



### SPM20-M Modbus register List

Register Num.	Property	Type	Definition	Remark
40001	RO	UINT	A Phase Voltage	Ratio100
40002	RO	UINT	B Phase Voltage	Ratio100
40003	RO	UINT	C Phase Voltage	Ratio100
40004	RO	UINT	Reserve	
40005	RO	UINT	Reserve	
40006	RO	UINT	Reserve	
40007	RO	UINT	Reserve	
40008	RO	UINT	Reserve	
40009	RO	UINT	Reserve	
40010	RO	UINT	Frequency	Ratio100
40011	RO	UINT	Branch Circuit 1 Current	Ratio1000
40012	RO	UINT	Branch Circuit 1 Active Power Low Byte	Ratio10
40013	RO	UINT	Branch Circuit 1Active Power High Byte	Ratio10
40014	RO	UINT	Branch Circuit 1 Reactive Power Low Byte	Ratio10
40015	RO	UINT	Branch Circuit 1 Reactive Power High Byte	Ratio10
40016	RO	UINT	Branch Circuit 1 Apparent Power Low Byte	Ratio10
40017	RO	UINT	Branch Circuit 1 Apparent Power High Byte	Ratio10
40018	RO	UINT	Branch Circuit 1Frequency	Ratio100
40019	RO	UINT	Branch Circuit 1 Active Energy Low Byte	Ratio10
40020	RO	UINT	Branch Circuit 1 Active Energy High Byte	Ratio10
40021	RO	UINT	Branch Circuit 1 Reactive Energy Low Byte	Ratio10
40022	RO	UINT	Branch Circuit 1 Reactive Energy High Byte	Ratio10
40023	RO	UINT	Branch Circuit 2 Current	Ratio1000
40024	RO	UINT	Branch Circuit 2 Active Power Low Byte	Ratio10
40025	RO	UINT	Branch Circuit 2 Active Power High Byte	Ratio10
40026	RO	UINT	Branch Circuit 2 Reactive Power Low Byte	Ratio10
40027	RO	UINT	Branch Circuit 2 Reactive Power High Byte	Ratio10
40028	RO	UINT	Branch Circuit 2 Apparent Power Low Byte	Ratio10
40029	RO	UINT	Branch Circuit 2 Apparent Power High Byte	Ratio10
40030	RO	UINT	Branch Circuit 2Frequency	Ratio100
40031	RO	UINT	Branch Circuit 2 Active Energy Low Byte	Ratio10
40032	RO	UINT	Branch Circuit 2 Active Energy High Byte	Ratio10
40033	RO	UINT	Branch Circuit 2 Reactive Energy Low Byte	Ratio10
40034	RO	UINT	Branch Circuit 2 Reactive Energy High Byte	Ratio10



40035-40046	RO	UINT	Branch Circuit 3 Electrical parameters	
40047-40058	RO	UINT	Branch Circuit 4 Electrical parameters	
40059-40070	RO	UINT	Branch Circuit 5 Electrical parameters	
40071-40082	RO	UINT	Branch Circuit 6 Electrical parameters	
40083-40094	RO	UINT	Branch Circuit 7 Electrical parameters	
40095-40106	RO	UINT	Branch Circuit 8 Electrical parameters	
40107-40118	RO	UINT	Branch Circuit 9 Electrical parameters	
40119-40130	RO	UINT	Branch Circuit 10 Electrical parameters	
40131-40142	RO	UINT	Branch Circuit 11 Electrical parameters	
40143-40154	RO	UINT	Branch Circuit 12 Electrical parameters	
40155-40166	RO	UINT	Branch Circuit 13 Electrical parameters	
40167-40178	RO	UINT	Branch Circuit 14 Electrical parameters	
40179-40190	RO	UINT	Branch Circuit 15 Electrical parameters	
40191-40202	RO	UINT	Branch Circuit 16 Electrical parameters	
40203-40214	RO	UINT	Branch Circuit 17 Electrical parameters	
40215-40226	RO	UINT	Branch Circuit 18 Electrical parameters	
40227-40238	RO	UINT	Branch Circuit 19 Electrical parameters	
40239-40250	RO	UINT	Branch Circuit 20 Electrical parameters	
40251-40262	RO	UINT	Branch Circuit 21 Electrical parameters	
40263-40274	RO	UINT	Branch Circuit 22 Electrical parameters	
40275-40286	RO	UINT	Branch Circuit 23 Electrical parameters	
40287-40298	RO	UINT	Branch Circuit 24 Electrical parameters	
40399-40310	RO	UINT	Branch Circuit 25 Electrical parameters	
40311-40322	RO	UINT	Branch Circuit 26 Electrical parameters	
40323-40334	RO	UINT	Branch Circuit 27 Electrical parameters	
40335-40346	RO	UINT	Branch Circuit 28 Electrical parameters	
40347-40358	RO	UINT	Branch Circuit 29 Electrical parameters	
40359-40370	RO	UINT	Branch Circuit 30 Electrical parameters	
40371	RO	BIT	Voltage Over Limit Alarm Status	bit0: Phase A Low Voltage Alarm bit1: Phase B Low Voltage Alarm bit2: Phase C Low Voltage Alarm bit3: Phase A High Voltage Alarm bit4: Phase B High Voltage Alarm bit5: Phase C High Voltage Alarm



