

MP2 – M2S – M2X – M2U – M2F

MODBUS RTU table

Multicom 302

SUPPORTED FUNCTION	FUNCTION DESCRIPTION	ACCESSIBLE TABLES
1 (0x01) 2 (0x02)	BIT READING	STATES/ALARMS
3 (0x03) 4 (0x04)	REGISTERS READING	ALL
6 (0x06)	SINGLE REGISTER WRITING	COMMANDS
16 (0x10)	MULTIPLE REGISTERS WRITING	COMMANDS

REGISTER ⁽¹⁾		STATES/ALARMS	BIT ⁽²⁾	
Number	Address		Number	Address
1	0		1	0
		Test in progress [0=NO / 1=YES]	2	1
		Shutdown imminent [0=NO / 1=YES]	3	2
		Shutdown active [0=NO / 1=YES]	4	3
		Replace battery [0=NO / 1=YES]	5	4
		Battery charged [0=NO / 1=YES]	6	5
		Battery charging [0=NO / 1=YES]	7	6
		Bypass not available [0=NO / 1=YES]	8	7
			9	8
		Normal operation [0=NO / 1=YES]	10	9
		Eco mode [0=NO / 1=YES]	11	10
		On bypass [0=NO / 1=YES]	12	11
		Battery low [0=NO / 1=YES]	13	12
		Battery working [0=NO / 1=YES]	14	13
		UPS locked [0=NO / 1=YES]	15	14
		Output powered [0=NO / 1=YES]	16	15
2	1		17	16
		SWOUT [0=CLOSED / 1=OPEN]	18	17
			19	18
			20	19
		SWMB (Manual bypass command) [0=OPEN / 1=CLOSED]	21	20
			22	21
			23	22
		Fan Fault [0=NO / 1=YES]	24	23
			25	24
			26	25
			27	26
			28	27
		Input Mains present [0=NO / 1=YES]	29	28
		Alarm temperature [0=NO / 1=YES]	30	29
		Alarm overload [0=NO / 1=YES]	31	30
		UPS alarm [0=NO / 1=YES]	32	31

REGISTER ⁽¹⁾		STATES/ALARMS	BIT ⁽²⁾	
Number	Address		Number	Address
3	2	EPO active [0=NO / 1=YES]	33	32
			34	33
		Bypass command active (Panel OR Remote IN) [0=NO / 1=YES]	35	34
			36	35
			37	36
		Backfeed protection active [0=NO / 1=YES]	38	37
			39	38
			40	39
			41	40
			42	41
		Battery not present (or inverted) [0=NO / 1=YES]	43	42
			44	43
			45	44
			46	45
			47	46
			48	47
4	3		49	48
			50	49
			51	50
			52	51
			53	52
			54	53
			55	54
			56	55
			57	56
			58	57
			59	58
			60	59
			61	60
			62	61
			63	62
		Communication lost with UPS [0=NO / 1=YES]	64	63

⁽¹⁾ The register number **n** must be addressed **n-1** in the data packet.

⁽²⁾ The bit number **n** must be addressed **n-1** in the data packet.

