

Module address (dec)	Module address (hex)	Reset factor (oct1)	Write-protect code (oct2)	Write multiple registers (oct3)	Description	Access	Data type	Data length in bytes	Number of registers	Data	Example	Profile alias / Protected alias in set	BitMask (GPIO/PD0)		
0	00000	x			Device class	R	uint16	2	1	0	58 = PSS 9000 Series	1	0		
1	00001	x			Device type	R	uint16	2	1	0	PSS 9000-120	1	0		
21	00019	x			Manufacturer	R	char	40	20	ASCII		1	0		
41	00029	x			Manufacturer address	R	char	40	20	ASCII		1	0		
61	00030	x			Manufacturer ZP code	R	char	40	20	ASCII		1	0		
81	00031	x			Manufacturer user number	R	char	40	20	ASCII		1	0		
101	00055	x			Manufacturer website	R	char	40	20	ASCII		1	0		
121	00079	x			Nominal voltage	R	float	4	2	Floating point number IEEE754	60	1	7		
140	00078	x			Nominal current	R	float	4	2	Floating point number IEEE754	120	1	8		
127	00077	x			Max. internal resistance	R	float	4	2	Floating point number IEEE754	25	1	10		
129	00081	x			Min. internal resistance	R	float	4	2	Floating point number IEEE754	0.02	1	11		
131	00083	x			Article no.	R	char	40	20	ASCII	02000001	1	12		
151	00097	x			Sensors	R	char	40	20	ASCII	123456789	1	13		
171	000A8	x	x		User text	R/W	char	40	20	ASCII		1	14		
191	000B8	x			Firmware version (KE)	R	char	40	20	ASCII		1	15		
211	000C3	x			Firmware version (HM)	R	char	40	20	ASCII		1	16		
231	000E7	x			Firmware version (ES)	R	char	40	20	ASCII		1	17		
401	00192	x	x		Remote mode	R/W	uint16	2	1	0	0x0000 = off, 0xFF00 = on	2	1		
403	00198	x	x		DC output/pulse	R	uint16	2	1	0	0x0000 = off, 0xFF00 = on	2	1		
407	00197	x	x		Condition of DC output/pulse after power fail alarm	R	uint16	2	1	0	0x0000 = not triggered, 0xFF00 = alarm	2	1		
408	00198	x	x		Condition of DC output/pulse after powering the device	R	uint16	2	1	Reg. - Power-On	0xFF00 = off, 0xFFFF = restore	2	1		
409	00199	x	x		Operation mode (UP/UR)	R	uint16	2	1	0	0x0000 = UP, 0xFF00 = UR	2	7		
410	0019A	x	x		Restart of the device (beam start)	R	uint16	2	1	0	0xFF00 = success	2	8		
411	0019B	x	x		Acknowledge alarm	R	uint16	2	1	0	0xFF00 = acknowledge	2	9		
416	001A0	x	x		Analogue interface - Reference voltage (pin VREF)	R	uint16	2	1	0	0x0000 = 10V, 0xFF00 = 5V	2	14		
417	001A1	x	x		Analogue interface - REM-SS level	R	uint16	2	1	0	0x0000 = normal, 0xFF00 = inverted	2	15		
418	001A2	x	x		Analogue interface - REM-SS action	R	uint16	2	1	0	0x0000 = on, 0xFF00 = auto	2	16		
425	001A3	x	x		Condition of DC output/pulse after leaving remote	R	uint16	2	1	0	0x0000 = off, 0xFF00 = unchanged	2	22		
432	001B0	x	x		Reset device to factory settings	R	uint16	2	1	0	0xFF00 = Trigger reset	2	23		
440	001B8	x	x		Analogue interface: Pin 14 configuration	R	uint16	2	1	1	Alarms	0x0000 = CVP (default); 0x0001 = COP; 0x0002 = OPP; 0x0003 = CVP + COP; 0x0004 = CVP + OPP; 0x0005 = COP + CVP + COP + OPP	2	44	
441	001B9	x	x		Analogue interface: Pin 6 configuration	R	uint16	2	1	1	Alarms	0x0000 = OT + PF (default); 0x0001 = OT; 0x0002 = PF	2	45	
442	001BA	x	x		Analogue interface: Pin 15 configuration	R	uint16	2	1	1	Status DC / reg. mode	0x0000 = CV; 0x0001 = DC output status	2	46	
443	001BB	x	x		Analogue interface: Pins 9 and 10 configuration	R	uint16	2	1	1	Current and voltage monitor	0x0000 = default (VCMN on pin 9 and CMON on pin 10) Pin 10 signals current from source or sink; 0x0001 = Pin 10 (CMON) only signals sink current (EL); 0x0002 = Pin 10 (CMON) only signals source current (PS); 0x0003 = Current mode A (source current (PS) on pin 9 and sink current (EL) on pin 10 (full range)); 0x0004 = Current mode B (source current (PS) on pin 10 and sink current (EL) on pin 9 (full range)); 0x0005 = Pin 10 (CMON) signals ELPS current (0...10 V +/- -100%...0...100% half range signal)	2	50	
