

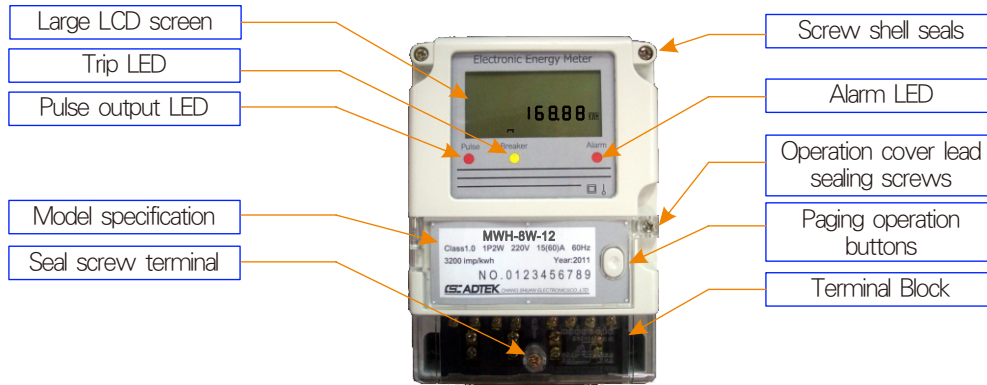
MWH-8W Wall-mounted Electronic Energy Meter MANUAL(Ver.1.1)

Thank you for purchasing this meter, before you begin using the meter should read this Manual ◦

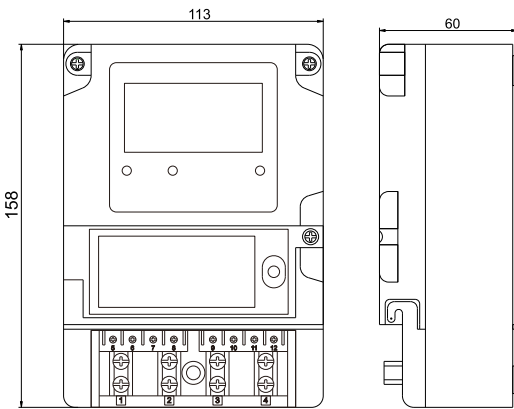
Safety Notes:

- Before Installation and removal, first power off ◦
- Do not use in direct sunlight, use the ambient temperature 0 ~ +60 degrees Celsius

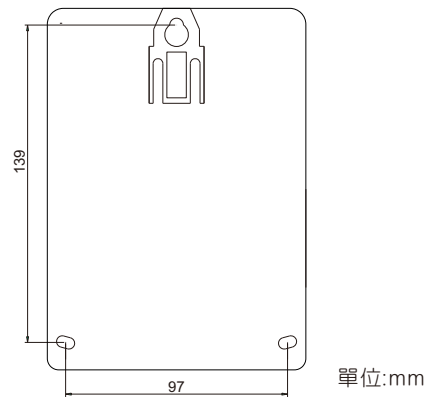
Appearance of the ministries Name Description



