3-Phase Current/Voltage Meter

Multi function power meter

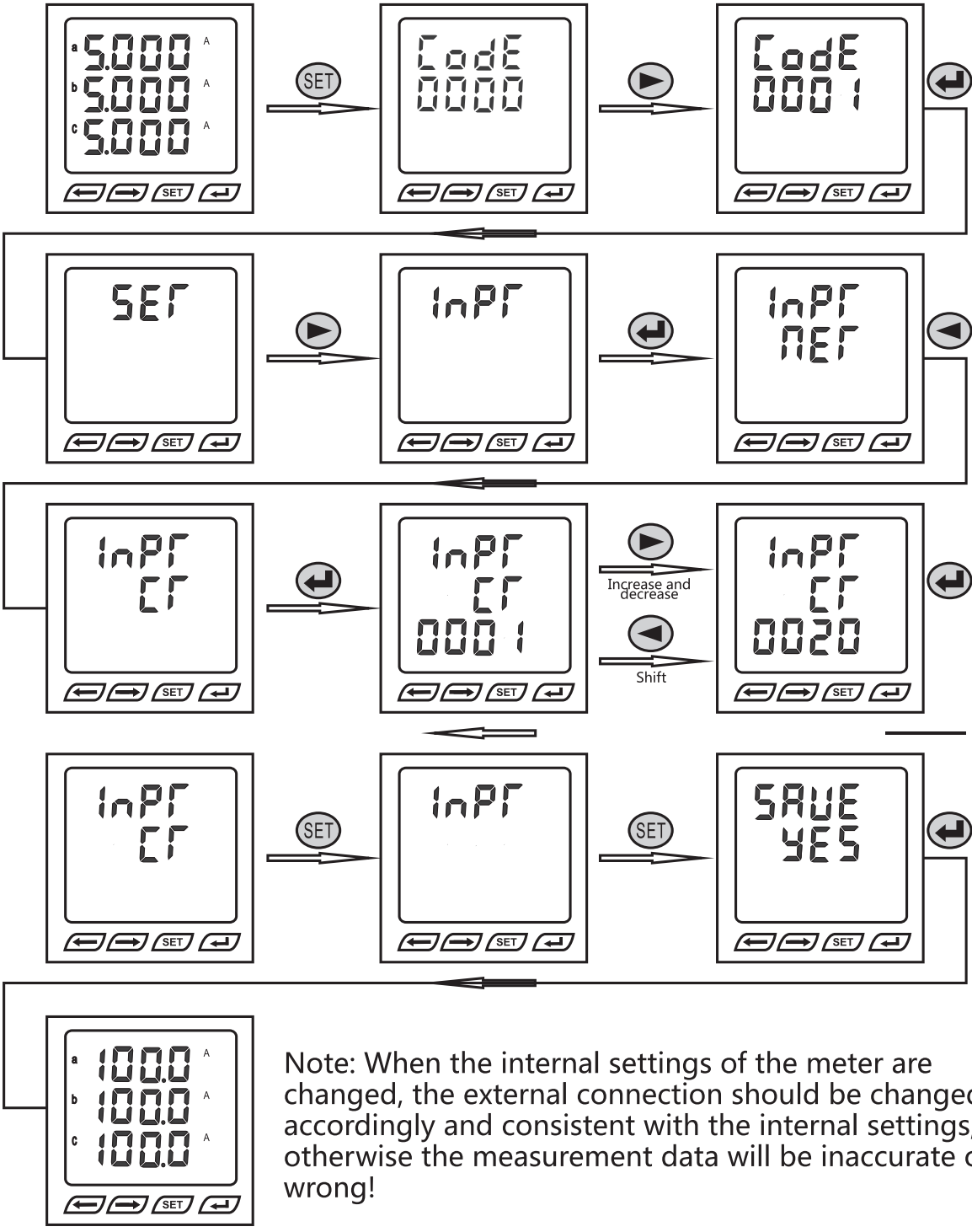
User manual

Product execution standard:GB/T22264.2-2008

Instructions for Common Operations

Programming example:

e.g.: Change 5A to 100/5A, the operation is as follows: (modification of other settings is similar to it, pay attention to the change of characters,different characters represent different meanings, please refer to the character comparison table for details)



Note: When the internal settings of the meter are changed, the external connection should be changed accordingly and consistent with the internal settings, otherwise the measurement data will be inaccurate or wrong!

