

mPower 411 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)																
Module address (dec)	Module address (hex)	Read/Write register (0x00)	Write single coil (0x01)	Write multiple registers (0x04)	Description	Access	Date type	Data length	Units	Number of bytes	Data	Example	Profibus	Modbus	EtherCAT	SDO/RO?
0	0x0000	x			Device class	R	unit16	2		1		See programming guide in section "A"	1	0x040101		
1	0x0001	x			Device type	R	char	40	ASCII			PSS 10080-1000	1	1 0x040101	x	
21	0x0015	x			Manufacturer	R	char	40	ASCII				1	2 0x040102		
41	0x0025	x			Manufacturer address	R	char	40	ASCII				1	3 0x040103		
61	0x0031	x			Manufacturer part number	R	char	40	ASCII				1	4 0x040104		
101	0x0050	x			Manufacturer website	R	char	40	ASCII				1	5 0x040105		
121	0x0079	x			Nominal voltage	R	float	4	Float	2	0x0001		1	6 0x040106	x	
123	0x007B	x			Nominal current	R	float	4	Float	2	0x0001		1	7 0x040107	x	
125	0x007D	x			Nominal power	R	float	4	Float	2	0x0001		1	8 0x040108	x	
127	0x007F	x			Max. internal resistance	R	float	4	Float	2	0x0001		1	9 0x040109	x	
131	0x0083	x			Internal resistance	R	float	4	Float	2	0x0001		1	10 0x040109	x	
151	0x0093	x			Article no.	R	char	40	ASCII			3000000001	1	11 0x04010C	x	
159	0x0097	x			Serial no.	R	char	40	ASCII			1234560001	1	13 0x04010D	x	
171	0x00A8	x	x		User text	RW	char	40	ASCII				1	14 0x040E	x	
191	0x00B1	x	x		Firmware version (KE)	R	char	40	ASCII				1	15 0x040F	x	
211	0x00D3	x	x		Firmware version (NM)	R	char	40	ASCII				1	16 0x0410	x	
231	0x00E7	x	x		Firmware version (DR)	R	char	40	ASCII				1	17 0x0411	x	
402	0x0192	x	x		Remote mode	RW	unit16	2		1	0x0001		2	1 0x04200	x	
405	0x0195	x	x		DIC output/input	RW	unit16	2		2	0x0001		2	2 0x04203	x	
407	0x0197	x	x		Condition of DIC output/input after power fail alarm	RW	unit16	2		2	0x0001		3	3 0x041C	x	
408	0x0198	x	x		Condition of DIC output/input after powering the device	RW	unit16	2		2	0x0001		2	6 0x04205	x	
409	0x0199	x	x		Operation mode (UPUR)	RW	unit16	2		2	0x0001		1	7 0x04206	x	
410	0x019A	x	x		Operation mode (UPUR) setting	RW	unit16	2		2	0x0001		1	8 0x04207	x	
411	0x019B	x	x		Acknowledge alarms	RW	unit16	2		2	0x0001		2	9 0x04208	x	
416	0x01A0	x	x		Analog interface: Reference voltage (pin VREF)	RW	unit16	2		2	0x0001		1	10 0x04209	x	
417	0x01A1	x	x		Analog interface: REM-SB level	RW	unit16	2		2	0x0001		1	11 0x04209	x	
418	0x01A2	x	x		Analog interface: REM-SB action	RW	unit16	2		2	0x0001		2	12 0x04224	x	
420	0x01A9	x	x		Condition of DIC output/input after leaving remote	RW	unit16	2		2	0x0001		2	13 0x04229	x	
421	0x01AB	x	x		Voltage Controller Speed	RW	unit16	2		2	0x0001		1	14 0x04230	x	
428	0x01AC	x	x		SEMI F47	RW	unit16	2		2	0x0001		1	2 0x0423	x	
432	0x01B0	x	x		Reset device to factory settings	RW	unit16	2		2	0x0001		1	3 0x0422A	x	
440	0x01B8	x	x		Analog interface: Pin 14 configuration	RW	unit16	2		2	0x0001		2	4 0x0422B	x	
441	0x01B9	x	x		Analog interface: Pin 6 configuration	RW	unit16	2		2	0x0001		2	5 0x0422C	x	
442	0x01BA	x	x		Analog interface: Pin 15 configuration	RW	unit16	2		2	0x0001		2	6 0x0422D	x	
443	0x01BB	x	x		Analog interface: Pins 9 and 10 configuration	RW	unit16	2		2	0x0001		2	50 0x04231	x	
498	0x01F3	x	x		Bank mode: Set power value	RW	unit16	2		2	0x0001		1	21 0x04214	x	
499	0x01F5	x	x		Bank mode: Set current value	RW	unit16	2		2	0x0001		1	22 0x04215	x	
500	0x01F4	x	x		Set voltage value	RW	unit16	2		2	0x0001		1	23 0x04216	x	