REGISTER ⁽¹⁾		MEASUREMENTS	UNIT
Number	Address		
9	8	Input voltage (L1-L2)	V
10	9	Input voltage (L2-L3)	V
11	10	Input voltage (L3-L1)	V
12	11	Input voltage (L1-N)	V
13	12	Input voltage (L2-N)	V
14	13	Input voltage (L3-N)	V
15	14	Input current (L1)	A/10
16	15	Input current (L2)	A/10
17	16	Input current (L3)	A/10
18	17	Input frequency	Hz/10
19	18	Bypass voltage (L1-L2)	V
20	19	Bypass voltage (L2-L3)	V
21	20	Bypass voltage (L3-L1)	V
22	21	Bypass voltage (L1-N)	V
23	22	Bypass voltage (L2-N)	V
24	23	Bypass voltage (L3-N)	V
25	24	Bypass frequency	Hz/10
26	25	Output voltage (L1-N)	V
27	26	Output voltage (L2-N)	V
28	27	Output voltage (L3-N)	V
29	28	Output voltage (L1-L2)	V
30	29	Output voltage (L2-L3)	V
31	30	Output voltage (L3-L1)	V
32	31	Output current (L1)	A/10
33	32	Output current (L2)	A/10
34	33	Output current (L3)	A/10
35	34	Output peak current (L1)	A/10
36	35	Output peak current (L2)	A/10
37	36	Output peak current (L3)	A/10
38	37	Load (L1)	%
39	38	Load (L2)	%
40	39	Load (L3)	%
41	40	Output active power (L1)	kW/10
42	41	Output active power (L2)	kW/10
43	42	Output active power (L3)	kW/10
44	43	Output frequency	Hz/10
45	44	Output apparent power (L1)	kVA/10
46	45	Output apparent power (L2)	kVA/10
47	46	Output apparent power (L3)	kVA/10
48	47	Battery voltage	V/10
49	48		
50	49		
51	50	Battery current (+ Discharge, - Charge)	±A/10
52	51	Battery SOC	%
53	52		
54	53	Battery autonomy	Minutes
55	54		
56	55		
57	56		
58	57		
59	58	Output reactive power (L1)	kVAr/10
60	59	Output reactive power (L2)	kVAr/10
61	60	Output reactive power (L3)	kVAr/10
62	61	System temperature	°C
63	62		
64	63		
65	64		
66	65		
67	66		

REGISTER ⁽¹⁾		MEASUREMENTS	UNIT
Number	Address		
68	67	External battery temperature	°C
69	68		
70	69		
71	70		
72	71		
73	72		
74	73	Average load on 3 phases	%
75	74	Output total active power	kW/10
76	75	Output total apparent power	kVA/10
77	76	Output total reactive power	kVAr/10

NOTE: Some measures may not be available. In this case you find 0xFFFF value in the relative register.

REGISTER ⁽¹⁾		NOMINAL DATA	UNIT
Number	Address		
78	77	Output nominal voltage	V
79	78	Output nominal frequency	Hz/10
80	79	Output nominal apparent power	kVA*100
81	80	Output nominal active power	kW*100
82	81		
83	82	Battery nominal voltage	V
84	83	Battery nominal capacity	Ah
85	84	Battery benches	1 or 2

REGISTER ⁽¹⁾		NetMan DIAGNOSTIC	UNIT
Number	Address		
119	118	Counter of processed correct messages	Integer
120	119	Counter of processed not correct messages	Integer

⁽¹⁾ The register number **n** must be addressed **n-1** in the data packet.

REGISTER ⁽¹⁾		MODULES STATUS CODE	
Number	Address		
197	196	SMU (System Monitoring Unit) status code	Refer to SMU status code table
198	197	BM (Bypass Module) BM (Bypass Module) Phase 1 status code	Refer to BM status code table
199	198	BM (Bypass Module) Phase 2 status code	Only for M2S
200	199	BM (Bypass Module) Phase 3 status code	Refer to BM status code table
201	200	PM (Power Module) status code	Only for MP2 Refer to PM status code table
202	201	PM (Power Module) status code	
203	202	PM (Power Module) status code	
204	203	PM (Power Module) status code	
205	204	PM (Power Module) status code	
206	205	PM (Power Module) status code	
207	206	PM (Power Module) status code	
208	207	PM (Power Module) status code	
209	208	PM (Power Module) status code	
210	209	RESERVED	
211	210	PM (Power Module) status code	Only for M2S Refer to PM status code table
212	211	PM (Power Module) status code	
213	212	PM (Power Module) status code	
214	213	PM (Power Module) status code	
215	214	PM (Power Module) status code	
216	215	PM (Power Module) status code	
217	216	PM (Power Module) status code	
218	217	PM (Power Module) status code	
219	218	PM (Power Module) status code	
220	219	PM (Power Module) status code	
221	220	PM (Power Module) status code	
222	221	PM (Power Module) status code	
223	222	PM (Power Module) status code	
224	223	PM (Power Module) status code	
225	224	PM (Power Module) status code	
226	225	PM (Power Module) status code	
227	226	PM (Power Module) status code	
228	227	PM (Power Module) status code	
229	228	PM (Power Module) status code	
230	229	PM (Power Module) status code	
231	230	PM (Power Module) status code	
232	231	PM (Power Module) status code	
233	232	PM (Power Module) status code	
234	233	PM (Power Module) status code	
235	234	PM (Power Module) status code	
236	235	PM (Power Module) status code	
237	236	PM (Power Module) status code	
238	237	PM (Power Module) status code	
239	238	PM (Power Module) status code	
240	239	PM (Power Module) status code	