40372	RO	BIT	Current 1-16 Over Limit Alarm Status	bit0: Current1 Over Limit Alarm bit15: Current16 Over Limit Alarm
40373	RO	BIT	Current 17-30 Over Limit Alarm Status	
40374	RO	BIT	Module 1-16 Communication Fault Status	bit0: Module 1 Communication Fault bit15: Module 16 Communication Fault
40375	RO	BIT	Module 17-30 Communication Fault Status	
40376	RO	UINT	Reserve	

Register Num.	Property	Type	Definition	Remark
42001	RO	UINT	1-3 Active Power And Low Byte	Ratio10
42002	RO	UINT	1-3 Active Power And High Byte	Ratio10
42003	RO	UINT	4-6 Active Power And Low Byte	Ratio10
42004	RO	UINT	4-6 Active Power And High Byte	Ratio10
42005	RO	UINT	7-9 Active Power And Low Byte	Ratio10
42006	RO	UINT	7-9 Active Power And High Byte	Ratio10
42007	RO	UINT	10-12 Active Power And Low Byte	Ratio10
42008	RO	UINT	10-12 Active Power And High Byte	Ratio10
42009	RO	UINT	13-15 Active Power And Low Byte	Ratio10
42010	RO	UINT	13-15 Active Power And High Byte	Ratio10
42011	RO	UINT	16-18 Active Power And Low Byte	Ratio10
42012	RO	UINT	16-18 Active Power And High Byte	Ratio10
42013	RO	UINT	19-21 Active Power And Low Byte	Ratio10
42014	RO	UINT	19-21 Active Power And High Byte	Ratio10
42015	RO	UINT	22-24Active Power And Low Byte	Ratio10
42016	RO	UINT	22-24Active Power And High Byte	Ratio10
42017	RO	UINT	25-27Active Power And Low Byte	Ratio10
42018	RO	UINT	25-27Active Power And High Byte	Ratio10
42019	RO	UINT	28-30Active Power And Low Byte	Ratio10
42020	RO	UINT	28-30Active Power And High Byte	Ratio10
42021	RO	UINT	1-3 Reactive Power And Low Byte	Ratio10