501	0x01F5	x	x		Source mode: Set current value	RW	unit16	2		2	0x0001		1	24 0x04217	x	
502	0x01F6	x	x		Source mode: Set power value	RW	unit16	2		2	0x0001		1	25 0x04218	x	
503	0x01F7	x	x		Source mode: Set resistance value	RW	unit16	2		2	0x0001		1	26 0x04219	x	
504	0x01F9	x	x		Sink mode: Set resistance value	RW	unit16	2		2	0x0001		1	27 0x0421A	x	
505	0x01FB	x	x		Device state	R	unit32	4		4	0x0001		1	2 27 0x0421A	x	
517	0x0200	x	x		Count of OV alarms since power up	R	unit16	2		2	0x0001		1	3 21 0x04115	x	
522	0x0204	x	x		Source mode: Count of OV alarms since power up	R	unit16	2		2	0x0001		1	3 22 0x04114	x	
523	0x020B	x	x		Count of DI alarms since power up	R	unit16	2		2	0x0001		1	3 23 0x04115	x	
524	0x020C	x	x		Count of DI alarms since power up	R	unit16	2		2	0x0001		1	3 24 0x04116	x	
525	0x020D	x	x		Sink mode: Count of PF alarms since power up	R	unit16	2		2	0x0001		1	3 25 0x04117	x	
526	0x020E	x	x		Count of PF alarms since power up (PSB/PSBE devices; sink mode)	R	unit16	2		2	0x0001		1	3 26 0x04118	x	
527	0x020F	x	x		Count of DI alarms since power up (PSB/PSBE devices; sink mode)	R	unit16	2		2	0x0001		1	3 27 0x04119	x	
550	0x0220	x	x		Overvoltage protection threshold (OVP)	RW	unit16	2		2	0x0001		1	3 0x04200	x	
553	0x0220	x	x		Source mode: Overcurrent protection threshold (OCP)	RW	unit16	2		2	0x0001		1	3 0x04301	x	
556	0x0220	x	x		Source mode: Undervoltage detection (UVD)	RW	unit16	2		2	0x0001		1	3 0x04304	x	
559	0x0221	x	x		Source mode: Undervoltage detection (UVL)	RW	unit16	2		2	0x0001		1	3 0x04307	x	
561	0x0231	x	x		Source mode: Overvoltage detection (OVD)	RW	unit16	2		2	0x0001		1	3 0x04309	x	
562	0x0232	x	x		Source mode: Adjustable OVD confirmation	RW	unit16	2		2	0x0001		1	3 0x0430A	x	
563	0x0233	x	x		Source mode: Undercurrent detection (UCD)	RW	unit16	2		2	0x0001		1	3 0x0430B	x	
564	0x0234	x	x		Source mode: Adjustable UCD confirmation	RW	unit16	2		2	0x0001		1	3 0x0430C	x	
565	0x0235	x	x		Source mode: Overcurrent detection (OCDD)	RW	unit16	2								

12024	0x2EF8	x		Function generator PV: Data set	R	16	0x0000...0xCCCC	Byte 0-3:Actual index [0x00000001...0x0000CA00] Byte 4-8: U_ist [0x0000...0xCCCC] Byte 8-9: I_ist [0x0000...0xCCCC] Byte 9-10: P_ist [0x0000...0xCCCC] Byte 10-11: P_mpp [0x0000...0xCCCC] Byte 11-15: P_mpp [0x0000...0xCCCC]	Actual index Actual voltage Actual current Actual power MPP voltage MPP current MPP power	10	16	0x0A07	x	
12032	0x2F00	x		Function generator PV: Open circuit voltage	R	unit[16]	2	0x0000...0xCCCC	Open circuit voltage (for translation see programming guide)	10	17	0x0A08	x	
12033	0x2F01	x		Function generator PV: Short-circuit current	R	unit[16]	2	0x0000...0xCCCC	Short circuit current (for translation see programming guide)	10	18	0x0A09	x	
12034	0x2F02	x		Function generator PV: Fill factor (voltage)	RW	float	4	0x0000...0xCCCC	Floating point number in IEEE754 format	10	19	0x0A0B	x	
12035	0x2F03	x		Function generator PV: Fill factor (current)	RW	float	4	0x0000...0xCCCC	Floating point number in IEEE754 format	10	20	0x0A0C	x	
12036	0x2F04	x		Function generator PV: Temperature coefficient for Isc (Technology parameter)	RW	float	4	0x0000...0xCCCC	Byte 0-3:TC values >0 ... -1	10	21	0x0A0E	x	
12040	0x2F08	x		Function generator PV: Temperature coefficient for Uoc (Technology parameter)	RW	float	4	0x0000...0xCCCC	Byte 0-3:TC values >0 ... -1	10	24	0x0A0F	x	
