

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	length	data mode	unit
01	03	0000	Serial number	1	Read	4		/
01	03	0002	Meter ID	2	Read	2		/
01	03	0003	Baud Rate	3	Read	2		bps
01	03	0004	Software Version	4	Read	4	float	/
01	03	0006	Hardware Version	5	Read	4	float	/
01	03	0008	CT Rate	6	Read	2		/
01	03	0009	S0 output rate	7	Read	4	float	imp/kWh
01	03	000B	Combined Code	8	Read	2		/
01	03	000C	HOLIDAY-WEEKEND T	9	Read	2		/
01	03	000D	Cycle time	10	Read	2		/
01	03	000E	L1 Voltage	11	Read	4	float	V
01	03	0010	L2 Voltage	12	Read	4	float	V
01	03	0012	L3 Voltage	13	Read	4	float	V
01	03	0014	Grid Frequency	14	Read	4	float	Hz
01	03	0016	L1 Current	15	Read	4	float	A
01	03	0018	L2 Current	16	Read	4	float	A
01	03	001A	L3 Current	17	Read	4	float	A
01	03	001C	Total Active Power	18	Read	4	float	kW
01	03	001E	L1 Active Power	19	Read	4	float	kW
01	03	0020	L2 Active Power	20	Read	4	float	kW
01	03	0022	L3 Active Power	21	Read	4	float	kW
01	03	0024	Total reactive power	22	Read	4	float	kVar
01	03	0026	L1 reactive power	23	Read	4	float	kVar
01	03	0028	L2 reactive power	24	Read	4	float	kVar
01	03	002A	L3 reactive power	25	Read	4	float	kVar
01	03	002C	Total Apparent Power	26	Read	4	float	kVA
01	03	002E	L1 Apparent Power	27	Read	4	float	kVA
01	03	0030	L2 Apparent Power	28	Read	4	float	kVA
01	03	0032	L3 Apparent Power	29	Read	4	float	kVA
01	03	0034	Total Power Factor	30	Read	4	float	/
01	03	0036	Power Factor	31	Read	4	float	/
01	03	0038	Power Factor	32	Read	4	float	/
01	03	003A	Power Factor	33	Read	4	float	/
01	03	003C	Time	34	Read	8		/
01	03	0040	时令开关	35	Read	2		/
01	03	0041	CRC CODE	36	Read	2		/

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	0100	Total Active Energy	35	Read	4	float	kWh
01	03	0102	L1 Total Active Energy	36	Read	4	float	kWh
01	03	0104	L2 Total Active Energy	37	Read	4	float	kWh
01	03	0106	L3 Total Active Energy	38	Read	4	float	kWh
01	03	0108	Forward Active Energy	39	Read	4	float	kWh
01	03	010A	L1 Forward Active Energy	40	Read	4	float	kWh
01	03	010C	L2 Forward Active Energy	41	Read	4	float	kWh
01	03	010E	L3 Forward Active Energy	42	Read	4	float	kWh