Refer to the following images to identify for each module the corresponding modbus address.

PM (POWER MODULE) STATUS CODE DESCRIPTION															
bit 15	bit 14	bit 13	bit 12	bit 11	bit 10	bit 9	bit 8	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
RESERVED						0 = Not available on UPS model 1 = Stand-by 2 = Precharge 3 = Starting - Calibration 4 = Wait battery recharge 5 = Load on inverter 6 = From battery 7 = Load on bypass 8 = Efficiency control 9 = Not present						0 = Communication Lost 1 = Normal Operation 2 = Anomaly 3 = Warning 4 = Fault 5 = Lock			

BM (BYPASS MODULE) STATUS CODE DESCRIPTION															
bit 15	bit 14	bit 13	bit 12	bit 11	bit 10	bit 9	bit 8	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
RESERVED						1 = Stand-by 3 = Switch on 5 = Ready 7 = Load on bypass						0 = Communication Lost 1 = Normal Operation 2 = Anomaly 3 = Warning 4 = Fault 5 = Lock			

SMU (SYSTEM MONITORING UNIT) STATUS CODE DESCRIPTION															
bit 15	bit 14	bit 13	bit 12	bit 11	bit 10	bit 9	bit 8	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
RESERVED						5 = Present						0 = Communication Lost 1 = Normal Operation 2 = Anomaly 3 = Warning 4 = Fault 5 = Lock			

**M2X 90 / M2X 120
MP2 300**



MP2 500 / MP2 600



The number of power modules changes according to the UPS model.

M2S 1000 / M2S 1250

		SMU reg# 197
PM reg# 230	PM reg# 220	
PM reg# 229	PM reg# 219	
PM reg# 228	PM reg# 218	
PM reg# 227	PM reg# 217	
PM reg# 226	PM reg# 216	BYP1 reg# 198
PM reg# 225	PM reg# 215	
PM reg# 224	PM reg# 214	BYP2 reg# 199
PM reg# 223	PM reg# 213	
PM reg# 222	PM reg# 212	BYP3 reg# 200
PM reg# 221	PM reg# 211	



The number of power modules changes according to the UPS model.

M2S 1600 / M2S 2000

			SMU reg# 197
PM reg# 240	PM reg# 230	PM reg# 220	
PM reg# 239	PM reg# 229	PM reg# 219	
PM reg# 238	PM reg# 228	PM reg# 218	
PM reg# 237	PM reg# 227	PM reg# 217	
PM reg# 236	PM reg# 226	PM reg# 216	BYP1 reg# 198
PM reg# 235	PM reg# 225	PM reg# 215	BYP2 reg# 199
PM reg# 234	PM reg# 224	PM reg# 214	
PM reg# 233	PM reg# 223	PM reg# 213	BYP3 reg# 200
PM reg# 232	PM reg# 222	PM reg# 212	
PM reg# 231	PM reg# 221	PM reg# 211	

M2U 68 / M2U 140
M2F 150 / M2F 350



M2F 675



The number of power modules changes according to the UPS model.