1.0Description of terminal functions

1) Numbering of signal and function terminals

This series of terminal blocks adopts unified number, which is applicable to allproducts of this series. The situation is shown in the following table:

Power supply	11,12	AC/DC 80-270V/AC220V
Current signal	5,6,7,8,9,10	6, 8, 10 are three-phase current incoming terminals
Voltage signal	4,3,2,1	Three-phase voltage input Uc, Ub, Ua, and Un respectively
Electric energy pulse	13,14	13 are positive terminals of the passive output, can be connected to the positive terminals of external power supply
RS485	19,18	A + and B- respectively

2)Instructions for use:

(a)11 and 12 are used to connect the auxiliary power supplies of meter, the limit supply voltage is AC/DC80-270/AC220V. Please ensure that the power supply is suitable for this series of products to prevent damage to the product.

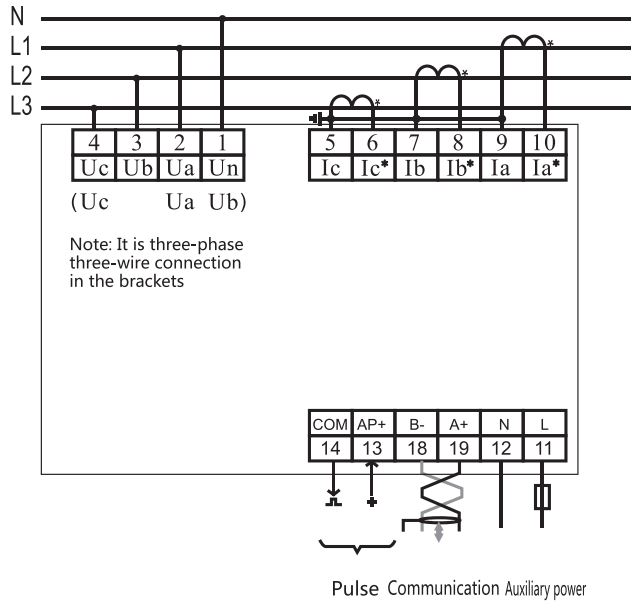
(b)6, 8 and 10 are incoming terminals of current transformer, and the terminals with the mark * are incoming terminals of current.

(c) Three-phase three-wire connection: In three-phase three-wire network, B-phase current does not need to be connected, and UB is connected to the terminal 1. For specific connection, please refer to wiring.

(d) For detailed wiring of terminal blocks, please refer to the wiring diagram on product shell.

3)Wiring

Wiring diagram Three-phase Multi-function Watt-hour Meter



Note: Terminal AO- is the common port of DI, shared with the negative terminal of transmitting terminal.