491	001F2	x	x		Sink mode: Set power value	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	Power value (for translation see programming guide)	2	21	
499	001F3	x	x		Sink mode: Set current value	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	Current value (for translation see programming guide)	2	20	
500	001F4	x	x		Set voltage value	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)	2	25	
501	001F5	x	x		Set current value (PSS/PBSE devices: source mode / Irradiation (Simple PV))	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	Current value (for translation see programming guide)	2	24	
502	001F6	x	x		Sink mode: Set power value	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	Power value (for translation see programming guide)	2	25	
503	001F7	x	x		Source mode: Set resistance value	R/W	uint16	2	1	1	variable - 0xD0E5 (0 - 102%) The minimum percent value needs to be calculated from the rating, see technical specs	Resistance value (for translation see programming guide)	2	26	
504	001F8	x	x		Sink mode: Set resistance value	R/W	uint16	2	1	1	variable - 0xD0E5 (0 - 102%) The minimum percent value needs to be calculated from the rating, see technical specs	Resistance value (for translation see programming guide)	2	22	
505	001F9	x			Device state	R	uint32	4	2	Bit 0 - Control lock Bit 9 - Master/slave type Bit 10 - Output state Bit 11 - Remote Bit 12 - PSS/PBSE 9000 operation mode Bit 13 - REM-SS level Bit 14 - REM-SS action Bit 15 - Alarms Bit 16 - CVP Bit 17 - OPP Bit 18 - OT Bit 21-23 Power fail Bit 24 - VREF Bit 25 - VCD Bit 26 - LCD Bit 27 - OCD Bit 28 - OPB Bit 29 - MSP Bit 30 - REM-SS Bit 31 - COP/OPC/OCD/OCD cause	0x00 = free, 0x01 = locked, 0x03 = USB, 0x04 = analog; 0x05 = Profibus, 0x06 = Ethernet, 0x08 = Master/Slave, 0x09 = RS232; 0x10 = CANopen, 0x12 = Modbus TCP, 1P, 0x13 = Profinet 1P, 0x14 = Ethernet IP, 0x15 = Ethernet IP, 0x16 = Modbus TCP, 2P, 0x17 = Profinet 2P, 0x18 = GPE, 0x19 = CAN, 0x1A = EtherCAT	0 = Slave; 1 = Master 0 = Slave; 1 = on 0 = Slave; 1 = on 0 = source; 1 = sink 0 = stopped; 1 = running 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = OK; 1 = Master-slave protection 0 = OK; 1 = REM-SS disables power output 0 = source mode; 1 = sink mode	2	27	
507	001F9	x			Actual voltage	R	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	Actual voltage (for translation see programming guide)	2	28	
508	001FC	x			Actual current	R	uint16	2	1	0	0x0000..0xFFFF (0 - 125%)	Actual current (for translation see programming guide)	2	29	
509	001FD	x			Actual power	R	uint16	2	1	0	0x0000..0xFFFF (0 - 125%)	Actual power (for translation see programming guide)	2	30	
521	00298	x			Count of OV alarms since power up	R	uint16	2	1	0	0x0000..0xFFFF		3	20	
521	00299	x			Source mode: Count of OC alarms since power up	R	uint16	2	1	0	0x0000..0xFFFF		3	21	
522	0020A	x			Source mode: Count of OP alarms since power up	R	uint16	2	1	0	0x0000..0xFFFF		3	22	
523	0020B	x			Count of OF alarms since power up	R	uint16	2	1	0	0x0000..0xFFFF		3	23	
524	0020C	x			Count of OF alarms since power up	R	uint16	2	1	0	0x0000..0xFFFF		3	24	
525	0020D	x			Sink mode: Count of PF alarms since power up	R	uint16	2	1	0	0x0000..0xFFFF		3	25	
