




PCE-PA 5500 Multifunctional Power Meter Quick Guide



Panel Description



(Subject to the physical object)

| Serial number | Name | Function Description |
|---|-----------------------------|---|
| SET | Confirmation key (menu key) | Press and hold this key for three seconds to enter the menu; confirm the modified menu value |
|  | Reduce key | Used in menu operations to enter data modification/menu switching; value reduction/menu switching to the left |

| | | |
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| ③ | Add key | Used in menu operations to access data modification/menu switching; value increase/menu switching to the right |
| ④ | Return button | Used in menu operations to return to the previous level |

Note: ALM is the alarm light, COM is the communication light

Electricity meter parameters

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|------------------|---|
| Measurement Type | Three-phase voltage, current, active and reactive apparent power, power |
|------------------|---|

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|-------------------------|---|
| | factor, residual current, electrical energy, current demand, maximum demand, temperature (optional) |
| Rated power supply | 100V~260V |
| Measured voltage | L-N 30V ~ 264V/L-L 52V ~ 460V Measurement accuracy 0.2 |
| Measuring current | AC 0.025A ~ 5A Measurement accuracy 0.2 |
| Measuring temperature | -40°C~150°C (optional) |
| Residual current | 0.01A~5A Measuring accuracy 0.5 |
| Measurement accuracy | Active power accuracy class 0.5S, reactive power accuracy class 0.5; 0.01Hz frequency |
| Communication protocols | Standard 2 RS-485 ports Support 4G /WiFi/lora communication (optional) Communication protocol: MODBUS-RTU /MQTT |

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| Installation method | Embedded |
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Panel interface display description

Three-phase voltage --> Three-phase current --> Zero sequence current --> Three-phase active power -- -->three-phase reactive power -->three-phase apparent power -->three-phase power factor -->system frequency -->Total voltage harmonics - ->Total current harmonics -->Voltage unbalance -- - -> Current unbalance --> Current demand --> Maximum demand --> Two-way temperature (optional)

Setup menu description

- 1、 Long press the "SET" key for more than 3 seconds, if the user has set a password, the password input box will pop up, enter the correct password to enter the user menu to modify the corresponding parameters.
- 2、 If the current display is the first level, long press the confirmation key "SET" to enter the next level display, tap the ◀ / ▶ key to change the menu sub items

- 3、 If the current is the 2nd or 3rd level of display, tap "⏪" key to return to the previous level of display
- 4、 If the current display is level 3, long press the / ⏪⏩ key to change the digital flashing position, press the ⏪ / ⏩ key to shift, tap the ⏪ / ⏩ key to adjust the value; press the confirmation key "SET" to save the setting value; if you press the "⏪" key, it will not save the setting value and return to level 2.
- 5、 Finish the modification, press the confirmation key "SET".

Explanation of menu symbols

| Level 1 | Next level | Description |
|------------------------|-------------------------------------|--|
| SEt ((System Settings) | CLrE (Removal of electrical energy) | Enter "1111" to clear the power; enter "2222" to clear the maximum demand; enter |

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| | | "1234" to restore the factory settings |
| | USER (Change password) | Change user password |
| | BLT (Backlight time) | Modify backlight time |
| | P9CH (Page turn time) | Measures page turn time in "seconds". The value of "0" does not turn the page |
| | VER (Version) | Software |

| | | |
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| | number) | version number, for manufacturer's internal management, read-only |
| InP (Signal input) | L In (Web) | This setting is the wiring mode setting, which can modify three-phase four-wire or three-phase three-wire wiring. |

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|-----------------------------------|------------------------------------|---------------------------------|
| | P_{t1} (Voltage ratio) | Primary side voltage, unit:V |
| | P_{t2} (Voltage ratio) | Secondary side voltage, unit: V |
| | C_{t1} (Current variation ratio) | Primary side current, unit: A |
| | C_{t2} (Current variation ratio) | Secondary side current, unit:A |
| Com (Communication settings) | $Addr$ (Device address) | Device address, range 1~9999 |
| | $Baud$ (Baud rate) | Baud rate 4k8 means 4800, |

| | | |
|----------------------------------|-------------------------------------|--|
| | | 9k means 9600,11k2 means 115200 |
| RL (Switching setting) | RdL (Alarm method) | The value of DO corresponds to the remote control mode, otherwise it is the alarm mode. |
| | RL I (Alarm action value) | 1st channel alarm value setting (unit is standard |

