

Appendix: Modbus PRO1 and PRO380

Please take into account that that a PRO1 meter is a single phase meter and the PRO380 is three phase meter. The PRO1 meter only shows single phase meter values, not three phase values which are also listed below:

11bits data (1 start bit, 8 data bit, 1 even check bit, 1 stop bit)

Communication commands will choose CRC check (2bytes)

Meter ID will use 01 as default, baud rate 9600bps, but 1200bps、 2400bps、 4800bps(optional)

Meter ID (default)	Function Code	Register Address	Contents	Register No.	Read/Write
01	03	1080	Block Command	1	Read
01	03	1050	Protocol Version	2	Read
01	03	1053	Software Version	3	Read
01	03	1058	Hardware Version	4	Read
01	03	1060	Meter Amps	5	Read
01	03	1010	Meter code	6	Read
01	03	1000	Serial number	7	Read
01	03	1018	Meter ID	8	Read
01	03	1020	Baud Rate	9	Read
01	03	1062	CT Rate	10	Read
01	03	1066	S0 output rate	11	Read
01	03	107A	Combined Code	12	Read
01	03	2008	L1 Voltage	13	Read
01	03	200C	L2 Voltage	14	Read
01	03	2010	L3 Voltage	15	Read
01	03	2020	Grid Frequency	16	Read
01	03	2068	L1 Current	17	Read
01	03	206C	L2 Current	18	Read
01	03	2070	L3 Current	19	Read
01	03	2080	Total Active Power	20	Read
01	03	2088	L1 Active Power	21	Read
01	03	208C	L2 Active Power	22	Read
01	03	2090	L3 Active Power	23	Read
01	03	20A0	Total reactive power		Read
01	03	20A8	L1 reactive power		Read
01	03	20AC	L2 reactive power		Read
01	03	20B0	L3 reactive power		Read
01	03	20C0	Total Apparent Power	24	Read
01	03	20C8	L1 Apparent Power	25	Read
01	03	20CC	L2 Apparent Power	26	Read
01	03	20D0	L3 Apparent Power	27	Read
01	03	20E0	Total Power Factor	28	Read
01	03	20E8	Power Factor	29	Read
01	03	20EC	Power Factor	30	Read
01	03	20F0	Power Factor	31	Read
01	03	2200	Tariff	32	Read

Correct Respond: 01(default) 03 02 data H 8bits data L 8bits CRC CRC

Incorrect Respond: 01(default) 83 wrong information code (address error and CRC error no return)

01	03	3000	Total Active Energy	101	Read
01	03	3100	T1 Total Active Energy	102	Read
01	03	3200	T2 Total Active Energy	103	Read
01	03	3008	L1 Total Active Energy	104	Read
01	03	300C	L2 Total Active Energy	105	Read
01	03	3010	L3 Total Active Energy	106	Read
01	03	3020	Forward Active Energy	107	Read
01	03	3120	T1 Forward Active Energy	108	Read
01	03	3220	T2 Forward Active Energy	109	Read
01	03	3028	L1 Forward Active Energy	110	Read
01	03	302C	L2 Forward Active Energy	111	Read
01	03	3030	L3 Forward Active Energy	112	Read
01	03	3040	Reverse Active Energy	113	Read
01	03	3140	T1 Reverse Active Energy	114	Read
01	03	3240	T2 Reverse Active Energy	115	Read
01	03	3048	L1 Reverse Active Energy	116	Read
01	03	304C	L2 Reverse Active Energy	117	Read
01	03	3050	L3 Reverse Active Energy	118	Read
01	03	3060	Total Reactive Energy	119	Read
01	03	3160	T1 Total Reactive Energy	120	Read
01	03	3260	T2 Total Reactive Energy	121	Read
01	03	3068	L1 Reactive Energy	122	Read
01	03	306C	L2 Reactive Energy	123	Read
01	03	3070	L3 Reactive Energy	124	Read
01	03	3080	Forward Reactive Energy	125	Read
01	03	3180	T1 Forward Reactive Energy	126	Read
01	03	3280	T2 Forward Reactive Energy	127	Read
01	03	3088	L1 Forward Reactive Energy	128	Read
01	03	308C	L2 Forward Reactive Energy	129	Read
01	03	3090	L3 Forward Reactive Energy	130	Read
01	03	30A0	Reverse Reactive Energy	131	Read
01	03	31A0	T1 Reverse Reactive Energy	132	Read
01	03	32A0	T2 Reverse Reactive Energy	133	Read
01	03	30A8	L1 Reverse Reactive Energy	134	Read
01	03	30AC	L2 Reverse Reactive Energy	135	Read
01	03	30B0	L3 Reverse Reactive Energy	136	Read

Correct Respond: 01(default) 03 04 data H 8bits data L 8bits CRC CRC

Incorrect Respond: 01(default) 83 Wrong information code(address error and CRC error no return)

01	03	1018	Meter ID	1	Write
01	03	1020	Baud Rate	2	Write
01	03	1062	CT Rate	3	Write until blocked
01	03	107A	Combined Code	4	Write

Correct Respond: 01(default) 06 register address H 8bits register address L 8bits data H 8bits data L 8bits CRC CRC

Incorrect Respond: 01(default) 86 Wrong information code (address error and CRC error no return)

Wrong Function Code

- 01 The received function code is invalid
- 02 Received register address is not existing
- 03 The received data is not comply with the requirement, generally writing data exceeds range
- 04 Equipment error, this program is not used