526	0020E	x			Sink mode: Count of OF alarms since power up	R	uint16	2	1	0	0x0000..0xFFFF		3	26	
551	00226	x	x		Overvoltage protection threshold (OVP)	R/W	uint16	2	1	0	0x0000..0xE147 (0 - 110%)	OVP threshold (for translation see programming guide)	3	0	
551	00229	x	x		Source mode: Overcurrent protection threshold (OCP)	R/W	uint16	2	1	0	0x0000..0xE147 (0 - 110%)	OCP threshold (for translation see programming guide)	3	1	
559	0022C	x	x		Source mode: Deepovercurrent protection threshold (CPP)	R/W	uint16	2	1	0	0x0000..0xE147 (0 - 110%)	CPP threshold (for translation see programming guide)	3	6	
560	0022F	x	x		Source mode: Undervoltage detection (UVD)	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	UVD threshold (for translation see programming guide)	3	9	
565	00230	x	x		Source mode: Adjustable UVD notification	R/W	uint16	2	1	0	0x0000..0x0001 = signal, 0x0002 = warning, 0x0003 = alarm		3	10	
561	00231	x	x		Source mode: Overvoltage detection (OVD)	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	OVD threshold (for translation see programming guide)	3	11	
565	00232	x	x		Source mode: Adjustable OVD notification	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	12	
563	00233	x	x		Source mode: Undercurrent detection (UCD)	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	UCD threshold (for translation see programming guide)	3	13	
564	00234	x	x		Source mode: Adjustable UCD notification	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	14	
565	00235	x	x		Source mode: Overcurrent detection (OCD)	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	OCD threshold (for translation see programming guide)	3	15	
566	00236	x	x		Source mode: Adjustable OCD notification	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	16	
567	00237	x	x		Source mode: Overpower protection threshold (OPP)	R/W	uint16	2	1	0	0x0000..0xE147 (0 - 110%)	OPP threshold (for translation see programming guide)	3	17	
569	00238	x	x		Sink mode: Overpower protection threshold (COP)	R/W	uint16	2	1	0	0x0000..0xE147 (0 - 110%)	COP threshold (for translation see programming guide)	3	18	
570	0023A	x	x		Sink mode: Overcurrent protection threshold (COP)	R/W	uint16	2	1	0	0x0000..0xE147 (0 - 110%)	COP threshold (for translation see programming guide)	3	19	
571	0023B	x	x		Sink mode: Undercurrent detection (UCD)	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	UCD threshold (for translation see programming guide)	3	20	
572	0023C	x	x		Sink mode: Adjustable UCD notification	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	21	
573	0023D	x	x		Sink mode: Overcurrent detection (OCD)	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	OCD threshold (for translation see programming guide)	3	22	
574	0023E	x	x		Sink mode: Adjustable OCD notification	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	23	
575	0023F	x	x		Sink mode: Undercurrent detection (UCD)	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	UCD threshold (for translation see programming guide)	3	24	
576	00240	x	x		Sink mode: Adjustable OPD notification	R/W	uint16	2	1	0	0x0000..0xD0E5 (0 - 102%)	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	25	
577	00241	x	x		Condition of DC output/pulse after OT alarm	R/W	uint16	2	1	0	Reg. Condition	0x0000 = off, 0x0001 = restore (default)	3	27	
601	00350A	x	x		Master-slave: Link mode on MS bus	R/W	uint16	2	1	0	0	0x0000 = Slave, 0xFF00 = Master		4	0
