

## **Handson Technology**

User Guide

## 100V/100A LED Dual Display Digital DC VA Meter

Compact voltage and current panel meter suitable for various equipments and measurements application. Built with dual 0.3" 7-segment 3-digits LED display module for simultaneous voltage and current display. Separate color for voltage and current display for easy reading.





Attention: Current Shunt <u>MUST BE CONNECTED</u> before power up the module for measurement, otherwise the module will be damaged !!!

#### **SKU: INS1009**

#### **Brief Specification:**

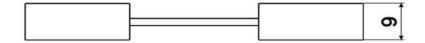
- Voltage Measurement Range: 0~100Vdc.
- Current Range: 0~100A.
- Power supply Input: 4~30.0Vdc.
- Voltage Measurement Accuracy: ±0.1%.
- Current Measurement Accuracy: ±1.0%.
- Current Shunt: 100A/75mV @ 0.5%.
- Operating Current: <20mA.
- Refresh Rate: ~300mS.
- Display: Double 3-Digit 0.28" LED.
- Display Color: Red (Voltage) + Blue (Current).
- Dimensions: 48 x 29 x 22 mm (L x W x H).
- Mounting Hole Cut-out: 46 x 27 mm.
- Weight: 140gram (include Current Shunt)

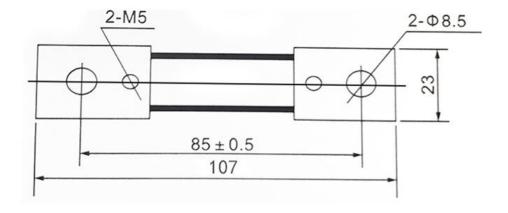
## **Mechanical Dimension:**

Unit: mm



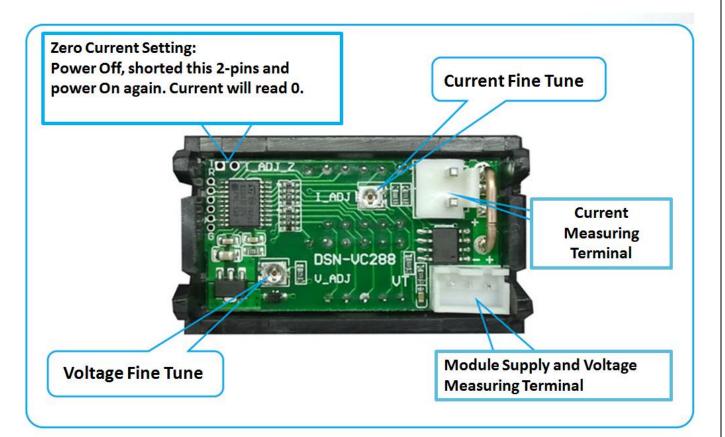
## 100A@75mV Current Shunt:







## **Functional Diagram:**

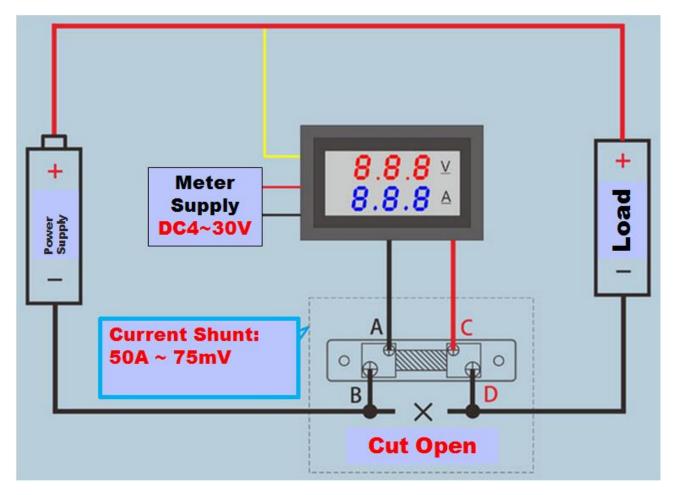


## **Application Examples:**

#### **Connection Method 1:**

The connection diagram below shown using separate power supply for meter module and supply for load.

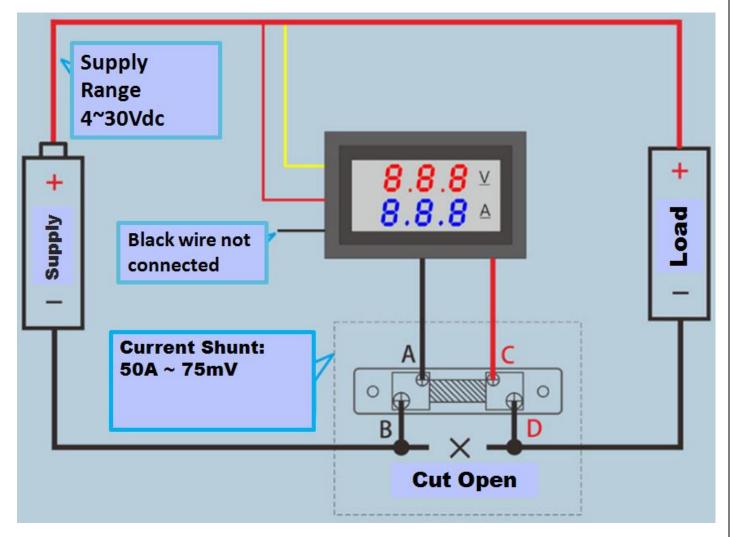
The module supply limited to supply voltage of 4~30Vdc. The load supply limited to measurement range of the meter at 100Vdc and load current measurement of 50A Maximum. Refer to wiring diagram 1.



