

Modbus address (dec)	Modbus address (hex)	Read coils (0x01)	Read holding registers (0x03)	Write single coil (0x05)	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	SDIO/DO7
0	0x0000					Device class	R	uint16	2	1		See programming guide in section "A"	1	1	0x0100		
1	0x0001					Device type	R	char	40	20	ASCII	PSI 10080-1000	1	1	0x0101		
21	0x0015					Manufacturer	R	char	40	20	ASCII		1	2	0x0102		
41	0x0029					Manufacturer address	R	char	40	20	ASCII		1	3	0x0103		
61	0x003D					Manufacturer ZIP code	R	char	40	20	ASCII		1	4	0x0104		
81	0x0051					Manufacturer phone number	R	char	40	20	ASCII		1	5	0x0105		
101	0x0065					Manufacturer website	R	char	40	20	ASCII		1	6	0x0106		
121	0x0079					Nominal voltage	R	float	4	2	Floating point number IEEE754	800	1	7	0x0107		
123	0x007B					Nominal current	R	float	4	2	Floating point number IEEE754	100	1	8	0x0108		
125	0x007D					Nominal power	R	float	4	2	Floating point number IEEE754	30000	1	9	0x0109		
127	0x007F					Max. Internal resistance	R	float	4	2	Floating point number IEEE754	5	1	10	0x010A		
129	0x0081					Min. Internal resistance	R	float	4	2	Floating point number IEEE754	0	1	11	0x010B		
131	0x0083					Article no.	R	char	40	20	ASCII	06230801	1	12	0x010C		
151	0x0097					Serial no.	R	char	40	20	ASCII	1234560001	1	13	0x010D		
171	0x00AB					User text	RW	char	40	20	ASCII		1	14	0x010E		
191	0x00BF					Firmware version (KE)	R	char	40	20	ASCII		1	15	0x010F		
211	0x00D3					Firmware version (HM)	R	char	40	20	ASCII		1	16	0x0110		
231	0x00E7					Firmware version (DR)	R	char	40	20	ASCII		1	17	0x0111		
402	0x0192	x				Remote mode	RW	uint16	2	1	Coil - Remote	0x0000 = off, 0x0FFF = on	2	1	0x0200	x	
405	0x0195	x				DC output/put	RW	uint16	2	1	Coil - Output/put	0x0000 = off, 0x0FFF = on	2	4	0x0203	x	
407	0x0197	x				Condition of DC output/put after power fall alarm	RW	uint16	2	1	Coil - Auto-On	0x0000 = off, 0x0FFF = auto	3	30	0x031C	x	
408	0x0198					Condition of DC output/put after powering the device	RW	uint16	2	1	Flag - Power-On	0x0FFF = off, 0x0FFF = restore	2	6	0x0205	x	
409	0x0199	x				Operation mode (UPI/UR)	R	uint16	2	1	Coil - Operation mode	0x0000 = UPP, 0x0FFF = UPR	2	7	0x0206	x	
410	0x019A	x				Restart of the device (warm start)	W	uint16	2	1	Coil - Restart	0x0FFF = execute	2	8	0x0207	x	
411	0x019B	x				Acknowledge alarms	W	uint16	2	1	Coil - Alarms	0x0FFF = acknowledge	2	9	0x0208	x	
414	0x01A0	x				Analog interface: Reference voltage (pin VREF)	R	float	4	2	Coil - VREF	0x0000 = 0V, 0x0FFF = 5V	2	14	0x0209	x	
417	0x01A1	x				Analog interface: REM-SB level	RW	uint16	2	1	Coil - REM-SB Level	0x0000 = normal, 0x0FFF = inverted	2	13	0x020A	x	
418	0x01A2	x				Analog interface: REM-SB action	W	uint16	2	1	Coil - REM-SB Action	0x0000 = off, 0x0FFF = auto	2	13	0x020C	x	
425	0x01A9	x				Condition of DC output/put after leaving remote	R	uint16	2	1	Coil - Condition	0x0000 = off, 0x0FFF = unchanged	2	43	0x0229	x	
426	0x01AA	x				Function generator XY: Select simple PV mode	RW	uint16	2	1	Coil - PV mode	0x0000 = off, 0x0FFF = on	2	53	0x0509	x	
427	0x01AB	x				Voltage Controller Speed	RW	uint16	2	1	Level	0x0000 = Normal (default), 0x0001 = Slow, 0x0002 = Fast.	2	60	0x023B	x	
428	0x01AC	x				SEM-F47	RW	uint16	2	1	On/Off	0x0000 = off, 0x0001 = on.	2	61	0x023C	x	
