface: Pin 14 configuration	RW	uint(16)	2	1	Alarms 1	0x0000 = OVP (default); 0x0001 = OCP; 0x0002 = OPP; 0x0003 = OVP + OCP; 0x0004 = OVP + OPP; 0x0005 = OCP + OPP; 0x0006 = OVP + OCP + OPP	2	44	0x022B	x
441	0x01B9				x	Analog interface: Pin 6 configuration	RW	uint(16)	2	1	Alarms 2	0x0000 = OT + PF (default); 0x0001 = OT; 0x0002 = PF	2	45	0x022C	x
442	0x01BA	x			x	Analog interface: Pin 15 configuration	RW	uint(16)	2	1	Status DC / reg. mode	0x0000 = CV; 0x0001 = DC output status	2	46	0x022D	x
500	0x01F4	x			x	Set voltage value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)	2	23	0x0216	x
501	0x01F5	x			x	Set current value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide) / Irradiation	2	24	0x0217	x
502	0x01F6	x			x	Set power value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Power value (for translation see programming guide)	2	25	0x0218	x
505	0x01F9	x				Device state	R	uint(32)	4	2	Bit 0-4: Control location Bit 5 : Config mode Bit 6 : Master-slave type Bit 7 : Output state Bit 9-10 : Regulation mode Bit 11 : Remote Bit 14 : External sense Bit 15 : Alarms Bit 16 : OVP Bit 17 : OCP Bit 18 : OPP Bit 19 : OT Bit 21 : Power fail Bit 29 : MSP Bit 30 : REM-SB	0x00 = free; 0x01 = local; 0x03 = USB; 0x04 = analog; 0x05 = Profibus; 0x06 = Ethernet; 0x08 = Master/Slave; 0x09 = RS232; 0x10 = CANopen; 0x12 = Modbus TCP 1P; 0x13 = Profinet 1P; 0x14 = Ethernet 1P; 0x15 = Ethernet TCP 2P; 0x16 = Modbus TCP 2P; 0x17 = Profinet 2P; 0x18 = GPB; 0x19 = CAN; 0x1A = EtherCAT; 0x1C = free (due to communication timeout (CTO)) 0 = Slave; 1 = Master 0 = off; 1 = on 00 = CV; 01 = CR; 10 = CC; 11 = CP 0 = off; 1 = on 0 = off; 1 = on 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = DC enabled; 1 = REM-SB disables power output	2	27	0x021A	x
507	0x01FB	x				Actual voltage	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual voltage (for translation see programming guide)	2	28	0x021B	x
508	0x01FC	x				Actual current	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual current (for translation see programming guide)	2	29	0x021C	x
509	0x01FD	x				Actual power	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual power (for translation see programming guide)	2	30	0x021D	x
511	0x01FF	x				Device state 2	R	uint(32)	4	2	Bit 1 : SF alarm Bit 4 : Power derating Bit 5 : Semi F47	0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active	2	19	0x0212	x

520	0x0208	x			Count of OV alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	20	0x0312	x
521	0x0209	x			Count of OC alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	21	0x0313	x
522	0x020A	x			Count of OP alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	22	0x0314	x
523	0x020B	x			Count of OT alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	23	0x0315	x
524	0x020C	x			Count of PF alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	24	0x0316	x

550	0x0226	x	x	Overvoltage protection threshold (OVP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OVP threshold (for translation see programming guide)	3	0	0x02FE	x
553	0x0229	x	x	Overcurrent protection threshold (OCP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OCP threshold (for translation see programming guide)	3	3	0x0301	x
556	0x022C	x	x	Overpower protection threshold (OPP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OPP threshold (for translation see programming guide)	3	6	0x0304	x

650	0x028A	x				Master-slave: Link mode on MS bus	RW	uint(16)	2	1	Coil: Mode	0x0000 = Slave; 0xFF00 = Master	4	0	0x03FD	x