DIMENSIONS

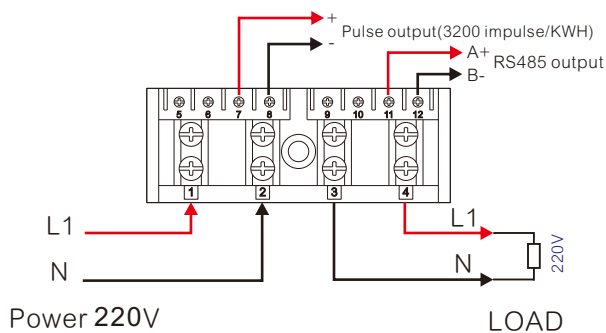


Fixed Hole Size

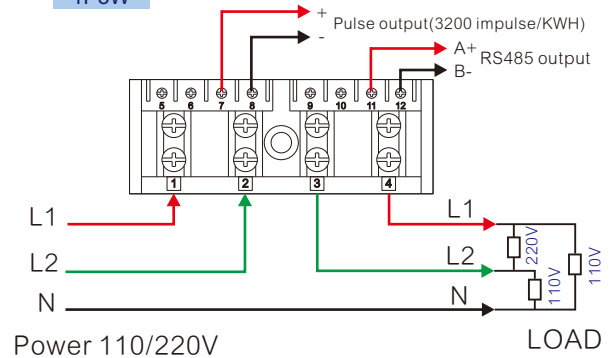


CONNECTION DIAGRAM

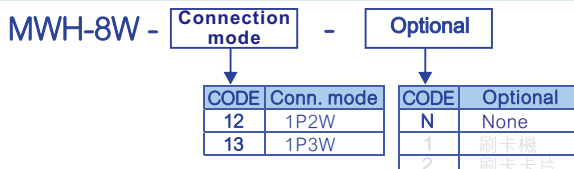
1P2W



1P3W



ORDERING INFORMATION

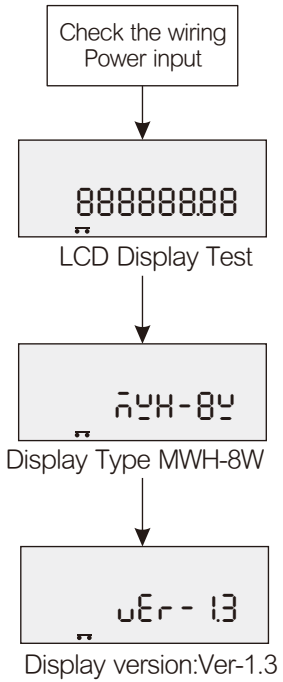


註:淺色字部份規格為新版預定追加功能,目前暫時無法提供。

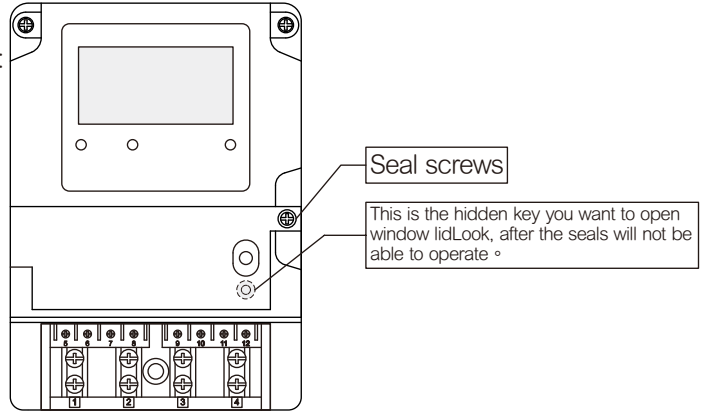
Execution parameters browse screen Operation Flow

Formal operation of the meter before you read the description of this process:

1. The instrument mainly divided into "execution parameters browse screen" and "factory-set parameters" of two parts.
2. Please do not suggest any non-engineering personnel to enter and modify the "factory-set parameters" inside the content, so as to avoid system anomalies caused by improperly set or damaged.
3. After the new meter purchase process engineers Please read this note, based on their needs, set the appropriate parameters to fully understand these processes can contribute to the later of the operating