12042	0x2F0A	x		Function generator PV: Correction factor Cr (Technology parameter)	RW	float	4	0x0000...0xCCCC	Byte 0-3:Cr values >0 ... -1.0 [0.01: 0.0859]; Then float: 0.08419	10	26	0x0A11	x	
12044	0x2F0C	x		Function generator PV: Correction factor Cr (Technology parameter)	RW	float	4	0x0000...0xCCCC	Byte 0-3:Cr values >0 ... -1 [0.01: 0.0001476]	10	28	0x0A13	x	
12046	0x2F0E	x		Function generator PV: Correction factor Cr (Technology parameter)	RW	float	4	0x0000...0xCCCC	Byte 0-3:Cr values >0 ... -1 [0.01: 0.0001476]	10	30	0x0A15	x	
12048	0x2F10	x		Function generator PV: Overvoltage setting STO (Standard Test condition)	RW	unit[16]	2	0x0000...0xCCCC	Open circuit voltage (for translation see programming guide)	10	31	0x0A16	x	
12049	0x2F11	x		Function generator PV: Short circuit current STC	RW	unit[16]	2	0x0000...0xCCCC	Short circuit current (for translation see programming guide)	10	32	0x0A17	x	
12050	0x2F12	x		Function generator PV: MPP Voltage STC	RW	unit[16]	2	0x0000...0xCCCC	MPP voltage (for translation see programming guide)	10	33	0x0A18	x	
12051	0x2F13	x		Function generator PV: MPP current STC	RW	unit[16]	2	0x0000...0xCCCC	MPP current (for translation see programming guide)	10	34	0x0A19	x	
12052	0x2F14	x		Function generator PV: Module temperature	RW	unit[16]	2	0x0000...0xCCCC	Module temperature (translation: value = real value*40/120/52428)	10	35	0x0A1A	x	
12053	0x2F15	x		Function generator PV: Irradiation	RW	unit[16]	2	0x0000...0xCCCC	Module irradiation (translation: value = real value*1500/52428)	10	36	0x0A1B	x	
12054	0x2F16	x		Function generator PV: Status	R	unit[16]	2	0x0000...0xCCCC	Status code of PV simulation: 0x0000 = Run; 0x0001 = Stopped, mode fault; 0x0002 = Stopped, day trend fault; 0x0003 = Stopped, interpolation fault; 0x0004 = Stopped, interpolation fault; 0xFFFF = PV not active	10	37	0x0A1C	x	
12055	0x2F17	x		Function generator PV: Actual day data count	R	unit[32]	4	0x00000000...0x000186A0	0x0000000F = 15 data samples written	10	38	0x0A1D	x	
21000	0x6208	x		Operation counter: total time	R	unit[16]	6	0DDDD0HHMM	Word 0 = Days (0-65535) Word 1 = Hours (0-23) Word 2 = Minutes (0-59)	2	53	0x0234	-	
21003	0x620B	x		Operation counter: DC on time	R	unit[16]	6	0DDDD0HHMM	Word 0 = Days (0-65535) Word 1 = Hours (0-23) Word 2 = Minutes (0-59)	2	54	0x0235	-	
21006	0x620E	x		Operation counter: DC off time	R	unit[16]	6	0DDDD0HHMM	Word 0 = Days (0-65535) Word 1 = Hours (0-23) Word 2 = Minutes (0-59)	2	55	0x0236	-	
21009	0x6211	x		Operation counter: Energy in kWh (PSB/PSBE: source mode)	R	float	4	0x0000...0xCCCC	Floating point number EEE754	2	56	0x0237	-	
21011	0x6213	x		Operation counter: Capacity in Ah (PSB/PSBE: source mode)	R	float	4	0x0000...0xCCCC	Floating point number EEE755	2	57	0x0238	-	
21013	0x6215	x		Operation counter: Secondary energy in kWh (PSB/PSBE sink mode only)	R	float	4	0x0000...0xCCCC	Floating point number EEE756	2	58	0x0239	-	
21015	0x6217	x		Operation counter: Secondary capacity in Ah (PSB/PSBE sink mode only)	R	float	4	0x0000...0xCCCC	Floating point number EEE757	2	59	0x023A	-	
40960	0x4000	x	x	Function generator XY: Table 2 (EL), block 0	RW	unit[16]	32	10	0x0000...0xCCCC	Word 0 mode: Current set value FC or Battery mode: Voltage set value (block of 16 values)	12	0	0x0DF5	-
45040	0xAF00	x		Function generator XY: Table 2 (EL), block 255	RW	unit[16]	32	10	0x0000...0xCCCC	Word 0 mode: Current set value FC or Battery mode: Voltage set value (block of 16 values)	12	255	0x0CF4	-