Wiring Diagram 1

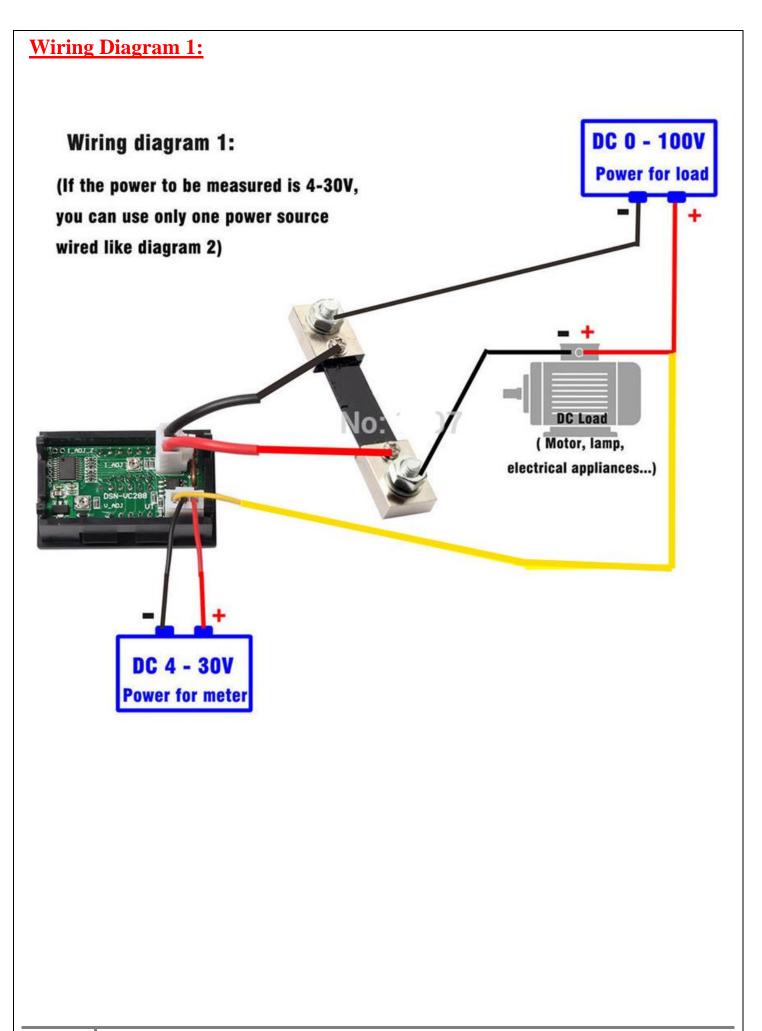
#### **Connection Method 2:**

In the below connection diagram, the meter module and load supply share the same power supply line. In this case, the load supply only limi to 30Vdc maximun as this is the maximun voltage allowed for the meter module. Refer to wiring diagram 2.

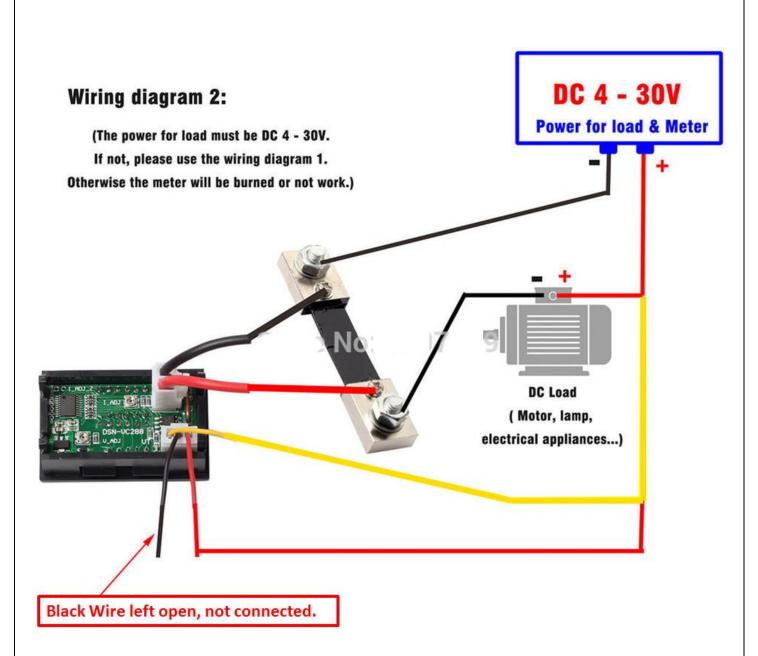


Wiring Diagram 2

Use connection method-1 if the required load supply voltage is greater than 30Vdc up to maximum 100Vdc. Use method-2 if required load supply voltage is less than 30Vdc.



## **Wiring Diagram 2:**



## Package Include:



- 1x Dual Display VA Meter Module.
- 1x 100A~75mV Current Shunt.
- 2x Connecting Cable.

## **Web Resources:**

• Dual Display Volt-Amp Meter.



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