Typical wiring diagram for low voltage network

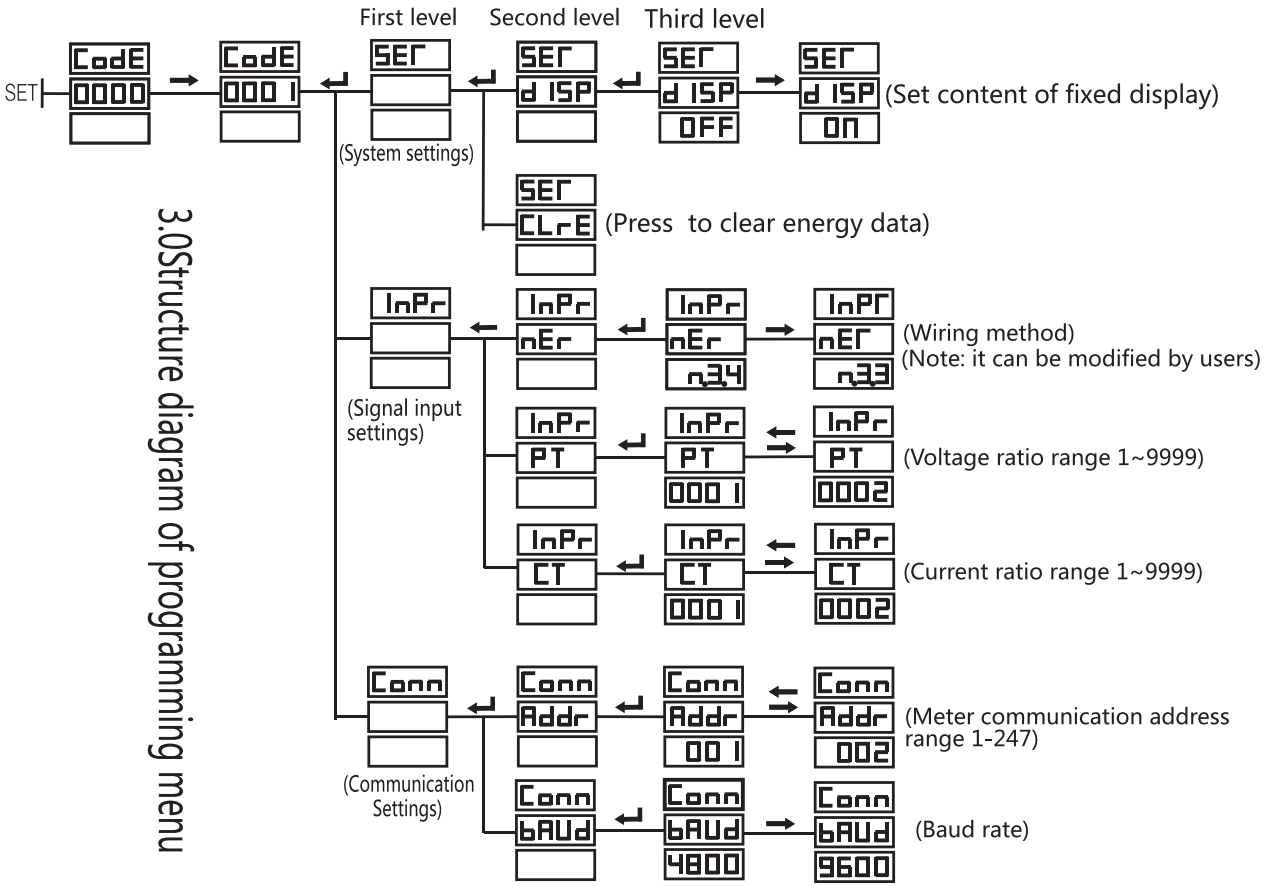
Note: The terminal sequence of each product is slightly different, please follow the wiring diagram on the product shell when wiring.

2.0The structure of display menu is as follows, and user can select appropriate setting parameters as needed.

Level 1	Level 2	Level 3	Description
System settings SET	Password CODE	0- 9999	Set user password
	Display DISP	ALL or other data	Set prioritized items for cycle display (if set to U-, it fixedly displays phase voltage when the power is turned on, and need to press the left and right keys manually to check other items). Set to ALL to turn on the cycle display.
	CLrE Clear electric energy and demand CLrE	" ↵" Or "SET"	Press " ↵ ", it displays NO, press ← or → to change to YES, then press " ↵ " again to clear energy data. Note: Press SET to return without clearing
Signal input INPT	Wiring method NET	N.3.4 or N.3.3	Select wiring method for input signal (N.3.4 is three-phase four-wire, N.3.3 is three-phase three-wire)
	Voltage range U.SCL	400V or 100V	Select measuring range of input voltage
	Current range I.SCL	5A or 1A	Select measuring range of input current
	Voltage transformation ratio PT	1~9999	Set voltage transformation ratio= primary scale/secondary scale
	Current transformation ratio CT	1~9999	Set current transformation ratio = primary scale/secondary scale

