# POWERTECH

# A. Features:

- 1. Four electrical parameter measurement (voltage, current, active power, energy)
- 2. Voltage alarm (user-settable over- and under-voltage alarm, backlight and display flashing).
- 3. Resettable Accumulated Energy (Watt-hours) Measurement
- 4. Data is retained even when power disconnected.
- 5. Large-screen LCD (Simultaneous display of voltage, current, active power, energy)
- 6. Switchable Backlight function.

#### B. General Apearance and Button Function I. Display Interface

Large-screen LCD, displays voltage, current, power, energy parameters simultaneously.

# II. Display Format (Auto Ranging)

- **1. Power: Measurement Range: 0~10kW** Below 1KW, display format is: 0.0~999.9W; 1KW and above, display format is: 1000~9999W.
- **2. Energy (Watt hours): Test range: 0~9999kWh** Below 10KWh, display format is: 0~9999Wh; 10kWh and above, display format is: 10~9999kWh.
- 3. Voltage: Test range: 6.5~100V Display format: 6.50~99.99V
- 4. Current: test range: 0~100A Display format: 0.00~99.99

# III. Control Pushbutton – all functions are activated by a single pushbutton.

# 1. Backlight Control

Short press (jab) the button to turn the backlight on or off. (Backlight has memory function, so it will remember its last setting when power is off).

# 2. Reset Accumulated Energy Reading (Watt-hours or kilowatt-hours)

- 1. Press and hold button for about 5 seconds. It will first display "Set" then "CLr". Release when it says "CLr"
- 2. The energy reading will start flashing. A short press will reset the reading to zero.
- 3. If the button is not pressed after 5 seconds, it will automatically exit the resetting mode.

# 3. Set voltage alarm threshold

Note: The available range for the voltage alarms setting is 6.5~99.9V

Step 1: Press and hold button until "Set" is displayed, then release.

Step 2: In this state, the digits that normally display voltage will show the high voltage alarm value, the digits that normally display current show low voltage alarm value. The last digit will be flashing; a short press adds +1 to that digit; keep making short presses until the desired value is reached.

Then wait three seconds; the flashing will move to the second last digit. Repeat the process until all six digits are set.

Step 3: After completing the voltage settings, press and hold the button until the screen display shows "**PASS**." That indicates you have entered valid settings and the device will exit the setting state automatically.

# Current measuring range Function (not applicable to this product)

NOTE: This function is only intended to be used with an alternate type of shunt that is not supplied with this version. The information is provided in case the user accidentally changes the setting. ONLY DO THIS IF YOU ARE GETTING AN INCORRECT CURRENT READING, TWICE WHAT IT SHOULD BE. (EG 4 amps where it should be 2 amps).

- 1. Press and hold the button until "Curr" appears (about 7 seconds) then release.
- 2. The Current display area should say "100A." If it says "50A", short-press the button to switch from "50A" to "100A"
- 3. Long-press the button to store and exit, or wait 3 seconds and it will store automatically and exit.

#### C. Caution:

- 1. This module is not waterproof; it is only suitable for indoor or sheltered use in dry areas, it is not intended for unprotected outdoor use.
- 2. The applied load must not exceed the rated voltage and current.
- 3. Pay particular attention to voltage polarity.

#### **D. Specification Parameters**

- 1. Working Voltage: 6.5~100VDC
- 2. Test Voltage: 6.5~100VDC
- 3. Rated Power: 100A/10,000W

#### E. Wiring diagram



#### F. Dimension diagram (mm)



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