432	0x01BD	x				Reset device to factory settings	RW	uint16	2	1	Coil - Condition	0x0FFF = Trigger reset	2	44	0x022B	x	
440	0x01BB	x				Analog interface: Pin 14 configuration	RW	uint16	2	1	Alarms 1	0x0000 = OVP (default), 0x0001 = OCP, 0x0002 = OPP, 0x0003 = OVP + OCP, 0x0004 = OVP + OPP, 0x0005 = OCP + OPP, 0x0006 = OVP + OCP + CPP	2	44	0x022B	x	
441	0x01B9	x				Analog interface: Pin 6 configuration	RW	uint16	2	1	Alarms 2	0x0000 = OT + PF (default), 0x0001 = OT, 0x0002 = PF	2	45	0x022C	x	
442	0x01BA	x				Analog interface: Pin 15 configuration	RW	uint16	2	1	Status DC / reg. mode	0x0000 = CV, 0x0001 = DC output status	2	46	0x022D	x	
500	0x01F4	x				Set voltage value	RW	uint16	2	1	0x0000 - 0x000E (0 - 102%)	Voltage value (for translation see programming guide)	2	23	0x0216	x	
501	0x01F5	x				Set current value or irradiation (PV function)	RW	uint16	2	1	0x0000 - 0x000E (0 - 102%)	Current value (for translation see programming guide) / irradiation	2	24	0x0217	x	
502	0x01F6	x				Set power value	RW	uint16	2	1	0x0000 - 0x000E (0 - 102%)	Power value (for translation see programming guide)	2	25	0x0218	x	
503	0x01F7	x				Set resistance value	RW	uint16	2	1	0x0000 - 0x000C (0 - 100%)	Resistance value (for translation see programming guide)	2	26	0x0219	x	
505	0x01F9	x				Device state	R	uint32	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 13 - Function generator Bit 14 - External sense Bit 15 - Alarms Bit 16 - OVP Bit 17 - OCP Bit 18 - OPP Bit 19 - OT Bit 21 - Power fail Bit 24 - SF alarm Bit 25 - OVD Bit 26 - UCD Bit 27 - OCD Bit 28 - OPD Bit 29 - MSP Bit 30 - REM-SB Bit 31 - SF alarm Bit 4 - Power derating Bit 5 - Semi F47	0 = free, 0x01 = local, 0x03 = USB, 0x04 = analog, 0x05 = Profibus, 0x06 = Ethernet, 0x08 = Master/Slave, 0x09 = RS232, 0x10 = CANopen, 0x12 = Modbus TCP, 0x13 = Profibus IP, 0x14 = Ethernet IP, 0x15 = Ethernet ZP, 0x16 = Modbus TCP ZP, 0x17 = Profinet ZP, 0x18 = GPB, 0x19 = CAN, 0x1A = EtherCAT, 0x1C = Ethernet (due to communication timeout (C10))	2	27	0x021A	x	
520	0x0208	x				Count of OV alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count	3	20	0x0312	x	
521	0x0209	x				Count of OC alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count	3	21	0x0313	x	
522	0x020A	x				Count of OP alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count	3	22	0x0314	x	
523	0x020B	x				Count of OT alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count	3	23	0x0315	x	
524	0x020C	x				Count of PF alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count	3	24	0x0316	x	
550	0x0226	x				Overvoltage protection threshold (OVP)	RW	uint16	2	1	0x0000 - 0x0147 (0 - 110%)	OVP threshold (for translation see programming guide)	3	0	0x02FE	x	
553	0x0229	x				Overcurrent protection threshold (OCP)	RW	uint16	2	1	0x0000 - 0x0147 (0 - 110%)	OCP threshold (for translation see programming guide)	3	3	0x0301	x	
556	0x022C	x				Overpower protection threshold (OPP)	RW	uint16	2	1	0x0000 - 0x0147 (0 - 110%)	OPP threshold (for translation see programming guide)	3	6	0x0304	x	
559	0x022F	x				Undervoltage detection (UVD)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	UVD threshold (for translation see programming guide)	3	9	0x0307	x	
560	0x0230	x				Adjustable UVD notification	RW	uint16	2	1	Adjustable UVD notification	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	10	0x0308	x	