653	0x028D	x				Master-slave: Enable MS	RW	uint(16)	2	1	Coil: MS on/off	0x0000 = off; 0xFF00 = on	4	3	0x0400	x
654	0x028E			x		Master-slave: Init MS	RW	uint(16)	2	1	Coil: MS start/init	0xFF00 = Start init	4	4	0x0401	x
655	0x028F	x			x	Master-slave: Condition	R	uint(16)	2	1	Reg: MS status	0x0000 = not initialised; 0x0001 = init running; 0x0003 = set defaults; 0x0004 = setup interface; 0x0005 = assignment; 0xFFFC = disrupted; 0xFFFF = different models detected; init not OK; 0xFFFE = error; 0xFFFF = init OK; 0xFFFB = Termination not OK	4	5	0x0402	x
656	0x0290	x				Master-slave: Total voltage in V	R	float	4	2	Floating point number IEEE754	500	4	6	0x0403	x
658	0x0292	x				Master-slave: Total current in A	R	float	4	2	Floating point number IEEE754	900	4	7	0x0404	x
660	0x0294	x				Master-slave: Total power in W	R	float	4	2	Floating point number IEEE754	150000	4	8	0x0405	x
662	0x0296	x				Master-slave: Number of initialised slaves	R	uint(16)	2	1		1...63	4	9	0x0406	x
666	0x029A	x				Master-slave: Bus termination	R	uint(16)	2	1	Coil : Termination	0x0000 = off; 0xFF00 = on	4	10	0x0407	x
667	0x029B	x				Master-slave: Bus bias	R	uint(16)	2	1	Coil : BIAS	0x0000 = off; 0xFF00 = on	4	11	0x0408	x

9000	0x2328	x	x	Upper limit of voltage set value (U-max)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	Voltage value (for translation see programming guide)	2	31	0x021E	x
9001	0x2329	x	x	Lower limit of voltage set value (U-min)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	Voltage value (for translation see programming guide)	2	32	0x021F	x
9002	0x232A	x	x	Upper limit of current set value (I-max)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	Current value (for translation see programming guide)	2	33	0x0220	x
9003	0x232B	x	x	Lower limit of current set value (I-min)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	Current value (for translation see programming guide)	2	34	0x0221	x
9004	0x232C	x	x	Upper limit of power set value (P-max)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	Power value (for translation see programming guide)	2	35	0x0222	x

10007	0x2717	x	x		Ethernet: TCP keep-alive timeout	RW	uint(16)	2	1	Coil: Keep-alive on/off	0x0000 = off; 0xFF00 = on									
10008	0x2718	x	x		Ethernet/Profinet/Modbus TCP: DHCP	RW	uint(16)	2	1	Coil: DHCP on/off	0x0000 = off; 0xFF00 = on									
10010	0x271A	x	x		Protocol: Modbus	RW	uint(16)	2	1	Coil: MODBUS on/off	0x0000 = off; 0xFF00 = on									
10011	0x271B	x	x		Protocol: SCPI	RW	uint(16)	2	1	Coil: SCPI on/off	0x0000 = off; 0xFF00 = on									
10012	0x271C	x	x		Restart interface card	RW	uint(16)	2	1	Coil: Restart	0xFF00 = Trigger restart									
10013	0x271D	x	x		Modbus specification compliance	RW	uint(16)	2	1	Coil: Mode	0x0000 = Limited (default); 0xFF00 = Full									
10020	0x2724	x			AnyBus module: Type	R	uint(16)	2	1	Reg: Type	0x0005 = Profibus									
											0x0009 = RS232									
											0x0010 = CANopen									
											0x0011 = DeviceNet									
											0x0012 = Modbus-TCP 1P									
											0x0013 = Profinet 1P									
											0x0014 = Ethernet 1P									
											0x0015 = Ethernet 2P									
											0x0016 = Modbus-TCP 2P									
											0x0017 = Profinet 2P									
											0x0019 = CAN									
											0x001A = EtherCAT									
											0x00FF = no or unknown module plugged									
10021	0x2725	x			AnyBus module: Interface type	R	char	40	20	ASCII	"Profibus DPV1"									
10041	0x2739	x			AnyBus module: Version number	R	uint(8)	4	2											