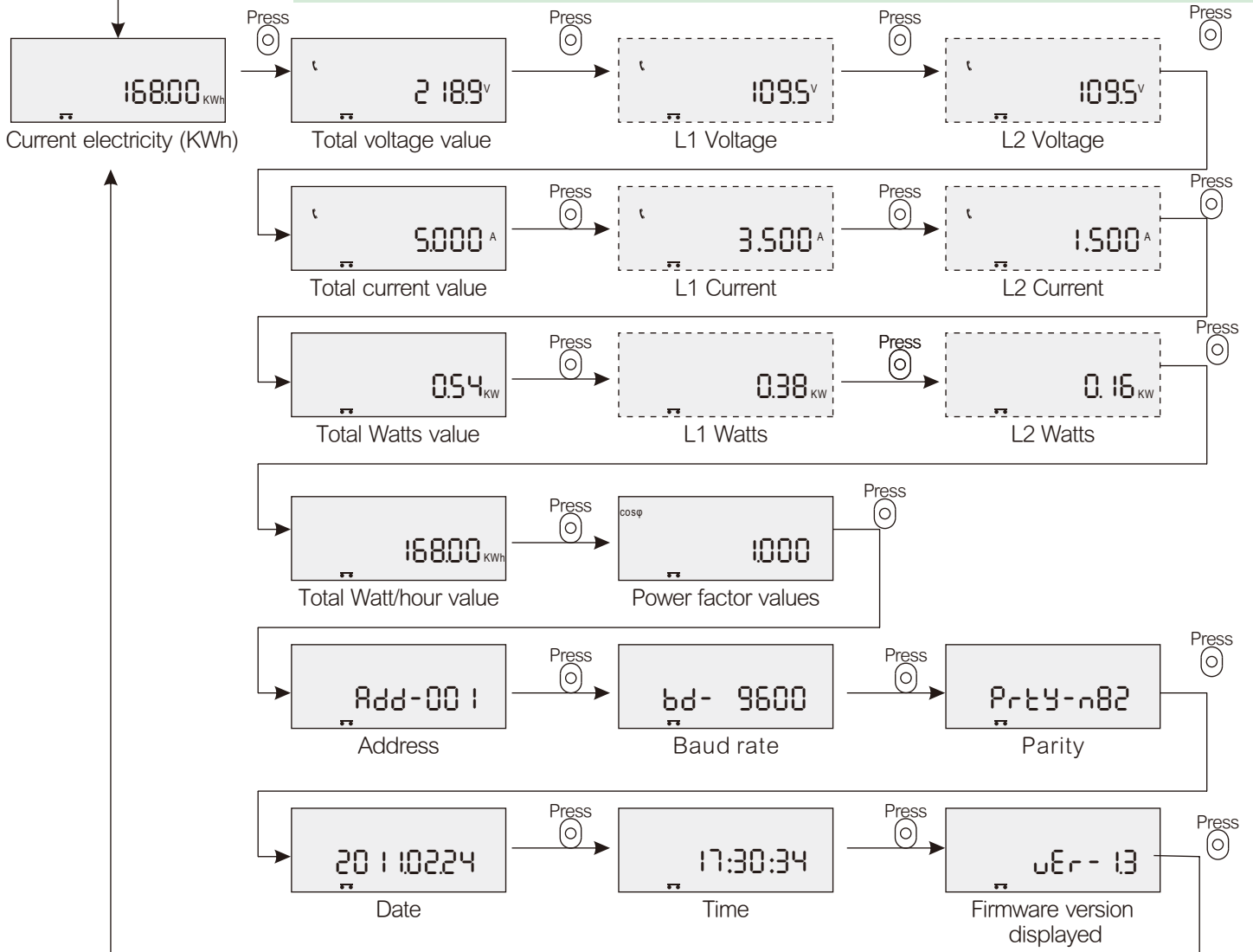


Key position description:





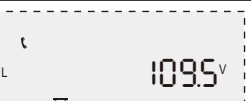

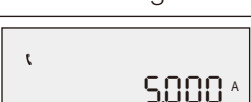

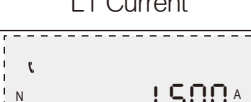

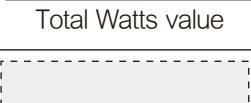


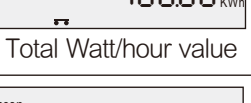
Ver-1.2:1P2W
Ver-1.3:1P3W

Execution parameters to browse screen process (Dotted screen for 1P3W display only)




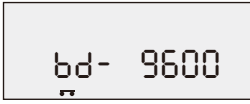
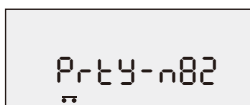

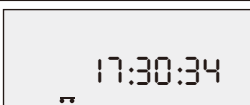
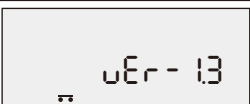
User operations level Operation and display

Description step execution parameters screen

Parameters screen	Screen note	Parameter Description	Mode of operation
 <p>Current electricity Kwh</p>	Current electricity Kwh	Cumulative effective energy function with forward, reverse and effective way to accumulate power by absolute °	This is the "normal display" To view the "execution parameters browse screen" Press Ⓞ into the next parameter browse screen
 <p>Total voltage value</p>	At present bus voltage value	1P2W:L1 to L2 Line voltage 1P3W:L1 to L2 Line voltage	Press Ⓞ into the next parameter browse screen
 <p>L1 Voltage</p>	L1 line voltage	1P2W:None 1P3W:L1-N line voltage	Press Ⓞ into the next parameter browse screen
 <p>L2 Voltage</p>	L2 line voltage	1P2W:None 1P3W:L2-N line voltage	Press Ⓞ into the next parameter browse screen
 <p>Total current value</p>	The current total current value	1P2W:L1 to L2 Line current 1P3W:L1+L2 total current	Press Ⓞ into the next parameter browse screen
 <p>L1 Current</p>	L1 Current	1P2W:None 1P3W:L1-N line current	Press Ⓞ into the next parameter browse screen
 <p>L2 Current</p>	L2 Current	1P2W:None 1P3W:L2-N line current	Press Ⓞ into the next parameter browse screen
 <p>Total Watts value</p>	Current total Watt value	1P2W:L1 to L2 total Watt 1P3W:L1+L2 total Watt	Press Ⓞ into the next parameter browse screen
 <p>L1 Watt value</p>	L1 Watt value	1P2W:None 1P3W:L1-N Watt value	Press Ⓞ into the next parameter browse screen
 <p>L2 Watt value</p>	L2 Watt value	1P2W:None 1P3W:L2-N Watt value	Press Ⓞ into the next parameter browse screen
 <p>Total Watt/hour value</p>	Currently the total watt / hour value	Currently the total watt / hour value	Press Ⓞ into the next parameter browse screen
 <p>Power factor values</p>	The current power factor values	Display the total power factor	Press Ⓞ into the next parameter browse screen