561	0x0231	x				Overvoltage detection (OVD)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	OVD threshold (for translation see programming guide)	3	11	0x0309	x	
562	0x0232	x				Adjustable OVD notification	RW	uint16	2	1	Adjustable OVD notification	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	12	0x030A	x	
563	0x0233	x				Undercurrent detection (UCD)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	UCD threshold (for translation see programming guide)	3	13	0x030B	x	
564	0x0234	x				Adjustable UCD notification	RW	uint16	2	1	Adjustable UCD notification	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	14	0x030C	x	
565	0x0235	x				Overcurrent detection (OCD)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	OCD threshold (for translation see programming guide)	3	15	0x030D	x	
566	0x0236	x				Adjustable OCD notification	RW	uint16	2	1	Adjustable OCD notification	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	16	0x030E	x	
567	0x0237	x				Overpower detection (OPD)	RW	uint16	2	1	0x0000 - 0x00E5 (0 - 102%)	OPD threshold (for translation see programming guide)	3	17	0x030F	x	
568	0x0238	x				Adjustable OPD notification	RW	uint16	2	1	Adjustable OPD notification	0x0000 = nothing, 0x0001 = signal, 0x0002 = warning, 0x0003 = alarm	3	18	0x0310	x	
577	0x0241	x				Condition of DC output/put after OT alarm	RW	uint16	2	1	Reg. Condition	0x0000 = off, 0x0001 = restore (default)	3	37	0x0323	x	
650	0x028A	x				Master-slave: Link mode on MS bus	RW	uint16	2	1	Coil: Mode	0x0000 = Slave, 0x0FFF = Master	4	0	0x03FD	x	
653	0x028D	x				Master-slave: Enable MS	RW	uint16	2	1	Coil: MS enable	0x0000 = off, 0x0FFF = on	4	0	0x0400	x	
654	0x028E	x				Master-slave: IRI MS	W	uint16	2	1	Coil: MS status	0x0000 = Start/stop	4	0	0x0401	x	
655	0x028F	x				Master-slave: Condition	R	uint16	2	1	MS start status	0x0000 = not initialised, 0x0001 = init running, 0x0003 = set default, 0x0004 = resp. interface, 0x0005 = assignment, 0x00FF = disrupted, 0x0FFF = different models detected, int not OK, 0x0FFF = error, 0x0FFF = int OK, 0x0FFB = Termination not OK	4	0	0x0402	x	
656	0x0290	x				Master-slave: Total voltage in V	R	float	4	2	Floating point number IEEE754	500	4	0	0x0403	x	
658	0x0292	x				Master-slave: Total current in A	R	float	4	2	Floating point number IEEE754	900	4	0	0x0404	x	
660	0x0294	x				Master-slave: Total power in W	R	float	4	2	Floating point number IEEE754	150000	4	0	0x0405	x	
662	0x0296	x				Master-slave: Number of initialised slaves	R	uint16	2	1	1..63		4	0	0x0406	x	
666	0x029A	x				Master-slave: Bus termination	R	uint16	2	1	Coil - Termination	0x0000 = off, 0x0FFF = on	4	10	0x0407	x	
667	0x029B	x				Master-slave: Bus bias	R	uint16	2	1	Coil - BAS	0x0000 = off, 0x0FFF = on	4	11	0x0408	x	
850	0x0352	x				Function generator Arbitrary: Start/stop	RW	uint16	2	1	Coil - Start/Stop	0x0000 = Stop, 0x0FFF = Start	5	0	0x04FC	x	
851	0x0353	x				Function generator Arbitrary: Select U	RW	uint16	2	1	Coil - U	0x0000 = not assigned, 0x0FFF = Assign function to voltage	5	0	0x04FD	x	
852	0x0354	x				Function generator Arbitrary: Select I	RW	uint16	2	1	Coil - I	0x0000 = not assigned, 0x0FFF = Assign function to current	5	0	0x04FE	x	
854	0x0356	x				Function generator XY:											