

YB28VTM-W Digital Waterproof meter Power Display

Product Features:

This meter can set battery modes by keys: Lead-acid batteries, lithium batteries, nickel-hydrogen batteries; also can set battery sections (Section number of batteries in series).

Suitable for 12V、24V、36V、48V、60V、64V、72V、84V, battery pack, balance car, inverter, electric forklift, sightseeing car, electric car, car battery, battery power mobile equipment and so on. Also it can be used in voltage, power measuring. The screen can display actual temperature, voltage, power, electricity percentage at the same time.

It has anti-connecting protection, anti-water and easy to connect with only two wires.

Flashing alarm will be reminded when in high/low battery.

12 display modes can be chosen:

Default C V % display modes; has power-off memory function.

C V %—F—F V—F %—F V %—V—%—V V %—C—C V—C %—C V %

C: Temperature V: Voltage %: electricity percentage F: Fahrenheit temperature

Technical Parameters:

- Power range: DC6~120V (The input voltage cannot exceed 120V, otherwise it will be burned.)
- Measurement voltage: DC6~120V
The minimum resolution below 100V: 0.1V
The minimum resolution over 100V: 1V
Voltage measurement accuracy: 1% (± 2 digits)
- Temperature measurement range:
Celsius degree: -50 ~ +120°C
The minimum resolution of -9.9~99.9°C: 0.1°C
The minimum resolution in other range: 1°C
Fahrenheit degree: -58~245°F
The minimum resolution of -9.9~99.9°C: 0.1°C
The minimum resolution in other range: 1°C
- Temperature type: NTC
- Temperature probe cable length: >120mm

- Electricity resolution: 1%
- Working current: <20mA
- Display form: LED color display
- Size: L54*W30*H27mm
- Hole size: 47.2*27.3mm
- Measuring rate: ≥ 500 ms/T
- Power and switch cable length: >150mm
- Extreme working conditions:
The lowest power voltage: +6 V
The highest power voltage: +120 V
Working temperature: -10~+55
Working humidity: 10 ~ 80% (no frost)
Working pressure: 80 ~ 106 kPa
Sun: no directly sunshine

How to use:

1. Power on: red wire for +, black wire for -. And then it displays actual temperature, voltage, power, electricity percentage.

2. Default value:

Battery mode: Lead-acid batteries; 12V; one section.

Display mode: recycling display temperature (°C), battery, voltage (V), electricity percentage (%).

3. Setting modes:

Long press a few seconds to enter setting mode, display: 1-U, 2-b, 3-C, 4-d, 5-t.

- (1) 1-U: voltage fine adjustment
- (2) 2-b: setting battery types
- (3) 3-C: setting number of battery
- (4) 4-d: setting display modes
- (5) 5-t: setting temperature units

4. Voltage calibration:

- While on 1-U, long press the button to enter voltage calibration mode,
- Release it and long press again, voltage will be in step-up fine adjustment; release the button and then long press to step-down fine adjustment; repeatedly adjust to the standard value and release the button. Save the setting while the screen flashing and finally exist setting.

5. Choose battery types:

- While on 2-b, long press the button to change the types of battery press one by one will show: 1.2V_2V_3.2V_3.7V_12V
 - 1.2V: NI-MH battery, 10-70
 - 2 V: Lead-acid battery, each battery 2V
 - 3.2V: Lithium iron phosphate battery, each section is 3.2V
 - 3.7V: Polymer battery, each section is 3.7V
 - 12 V: Lead-acid battery, each section is 12V

While adjusting to appropriate battery type, release the button, save it when the screen flashing and finally exist setting.

6. Setting number of battery sections:

- While on the "3-C" setting, long press the button to enter the mode of setting number of battery sections.
- Release the button and long press again, value will be in step-up fine adjustment; release the button and then long press to step-down fine adjustment; repeatedly adjust to appropriate number of battery sections.
- Save the setting while the screen flashing and finally exist setting.
- Different range for different type batteries:
 - 12V Lead-acid battery: 1-10 sections
 - 3.7V Lithium battery: 2-28 sections
 - 3.2V Lithium ion battery: 2-32 sections
 - 2V Lead-acid battery: 3-60 sections
 - 1.2V NI-MH battery: 10-70 sections

7. Display setting mode:

- 12 display modes can be chosen; has power-off memory function.
- While on "4-d", long press the button to enter display setting mode.
- Release the button, press button to switch one mode:
V—Voltage, %—Electricity percentage, °C—Celsius degree, °F—Fahrenheit temperature
V%°C—recycling display voltage, electricity percentage, Celsius degree.
- Switch order: CV—F—FV—FV%—V—%—V%—C—CV—C%—CV%
- Adjust to appropriate mode, save the setting while the screen flashing and exist setting.

8. Temperature calibration:

- In the case of setting modes, pressing button to switch to 5-t, long press the button to enter temperature calibration mode.
- Release it and long press again, temperature will be in step-up fine adjustment; release the button and then long press to step-down fine adjustment; Repeatedly adjust to the standard value and release the button.

Save the setting while the screen flashing and finally exist setting.

9. Alarm output function:

- When full-charge (100%), PIN12_PB4 output high level, at ordinary times output low level.
- When full-charge(100%) and the temperature exceeds 45°C, PIN12_PB4 output pulse signal: 140msH—50msL—150msH—160msL
- When low electricity (below 10%), PIN12_PB4 output pulse signal H=200ms, L=300ms; the last drop of electricity single flashing, at ordinary times output low level.
- When low electricity (below 10%) and the temperature exceed 45°C, PIN12_PB4 output pulse signal: 300msH—200msL
- When the temperature exceeds 45°C, PIN12_PB4 output pulse signal: 100msH—100msL—100msH—200msL

10. Samples for setting:

12V Lead-acid battery (1 section 12V series): select 12.0 on "2-b" setting, select 1 on "3-c"
24V Lead-acid battery (2 section 12V series): select 12.0 on "2-b" setting, select 2 on "3-c"
36V Lead-acid battery (3 section 12V series): select 12.0 on "2-b" setting, select 3 on "3-c"
48V Lead-acid battery (4 section 12V series): select 12.0 on "2-b" setting, select 4 on "3-c"
56V Lead-acid battery (28 section 2V series): select 2.0 on "2-b" setting, select 28 on "3-c"
60V Lead-acid battery (5 section 12V series): select 12.0 on "2-b" setting, select 5 on "3-c"
64V Lead-acid battery (32 section 2V series): select 2.0 on "2-b" setting, select 32 on "3-c"
72V Lead-acid battery (6 section 12V series): select 12.0 on "2-b" setting, select 6 on "3-c"
84V Lead-acid battery (7 section 12V series): select 12.0 on "2-b" setting, select 7 on "3-c"

12V Lithium battery (3 section 3.7V series): select 3.7 on "2-b" setting, select 3 on "3-c"
18V Lithium battery (5 section 3.7V series): select 3.7 on "2-b" setting, select 5 on "3-c"
24V Lithium battery (7 section 3.7V series): select 3.7 on "2-b" setting, select 7 on "3-c"
36V Lithium battery (10 section 3.7V series): select 3.7 on "2-b" setting, select 10 on "3-c"
48V Lithium battery (13 section 3.7V series): select 3.7 on "2-b" setting, select 12 on "3-c"
60V Lithium battery (16 section 3.7V series): select 3.7 on "2-b" setting, select 16 on "3-c"