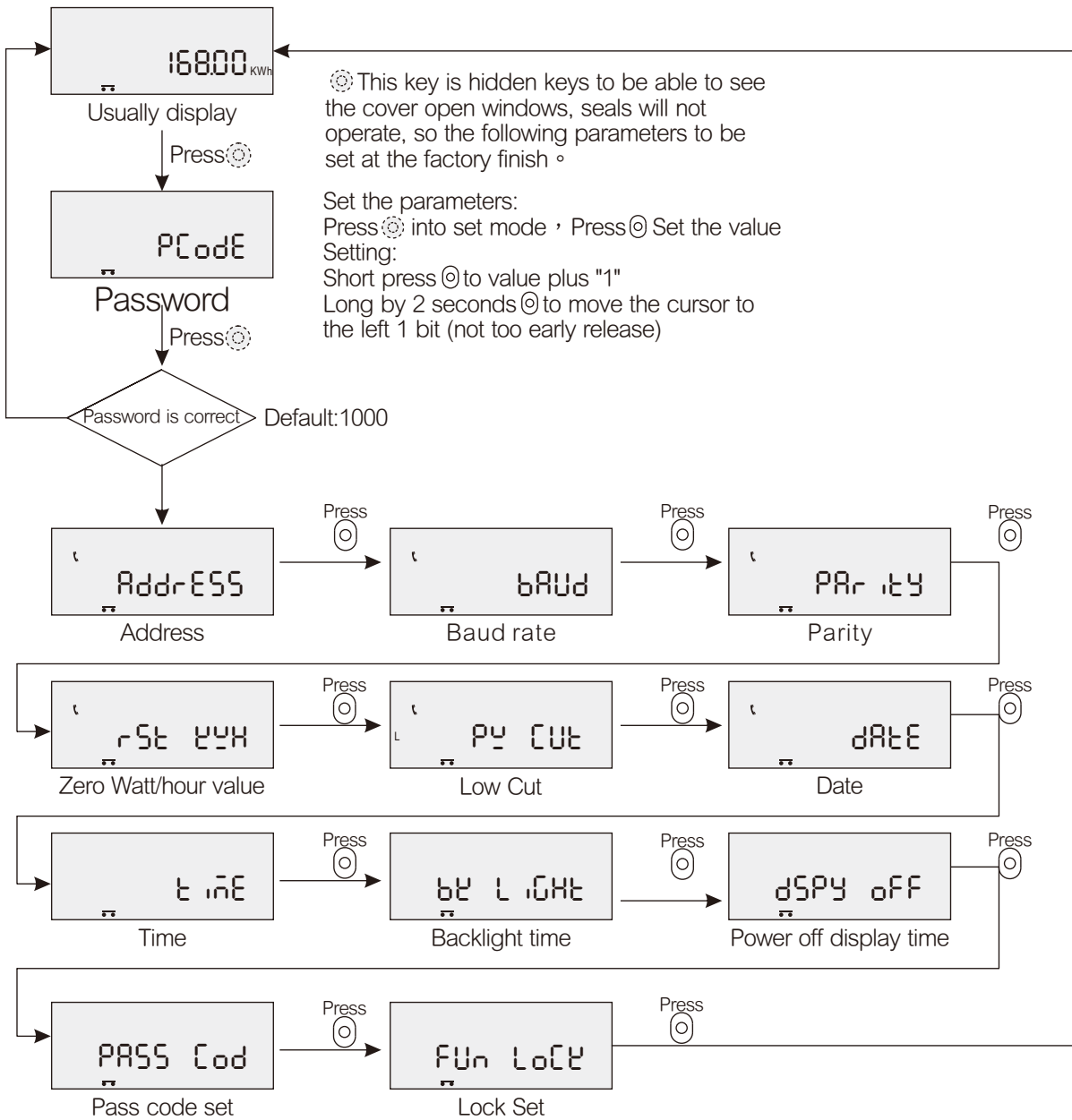
User operations level Operation and display