CONN	Address SN	1~247	Meter address range 1~247
Communication settings	Communication speed BAUD	4800~9600	Baud rate 4800, 9600
	Data format DATA	N, E, O data format	Data format N81

The structure diagram is as follows



3.0Structure diagram of programming menu

This is the save interface

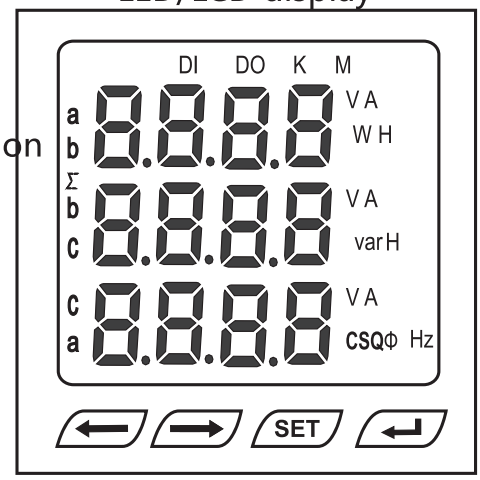
After the user sets the parameters, press the Enter key to save first, then press "Set" twice to return to the save interface, and then press the Enter key again, now the parameters are savedsuccessfully.

Note:When it displays YES, press "↵ " to save.

4. Panel description and measurement information display

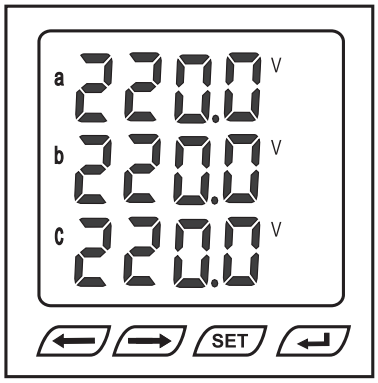
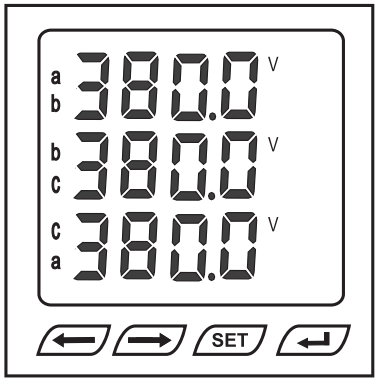
4.1 Product panel and display information

LED/LCD display

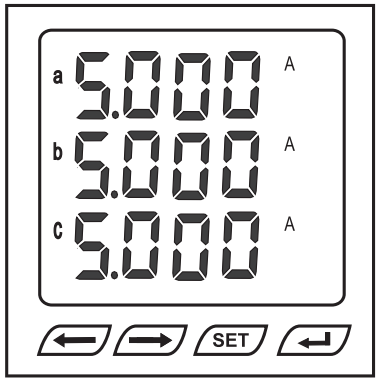
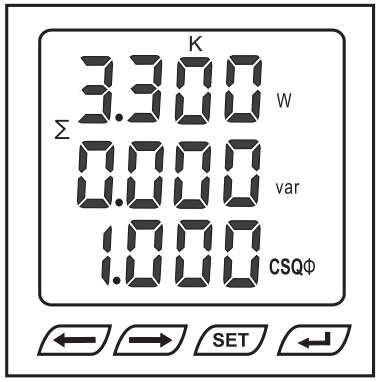
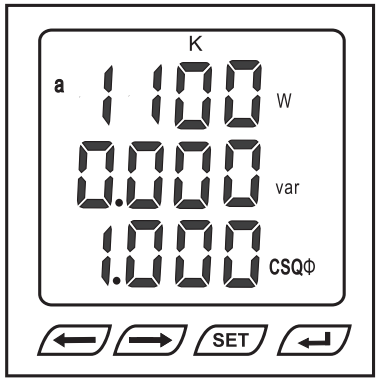
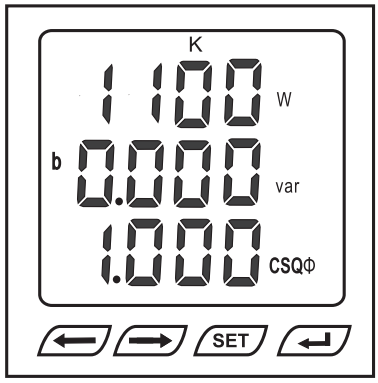