42022	RO	UINT	1-3 Reactive Power And High Byte	Ratio10
42023	RO	UINT	4-6 Reactive Power And Low Byte	Ratio10
42024	RO	UINT	4-6 Reactive Power And High Byte	Ratio10
42025	RO	UINT	7-9 Reactive Power And Low Byte	Ratio10
42026	RO	UINT	7-9 Reactive Power And High Byte	Ratio10
42027	RO	UINT	10-12 Reactive Power And Low Byte	Ratio10
42028	RO	UINT	10-12 Reactive Power And High Byte	Ratio10
42029	RO	UINT	13-15 Reactive Power And Low Byte	Ratio10
42030	RO	UINT	13-15 Reactive Power And High Byte	Ratio10
42031	RO	UINT	16-18 Reactive Power And Low Byte	Ratio10
42032	RO	UINT	16-18 Reactive Power And High Byte	Ratio10
42033	RO	UINT	19-21 Reactive Power And Low Byte	Ratio10
42034	RO	UINT	19-21 Reactive Power And High Byte	Ratio10
42035	RO	UINT	22-24 Reactive Power And Low Byte	Ratio10
42036	RO	UINT	22-24 Reactive Power And High Byte	Ratio10
42037	RO	UINT	25-27 Reactive Power And Low Byte	Ratio10
42038	RO	UINT	25-27 Reactive Power And High Byte	Ratio10
42039	RO	UINT	28-30 Reactive Power And Low Byte	Ratio10
42040	RO	UINT	28-30 Reactive Power And High Byte	Ratio10
42041	RO	UINT	1-3 Active Energy And Low Byte	Ratio10
42042	RO	UINT	1-3 Active Energy And High Byte	Ratio10
42043	RO	UINT	4-6 Active Energy And Low Byte	Ratio10
42044	RO	UINT	4-6 Active Energy And High Byte	Ratio10
42045	RO	UINT	7-9 Active Energy And Low Byte	Ratio10
42046	RO	UINT	7-9 Active Energy And High Byte	Ratio10
42047	RO	UINT	10-12 Active Energy And Low Byte	Ratio10
42048	RO	UINT	10-12 Active Energy And High Byte	Ratio10
42049	RO	UINT	13-15 Active Energy And Low Byte	Ratio10
42050	RO	UINT	13-15 Active Energy And High Byte	Ratio10
42051	RO	UINT	16-18 Active Energy And Low Byte	Ratio10
42052	RO	UINT	16-18 Active Energy And High Byte	Ratio10
42053	RO	UINT	19-21 Active Energy And Low Byte	Ratio10
42054	RO	UINT	19-21 Active Energy And High Byte	Ratio10
42055	RO	UINT	22-24 Active Energy And Low Byte	Ratio10
42056	RO	UINT	22-24 Active Energy And High Byte	Ratio10
42057	RO	UINT	25-27 Active Energy And Low Byte	Ratio10
42058	RO	UINT	25-27 Active Energy And High Byte	Ratio10



42059	RO	UINT	28-30 Active Energy And Low Byte	Ratio10
42060	RO	UINT	28-30 Active Energy And High Byte	Ratio10

## 5.2 Device Parameter Register

Register Num.	Type	Definition	Range
40501	R/W	Controller Communication Address	1 ~ 247
40502	R/W	Communication Baud Rate	0:4800 1:9600 2:19200
40503	R/W	Reserve	
40504	R/W	Communication Module Quantity	1-30
40505	R/W	Voltage Upper Limit Setting	0-50000, Ratio100
40506	R/W	Voltage Lower Setting	0-50000, Ratio100
40507	R/W	Wiring Model Setting	0-1
40508	R/W	Current 1 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40509	R/W	Current 2 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40510	R/W	Current 3 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40511	R/W	Current 4 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40512	R/W	Current 5 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40513	R/W	Current 6 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40514	R/W	Current 7 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40515	R/W	Current 8 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40516	R/W	Current 9 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40517	R/W	Current 10 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40518	R/W	Current 11 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40519	R/W	Current 12 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40520	R/W	Current 13 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40521	R/W	Current 14 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40522	R/W	Current 15 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40523	R/W	Current 16 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40524	R/W	Current 17 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40525	R/W	Current 18 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40526	R/W	Current 19 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40527	R/W	Current 20 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40528	R/W	Current 21 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40529	R/W	Current 22 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40530	R/W	Current 23 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40531	R/W	Current 24 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40532	R/W	Current 25 Upper Limit Alarm Threshold	0~65000 , Ratio1000



40533	R/W	Current 26 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40534	R/W	Current 27 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40535	R/W	Current 28 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40536	R/W	Current 29 Upper Limit Alarm Threshold	0~65000 , Ratio1000
40537	R/W	Current 30 Upper Limit Alarm Threshold	0~65000 , Ratio1000