Description step execution parameters screen

Parameters screen	Screen note	Parameter Description	Mode of operation
 <p>Add-001 Address</p>	Address	Display the current settings of the communication address of the meter:001	Press Ⓞ into the next parameter browse screen
 <p>bd- 9600 Baud rate</p>	Baud rate	Display the current settings of the communication Baud rate of the meter: 9600 bps	Press Ⓞ into the next parameter browse screen
 <p>Prty-n82 Parity</p>	Parity	Display the current settings of the communication Parity of the meter:N,8,2	Press Ⓞ into the next parameter browse screen
 <p>20110224 Date</p>	Date	Displays the current date: 2011/02/24	Press Ⓞ into the next parameter browse screen
 <p>17:30:34 Time</p>	Time	Displays the current time: 17(H)30(M)34(S)	Press Ⓞ into the next parameter browse screen
 <p>vEr- 13 Firmware version displayed</p>	Firmware version displayed	Display the Firmware version: VER-1.2:1P2W VER-1.3:1P3W	Press Ⓞ into the next parameter browse screen







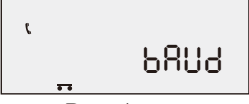




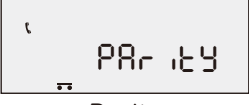





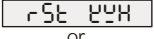
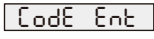




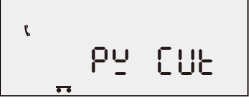




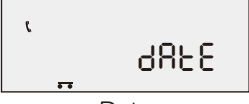







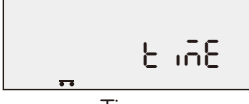
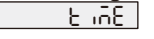
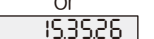





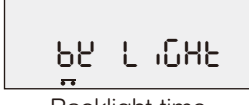





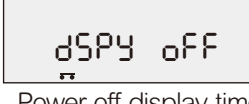





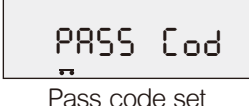











Engineers parameter level Operation Flow

Factory set parameter operation process



Engineers parameter level Operation flow and display

Factory set parameter operation process

Parameters screen	Screen note	Parameter Description	Mode of operation
 Address	RS485 Communication station number setting	1~255 Default:1	Press  to enter setup mode, then press  set the value Short press  for the value added 1 Long 2 second  to move cursor left 1 bit (not released too early) Set completed by:  enter to leave and go to the next parameter
 Baud rate	RS485 Baud rate setting	2400/4800/9600/19200 Default:9600	Press  to enter setup mode, then press  set the value Short press  to cycle through options: 2400/4800/9600/19200/38400 Set completed by:  enter to leave and go to the next parameter
 Parity	RS485 Parity check set	n8 1/n82/E8 1/o8 1 Programable Default:N82	Press  to enter setup mode, then press  set the value Short press  to cycle through options: n81/n82/E81/o81 Set completed by:  enter to leave and go to the next parameter
 Zero watt / hour value	Zero watt / hours accumulated value  or 	Enter Password , Password is correct , reset watt / hour value Default:2100	Press  to enter the setting mode, press  to set the pass code Short press  to cycle through options: NO/YES Set completed by:  enter to leave and go to the next parameter Selected YES ,Watt/hours accumulated value is immediately
 Power shutoff	Power shutoff	n0/YES Programable no=Power up yes=Power off Default:NO	Press  to enter setup mode, then press  set the value Short press  to cycle through options: NO/YES Set completed by:  enter to leave and go to the next parameter If you select YES, the meter will immediately trip the internal relay, and Breaker LED flashes
 Date	Date Setting  or 	2011.03.05 YYYY.MM.DD	Press  to enter setup mode, then press  set the value Short press  for the value added 1 Long 2 second  to move cursor left 1 bit (not released too early) Set completed by:  enter to leave and go to the next parameter
 Time	Time setting  or 	15.35.26 hh.mm.ss	Press  to enter setup mode, then press  set the value Short press  for the value added 1 Long 2 second  to move cursor left 1 bit (not released too early) Set completed by:  enter to leave and go to the next parameter
 Backlight time	Set the screen Backlight time	1~99 min Default:1	Press  to enter setup mode, then press  set the value Short press  for the value added 1 Long 2 second  to move cursor left 1 bit (not released too early) Set completed by:  enter to leave and go to the next parameter
 Power off display time	Set KWH value display for time after power off	1~6 day Default:0	Press  to enter setup mode, then press  set the value Short press  for the value added 1 Long 2 second  to move cursor left 1 bit (not released too early) Set completed by:  enter to leave and go to the next parameter
 Pass code set	Set to enter the parameter setting levels of pass code	0000~9999 Default:1000	Press  to enter setup mode, then press  set the value Short press  for the value added 1 Long 2 second  to move cursor left 1 bit (not released too early) Set completed by:  enter to leave and go to the next parameter
 Lock Set	Set the lock mode function keys	Unlock/Lock Default:Unlock	Press  to enter setup mode, then press  set the value Short press  for the value added 1 Long 2 second  to move cursor left 1 bit (not released too early) Set completed by:  enter to leave and go to the next parameter