4.2 Multi-function display interface

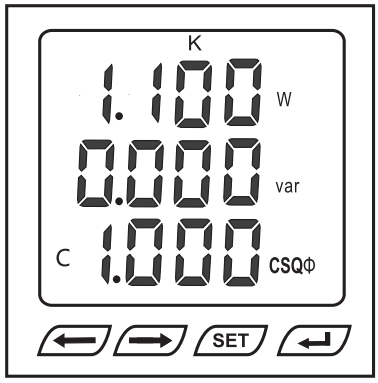
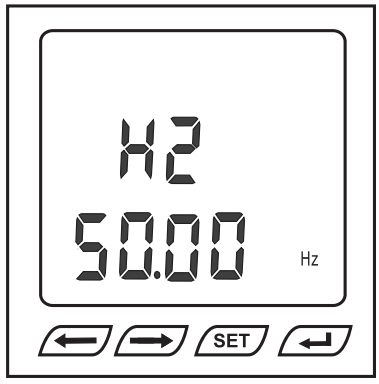
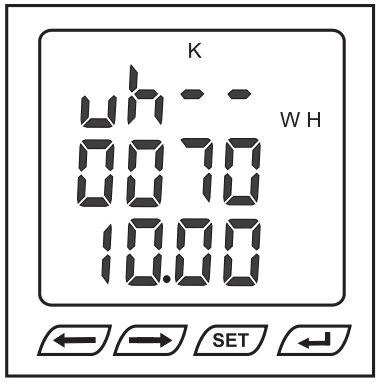
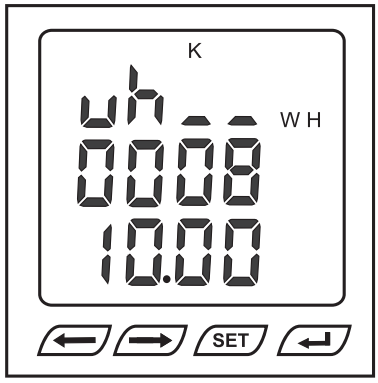
There are 14 pages of measurement information (disp is set to ON by default, i.e. turn on the cycle display. When it is set to other item, it will fixedly display the setting items when the power is turned on). "→" and "←" can beused to switch pages, and "↵" can be usedto check the same page. Information of each page as shown below.

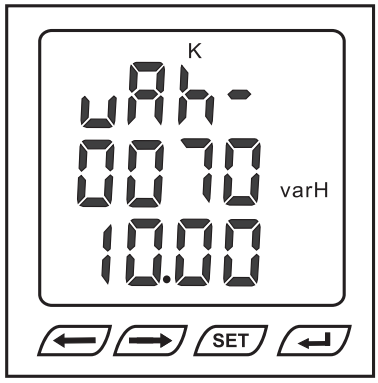
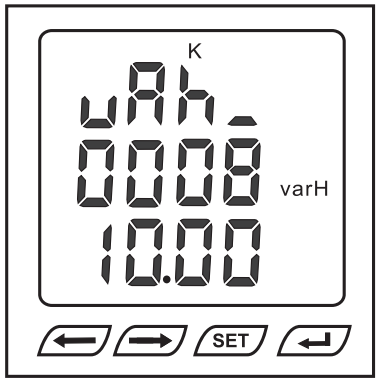
Page	Content	Description
XS1=1		Display three-phase voltages Ua, Ub and Uc respectively, and the content shown is the value of the input voltage multiplied by the set PT ratio.
XS1=2		Press ↵ Display three-phase line voltages Uab, Ubc and Uca respectively, and the content shown is the value of the input voltage multiplied by the set PT ratio.