10043	0x273B	x			AnyBus module: Serial number	R	uint(32)	4	2											
10251	0x280B	x	x		Profibus: Client number	RW	uint(16)	2	1											
10252	0x280C	x	x		Profibus/CANopen: Node address	RW	uint(16)	2	1			0x0001				8	0	0x07F9		
10253	0x280D	x		x	Profibus/Profinet: User-definable "Function tag"	RW	char	32	16	ASCII	Profibus: 0-125; CANopen: 0-127									
10269	0x281D	x		x	Profibus/Profinet: User-definable "Location tag"	RW	char	22	11	ASCII	"Test"									
10280	0x2828	x		x	Profibus/Profinet: User-definable Installation date	RW	char	40	20	ASCII	"13.01.2012 09:59:00"									
10300	0x283C	x		x	Profibus/Profinet: User-definable description	RW	char	54	27	ASCII	"www.webpage.de"									
10354	0x2872	x		x	Profinet: User-definable "Station name"	RW	char	200	100	ASCII	"Test"									
10502	0x2906	x	x		Ethernet/Modbus TCP: IP address	RW	uint(8)	4	2	Bytes 0-3: 0.255	192.168.0.2 (default)									
10504	0x2908	x	x		Ethernet/Modbus TCP: Subnet mask	RW	uint(8)	4	2	Bytes 0-3: 0.255	255.255.255.0 (default)									
10506	0x290A	x	x		Ethernet/Modbus TCP: Gateway	RW	uint(8)	4	2	Bytes 0-3: 0.255	192.168.0.1 (default)									
10508	0x290C	x	x		Ethernet/Profinet/Modbus TCP: Host name	RW	char	54	27	ASCII	"Client" (default)									
10535	0x2927	x	x		Ethernet/Profinet/Modbus TCP: Domain name	RW	char	54	27	ASCII	"Workgroup" (default)									
10562	0x2942	x		x	Ethernet/Modbus TCP: DNS 1	RW	uint(8)	4	2	Bytes 0-3: 0.255	0.0.0.0 (default)									
10564	0x2944	x		x	Ethernet/Modbus TCP: DNS 2	RW	uint(8)	4	2	Bytes 0-3: 0.255	0.0.0.0 (default)									
10566	0x2946	x	x		RS232/USB: Connection timeout in milliseconds	RW	uint(16)	2	1	5..65535	Default: 5ms									
10567	0x2947	x			Ethernet/Profinet/Modbus TCP: MAC	R	uint(8)	6	3	Bytes 0-5: 0.255	00:50:C2:C3:12:34 or 00:50-C2-C3-12-34									
10570	0x294A	x	x	x	Ethernet/Modbus TCP: Connection speed Port 1 (1 & 2 port modules)	RW	uint(16)	2	1	Connection speed	0x0000 = Auto; 0x0001 = 10Mbit half duplex; 0x0002 = 10Mbit full duplex; 0x0003 = 100Mbit half duplex; 0x0004 = 100Mbit full duplex									
10571	0x294B	x	x	x	Ethernet/Modbus TCP: Connection speed Port 2 (2 port module)	RW	uint(16)	2	1	Connection speed	0x0000 = Auto; 0x0001 = 10Mbit half duplex; 0x0002 = 10Mbit full duplex; 0x0003 = 100Mbit half duplex; 0x0004 = 100Mbit full duplex									
10572	0x294C	x	x	x	Ethernet (except for Modbus TCP): Port	RW	uint(16)	2	1	0..65535	5025 (default), except port 80									
10573	0x294D	x	x	x	Ethernet: TCP Socket timeout (in seconds)	RW	uint(16)	2	1	0..65535	0 = timeout inactive; 5 = 5 s (default)									
10700	0x29CC	x	x	x	RS232/CANopen/CAN: Baud rate	RW	uint(16)	2	1	Baud rate	0x00: 10kbps 0x01: 20kbps 0x02: 50kbps 0x03: 100kbps 0x04: 125kbps 0x05: 250kbps 0x06: 500kbps 0x07: 1Mbps 0x08: - 0x09: -	CANopen 10kbps 20kbps 50kbps 100kbps 125kbps 250kbps 500kbps 800kbps 1Mbps Auto baud	RS232 2400 Bd 4800 Bd 9600 Bd 19200 Bd 38400 Bd 57600 Bd 115200 Bd -							
10701	0x29CD	x	x	x	CAN: ID format	RW	uint(16)	2	1	Coil: Base/Extended	0x0000 = Base (11 Bit); 0xFF00 = Extended (29 Bit)									
10702	0x29CE	x	x	x	CAN: Termination	RW	uint(16)	2	1	Coil: Bus termination	0x0000 = off; 0xFF00 = on									
10704	0x29D0	x		x	CAN: Base ID	RW	uint(32)	4	2	0x0000...0x07FF or 0x0000...0x1FFFFFFF	Default: 0x000									
10706	0x29D2	x		x	CAN: Broadcast ID	RW	uint(32)	4	2	0x0000...0x07FF or 0x0000...0x1FFFFFFF	Default: 0x7FF									
10709	0x29D5	x	x		CAN: Data length	RW	uint(16)	2	1	Coil: Data length	0x0000 = Auto; 0xFF00 = Always 8 bytes									