RS-485 communication parameters address table

MWH-8W Modbus RTU Parameters address table

Modbus	Register	name	Parameter Description	Numeric format and units	Length	R/W
40001	0000h	KWHT (Hi)	Cumulative watt / hour KWH (High-word)	0~999999.99 (KWH) Value display: calculated as follows (HI)*10000+(LO)/100 <small>More than the total value of auto-zero</small>	Long	R
40002	0001h	KWHT (Lo)	Cumulative watt / hour KWH (Low-word)			
40009	0008h	PT	Currently total effective watts (KW)	0~19.999 (KW)	Word	R
40010	0009h	P1	Line 1 effective watt (KW)	0~19.999 (KW)	Word	R
40011	000Ah	P2	Line 2 effective watt (KW)	0~19.999 (KW)	Word	R
40013	000Ch	VT	Currently the total Line voltage (V)	176.0~265.0 (V)	Word	R
40014	000Dh	V1	Line 1 voltage (V)	176.0~265.0 (V)	Word	R
40015	000Eh	V2	Line 2 voltage (V)	176.0~265.0 (V)	Word	R
40017	0010h	AT	Current total average current (A)	0~15.000 (A)	Word	R
40018	0011h	A1	Line 1 current (A)	0~15.000 (A)	Word	R
40019	0012h	A2	Line 2 current (A)	0~15.000 (A)	Word	R
40021	0014h	PF	Currently power factor (PF)	-1.000~+1.000 (Cos θ)	Word	R
40025	0018h	F	Currently frequency (F)	45.0~65.0 (Hz)	Word	R
40029	001Ch	ST	Currently the total apparent power (KVA)	45.0~19.999 (KVA)	Word	R
40033	0020h	Addr	Communication Station No.	1~255 Default: [1]	Word	R/W
40034	0021h	Baud	Communication Baud rate	1=2400、2=4800、3=9600 4=19200 bps Default: [3]	Word	R/W
40035	0022h	Parity	Parity check	0=N81、1=N82、2=E81、 3=O81 Default: [1]	Word	R/W
40036	0023h	Reset	Zero clearance watt / hour values	0=NO(No clear) 1=YES(clear) Default: [0]	Word	R/W
40037	0024h	Breaker	Relay direct power off	0=OFF(Power failure) 1=ON(Powered) Default: [1]	Word	R/W
40038	0025h	YYYY	Year	2000~2099 Default: [2010]	Word	R/W
40039	0026h	MM	Month	1~12 Default: [1]	Word	R/W
40040	0027h	DD	Date	1~31 Default: [1]	Word	R/W
40041	0028h	hh	Hour	0~23 Default: [0]	Word	R/W
40042	0029h	mm	Minutes	0~59 Default: [0]	Word	R/W
40043	002Ah	ss	Second	0~59 Default: [0]	Word	R/W
40044	002Bh	Back Light	Backlight time(0=Always light)	1~15 (min) Default: [1]	Word	R/W
40045	002Ch	LCD off	Off-screen display time(0=Led off immediately after power failure)	0~6 (day) Default: [0]	Word	R/W
40046	002Dh	P.Code	Password setting function	0~9999 Default: [1000]	Word	R/W
40047	002Eh	Lock	Parameter lock	0=Unlock 1=Lock Default: [0]	Word	R/W