01	03	0110	Reverse Active Energy	43	Read	4	float	kWh
01	03	0112	L1 Reverse Active Energy	44	Read	4	float	kWh
01	03	0114	L2 Reverse Active Energy	45	Read	4	float	kWh
01	03	0116	L3 Reverse Active Energy	46	Read	4	float	kWh
01	03	0118	Total Reactive Energy	47	Read	4	float	kVarh
01	03	011A	L1 Reactive Energy	48	Read	4	float	kVarh
01	03	011C	L2 Reactive Energy	49	Read	4	float	kVarh
01	03	011E	L3 Reactive Energy	50	Read	4	float	kVarh
01	03	0120	Forward Reactive Energy	51	Read	4	float	kVarh
01	03	0122	L1 Forward Reactive Energy	52	Read	4	float	kVarh
01	03	0124	L2 Forward Reactive Energy	53	Read	4	float	kVarh
01	03	0126	L3 Forward Reactive Energy	54	Read	4	float	kVarh
01	03	0128	Reverse Reactive Energy	55	Read	4	float	kVarh
01	03	012A	L1 Reverse Reactive Energy	56	Read	4	float	kVarh
01	03	012C	L2 Reverse Reactive Energy	57	Read	4	float	kVarh
01	03	012E	L3 Reverse Reactive Energy	58	Read	4	float	kVarh
01	03	0130	T1 Total Active Energy	59	Read	4	float	kWh
01	03	0132	T1 Forward Active Energy	60	Read	4	float	kWh
01	03	0134	T1 Reverse Active Energy	61	Read	4	float	kWh
01	03	0136	T1 Total Reactive Energy	62	Read	4	float	kVarh
01	03	0138	T1 Forward Reactive Energy	63	Read	4	float	kVarh
01	03	013A	T1 Reverse Reactive Energy	64	Read	4	float	kVarh
01	03	013C	T2 Total Active Energy	65	Read	4	float	kWh
01	03	013E	T2 Forward Active Energy	66	Read	4	float	kWh
01	03	0140	T2 Reverse Active Energy	67	Read	4	float	kWh
01	03	0142	T2 Total Reactive Energy	68	Read	4	float	kVarh
01	03	0144	T2 Forward Reactive Energy	69	Read	4	float	kVarh
01	03	0146	T2 Reverse Reactive Energy	70	Read	4	float	kVarh
01	03	0148	T3 Total Active Energy	71	Read	4	float	kWh
01	03	014A	T3 Forward Active Energy	72	Read	4	float	kWh
01	03	014C	T3 Reverse Active Energy	73	Read	4	float	kWh
01	03	014E	T3 Total Reactive Energy	74	Read	4	float	kVarh
01	03	0150	T3 Forward Reactive Energy	75	Read	4	float	kVarh
01	03	0152	T3 Reverse Reactive Energy	76	Read	4	float	kVarh
01	03	0154	T4 Total Active Energy	77	Read	4	float	kWh
01	03	0156	T4 Forward Active Energy	78	Read	4	float	kWh
01	03	0158	T4 Reverse Active Energy	79	Read	4	float	kWh
01	03	015A	T4 Total Reactive Energy	80	Read	4	float	kVarh
01	03	015C	T4 Forward Reactive Energy	81	Read	4	float	kVarh
01	03	015E	T4 Reverse Reactive Energy	82	Read	4	float	kVarh
01	03	0300	TIME interval 1	83	Read	24		/
01	03	030C	TIME interval 2	84	Read	24		/
01	03	0318	TIME interval 3	85	Read	24		/
01	03	0324	TIME interval 4	86	Read	24		/
01	03	0330	TIME interval 5	87	Read	24		/
01	03	033C	TIME interval 6	88	Read	24		/
01	03	0348	TIME interval 7	89	Read	24		/
01	03	0354	TIME interval 8	90	Read	24		/
01	03	0360	TIME zone	91	Read	24		/

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	06	0002	Meter ID	1	Write	2		/
01	06	0003	Baud Rate	2	Write	2		/

01	06	0008	CT Rate	3	Write	2		only focus on CT type
01	10	0009	SO OUTPUT	4	Write	4	float	imp/kWh
01	06	000B	Combined Code	5	Write	2		/
01	06	000C	HOLIDAY-WEEKEND T	6	Write	2		/
01	06	000D	Cycle time	7	Write	2		/
01	10	003C	Time	8	Write	8		/
01	10	0300	TIME interval 1	9	Write	24		/
01	10	030C	TIME interval 2	10	Write	24		/
01	10	0318	TIME interval 3	11	Write	24		/
01	10	0324	TIME interval 4	12	Write	24		/
01	10	0330	TIME interval 5	13	Write	24		/
01	10	033C	TIME interval 6	14	Write	24		/
01	10	0348	TIME interval 7	15	Write	24		/
01	10	0354	TIME interval 8	16	Write	24		/
01	10	0360	TIME zone	17	Write	24		/

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