Note: There are differences in shell signs, Set is equivalent to Menu.

XS1=3		The picture on the left shows three-phase currents IA, IB, IC respectively: IA = 5.000A IB = 5.000A IC = 5.000A, The displayed current is a primary value, that is, the input current is multiplied by the set CT ratio.
XS1=4		The picture on the left respectively show: Active power is 3.300KW Reactive power is 0.000KVar power factor is 1.000
XS1=5		The picture on the left shows A-phase active power = 1.100KW, A-phase reactive power = 0.000Kvar, A-phase power factor = 1.000.
XS1=6		The picture on the left shows B-phase active power = 1.100KW, B-phase reactive power = 0.000Kvar, B-phase power factor = 1.000.

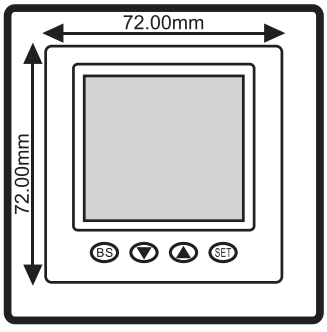
Note: There are differences in shell signs, Set is equivalent to Menu.

XS1=7		The picture on the left shows C-phase active power = 1.100KW, C-phase reactive power = 0.000Kvar, C-phase power factor = 1.000.
XS1=8		The picture on the left shows Frequency = 50Hz,
XS1=9		uh– stands for positive total active energy. The data in row two and row three should be read together. The degree on the left is 7010.00 KWH
XS1=10		uh__stands for repositive total active energy. The data in row two and row three should be read together. The degree on the left is 810.00 KWH

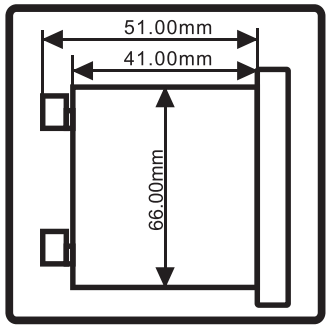
XS1=11		uAh– stands for positive total reactive energy. The data in row two and row three should be read together. The degree on the left is 7010.00 KvarH
XS1=12		uAh_ stands for repositive total reactive energy. The data in row two and row three should be read together. The degree on the left is 810.00 KvarH

Installing dimension

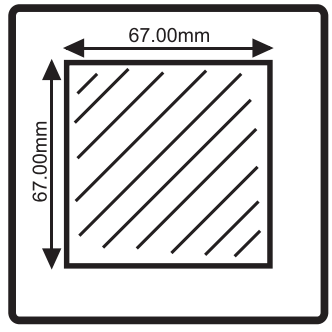
72x72 size



Positive diagram

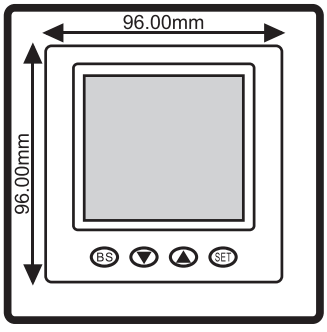


Side diagram

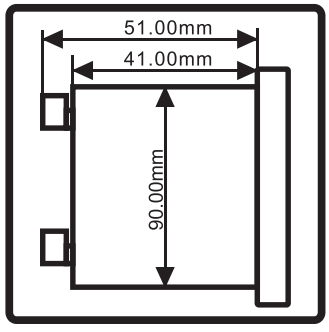


installing hole diagram

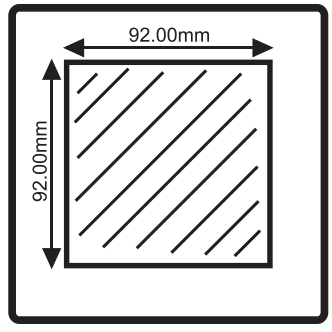
96x96 size



Positive diagram



Side diagram



installing hole diagram