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| | | display unit) |
| | HI (Alarm return value) | 1st alarm return difference value setting (unit is standard display unit) |
| | HI (Alarm relay selection) | 1st alarm relay output selection (can be set when none of the alarm methods are DO) |

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| | dLRI (Action delay) | Action delay time, unit: second |
| | dLbI (Alarm end time) | Action reset time, unit: seconds |
| br (Analog output) | brA (Variable transmission mode selection) | Refer to Exhibit 1 |
| | brH (Variable transmission limit) | 20mA output to strain feed |
| | brL (Variable transmission) | 20mA output to strain feed |

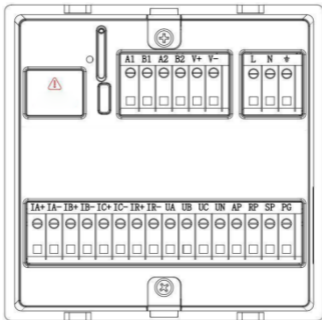
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| | lower limit) | |
| Time setting) | YEAR (Year) | Year |
| | Month (Month) | Month |
| | DAY (Day) | Date |
| | Hour (When) | Time |
| | Points (Points) | Points |
| | SEC (seconds) | seconds |
| FFL (Paid rate setting) | FFL 1 (Rate for time slot 1) | Rates for time period 1, representing four rates for spikes and valleys (Note: |

| | | |
|--|--|--|
| | | FFL rates / 1-4 rate numbers / 0000 time) |
| | FFL₂ (Rate for time slot 2) | Rates for time period 2, representing four rates for spikes and valleys (Note: FFL rates / 1-4 rate numbers / 0300 time) |
| | ⋮ | ⋮ |
| | FFL_B (Rate for | Rates for time |

| | | |
|--|----------------------------|--|
| | time slot 8) | period 8, representing four rates for spikes and valleys (Note: FFL rates / 1-4 rate numbers / 2100 time) |
| | ⋮ | ⋮ |
| | (Rate for time slot 12) | Rates for time period 12, representing four rates for spikes and |

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| | | valleys (Note: FFL rates / 1-4 rate numbers / 2100 time) |
| | Rate number 1~4 for spikes and valleys, time 0000 represents hour and minute | |

**Basic version of the wiring method and definition
description**



| | |
|-------|---|
| A1/B1 | RS485-1 |
| A2/B2 | RS485-2 Southbound [Customization available] |
| V+/V- | DC24V interface output |
| L/N | AC 220V interface |

| | |
|-----------------|---|
| IA+/IA- | A-phase current input and output |
| IB+/IB- | B-phase current output |
| IC+/IC- | C-phase current input |
| IR+ IR- | Residual current transformer |
| UA/UB/UC/U N | Three-phase voltage |
| AP | Active energy pulse |
| RP | Reactive power pulse |
| SP | Visual energy pulse |
| PG | Common ground of AP/RP/SP (electrical energy ground) |

Control board description (optional)

4-channel NTC temperature measurement + 4-channel switching (passive) input + 2-channel relay output + 1-channel analog 4-20mA output.



| Channel Interface | Channel Function |
|-------------------|--|
| NTC1 | Temperature measurement NTC input port 1 |

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| NTC2 | Temperature measurement NTC input port 2 |
| NTC3 | Temperature measurement NTC input 3 |
| NTC4 | Temperature measurement NTC input port 4 |
| 4-20mA | Analog output |
| S1 | Switching input port 1 |
| S2 | Switching input port 2 |
| S3 | Switching input port 3 |

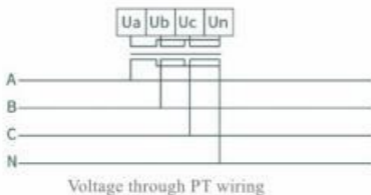
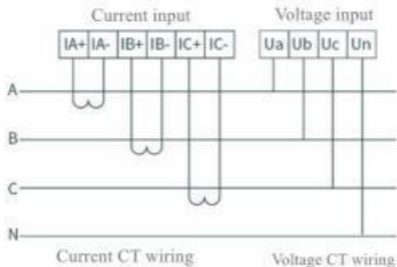
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| S4 | Switching input port 4 |
| SG | 4-channel switching common ground |
| RELAY1 | Relay output 1 |
| RELAY2 | Relay output 2 |

Note: NO of relay output is normally open, NC is normally closed, COM is common terminal

Relay Description: The alarm function of the meter can be used together with the relay.

Wiring Diagram

Method 1:(3 pcs CT) 3 phase 4 wire wiring method



Method 2:(2 pcs CT) 3 phase 3 wire wiring method