603	00350B	x	x		Master-slave: Enable MS	R/W	uint16	2	1	0	0	0x0000 = off, 0xFF00 = on		4	1
604	00350E	x			Master-slave: Int MS	R/W	uint16	2	1	0	0	0xFF00 = Start int		4	2
605	0035F	x	x		Master-slave: Condition	R	uint16	2	1	0	Reg. MS status	0x0000 = not initialized, 0x0001 = int running, 0x0002 = not initialized, 0x0004 = setup interface, 0x0005 = assignment, 0xFFFC = disrupted, 0xFFFD = different mode detected, int not OK, 0xFFFE = error, 0xFFFF = int OK	4	5	
650	00390	x			Master-slave: Total voltage in V	R	float	4	2	Floating point number IEEE754	500	4	6		
650	00392	x			Master-slave: Total current in A	R	float	4	2	Floating point number IEEE754	300	4	7		
660	0040A	x			Master-slave: Total power in W	R	float	4	2	Floating point number IEEE754	15000	4	8		
662	00506	x			Master-slave: Number of retained slaves	R	uint8	2	1	1..30		4	9		
850	00352	x	x		Function generator: Arbitrary: Start/stop	R/W	uint16	2	1	0	0	0x0000 = Stop, 0xFF00 = Start		5	0
851	00353	x	x		Function generator: Arbitrary: Select U	R/W	uint16	2	1	0	0	0x0000 = not assigned, 0xFF00 = Assign function to voltage		5	1
852	00354	x	x		Function generator: Arbitrary: Select I	R/W	uint16	2	1	0	0	0x0000 = not assigned, 0xFF00 = Assign function to current		5	2
856	00356	x	x		Function generator: XY: Select mode	R	uint16	2	1	Reg. Mode	0x0000 = deactivated; 0x0001 = A Source; 0x0002 = A Sink; 0x0003 = U; 0x0004 = V; out; 0x0005 = PV 1; 0x0006 = PV 2; 0x0007 = External				
859	00358	x	x		Function generator: Arbitrary: Start sequence	R/W	uint16	2	1	0	0x0001..0x0003		5	9	
861	0035C	x	x		Function generator: Arbitrary: End sequence	R/W	uint16	2	1	0	0x0001..0x0003		5	10	
861	0035D	x	x		Function generator: Arbitrary: Sequence cycles	R/W	uint16	2	1	0	0x0000..0x0007	0x0000 = infinite	5	11	
862	0035E	x	x		Function generator: Arbitrary: Submit settings	W	uint16	2	1	0	0	0xFF00 = Submit settings		5	12
800	00350	x	x		Function generator: Arbitrary: Setup for sequence 1	R	uint16	32	16	Bytes 0-3: U _{limA} (A) in V Bytes 4-7: U _{limA} (A) in V Bytes 8-11: I _{lim} (I) in Hz Bytes 12-15: I _{lim} (I) in Hz Bytes 16-19: Angle in degrees Bytes 20-23: I _{lim} (I) in V Bytes 24-27: I _{lim} (I) in V Bytes 28-31: Sequence time in μs	Floating point number in IEEE754 format, see device manual for value range, chapter about function generator Heger in IEEE754 format: 0...10000 Hz Heger in IEEE754 format: 0...359° Floating point number in IEEE754 format, see device manual for value range, chapter about function generator Floating point number in IEEE754 format: 100 μs...36,000,000,000 μs	8	0		
2468	00350	x	x		Function generator: Arbitrary: Setup for sequence 99	R	uint16	32	16	Bytes 0-3: U _{limA} (A) in V Bytes 4-7: U _{limA} (A) in V Bytes 8-11: I _{lim} (I) in Hz Bytes 12-15: I _{lim} (I) in Hz Bytes 16-19: Angle in degrees Bytes 20-23: I _{lim} (I) in V Bytes 24-27: I _{lim} (I) in V Bytes 28-31: Sequence time in μs	Floating point number in IEEE754 format, see device manual for value range, chapter about function generator Heger in IEEE754 format: 0...10000 Hz Heger in IEEE754 format: 0...359° Floating point number in IEEE754 format, see device manual for value range, chapter about function generator Floating point number in IEEE754 format, see device manual for value range, chapter about function generator Floating point number in IEEE754 format: 100 μs...36,000,000,000 μs	8	98		
2600	00A28	x	x		Function generator: XY: Table 1 (PS), block 0	R									