10710	0x29D6	x	x	x	CAN: Cyclic read: Base ID	RW	uint(32)	4	2	0x0000...0x07FF or 0x0000...0x1FFFFFFF	Default: 0x100									
10712	0x29D8	x		x	CAN: Cyclic send: Base ID	RW	uint(32)	4	2	0x0000...0x07FF or 0x0000...0x1FFFFFFF	Default: 0x200									
10714	0x29DA	x	x	x	CAN: Cyclic read time (in ms): Status	RW	uint(16)	2	1	20...5000; 0 = off	Default: off									
10715	0x29DB	x	x	x	CAN: Cyclic read time (in ms): Set value (U, I, P, R)	RW	uint(16)	2	1	20...5000; 0 = off	Default: off									
10716	0x29DC	x	x	x	CAN: Cyclic read time (in ms): Limits 2 (P, R)	RW	uint(16)	2	1	20...5000; 0 = off	Default: off									
10717	0x29DD	x	x	x	CAN: Cyclic read time (in ms): Limits 1 (U, I)	RW	uint(16)	2	1	20...5000; 0 = off	Default: off									
10718	0x29DE	x	x	x	CAN: Cyclic read time (in ms): Actual values U, I, P	RW	uint(16)	2	1	20...5000; 0 = off	Default: off									
10820	0x2A44	x			Internal Ethernet interface: Status	R	uint(16)	2	1	Bits 0-5:- Bit 6: Keep-Alive Bit 7: DHCP 1 Bit 8: DHCP 2	0 = inactive; 1 = activ									
											0 = DHCP deactivated; 1 = DHCP activated									
											0 = DHCP is not running; IP has been not assigned; 1 = DHCP is running; IP has been assigned									
10821	0x2A45	x	x		Internal Ethernet interface: TCP keep-alive timeout	RW	uint(16)	2	1	Coil: Keep-alive on/off	0x0000 = off; 0xFF00 = on									
10822	0x2A46	x	x		Internal Ethernet interface: DHCP	RW	uint(16)	2	1	Coil: DHCP on/off	0x0000 = off; 0xFF00 = on									
10823	0x2A47	x		x	Internal Ethernet interface: IP address	RW	uint(8)	4	2	Bytes 0-3: 0.255	192.168.0.2 (default)									
10825	0x2A49	x		x	Internal Ethernet interface: Subnet mask	RW	uint(8)	4	2	Bytes 0-3: 0.255	255.255.255.0 (default)									
10827	0x2A4B	x		x	Internal Ethernet interface: Gateway	RW	uint(8)	4	2	Bytes 0-3: 0.255	192.168.0.1 (default)									
10829	0x2A4D	x		x	Internal Ethernet interface: Host name	RW	char	54	27	ASCII	"Client" (default)									
10856	0x2A68	x		x	Internal Ethernet interface: Domain name	RW	char	54	27	ASCII	"Workgroup" (default)									
10883	0x2A83	x		x	Internal Ethernet interface: DNS	RW	uint(8)	4	2	Bytes 0-3: 0.255	0.0.0.0 (default)									
10885	0x2A85	x			Internal Ethernet interface: MAC	R	uint(8)	6	3	Bytes 0-5: 0.255	00:50:C2:C3:12:34 or 00:50-C2-C3-12-34									
10888	0x2A88	x		x	Internal Ethernet interface: Port	RW	uint(16)	2	1	0..65535	5025 (default), except port 80									
10889	0x2A89	x	x		Internal Ethernet interface: TCP Socket timeout (in seconds)	RW	uint(16)	2	1	0..65535 (0 = timeout inactive)	Default: 5									

21000	0x5208	x				Operation counter: total time	R	uint(16)	6	3	DDDDDHMM	Word 0 = Days (0-65535) Word 1 = Hours (0-23) Word 2 = Minutes (0-59)	2	53	0x0234	-
21003	0x520B	x				Operation counter: DC on time	R	uint(16)	6	3	DDDDDHMM	Word 0 = Days (0-65535) Word 1 = Hours (0-23) Word 2 = Minutes (0-59)	2	54	0x0235	-
21006	0x520E	x				Operation counter: DC off time	R	uint(16)	6	3	DDDDDHMM	Word 0 = Days (0-65535) Word 1 = Hours (0-23) Word 2 = Minutes (0-59)	2	55	0x0236	-
21009	0x5211	x				Operation counter: Energy in kWh (PSB/PSBE: source mode)	R	float	4	2	Floating point number IEEE754		2	56	0x0237	-
21011	0x5213	x				Operation counter: Capacity in Ah (PSB/PSBE: source mode)	R	float	4	2	Floating point number IEEE755		2	57	0x0238	-
21013	0x5215	x				Operation counter: Secondary energy in kWh (PSB/PSBE sink mode only)	R	float	4	2	Floating point number IEEE756		2	58	0x0239	-
21015	0x5217	x				Operation counter: Secondary capacity in Ah (PSB/PSBE sink mode only)	R	float	4	2	Floating point number IEEE757		2	59	0x023A	-