

## FEATURES

### INPUT MEASUREMENTS

- Basic functions: DC Voltage DCV, DC Current DCI
- Maximum measurement accuracy is 0.05%
- Display is 5 digits.
- Measurement rate: 2-3 times/sec.
- Loop detection function
- Internal 24V circuit power supply
- Simultaneous measurement of current.
- mA has a percentage display mode

### ANALOGUE OUTPUT

- Basic functions: DC current DCI
- Maximum measurement accuracy is 0.05%
- Measurement display is 5 digits
- Output settings can be manually increased or decreased by position
- DCI output includes active output (internal 24V power supply)
- Passive output (external 24V power supply).
- mA has a percentage display mode.
- During DCI output, it can provide manual stepping and automatic waveform output functions
- The manual stepping output mode includes: 25% stepping and 100% stepping.
- The output current is selectable from 0~20mA or 4~20mA.
- Automatic wave output type includes automatic step, sawtooth wave, triangle wave, and automatic waveform working parameters can be configured.

### GENERAL

- Internal 24V circuit power supply
- It has maintenance setup functions, including Auto power-off, backlight and flashlight
- The segment code is displayed on the LCD with a white backlight.
- LED flashlight for lighting.
- Powered by 3 AA battery cells
- Battery compartment door is convenient for battery replacement.
- Low-battery detection
- Small, firm, reliable, suitable for field use
- Large-suction magnetic sling is available (optional)



\*Technical Specifications & Appearance are subject to change without prior notice

**TECHNICAL SPECIFICATIONS**

**ANALOGUE MEASUREMENT FUNCTIONS**

Output function	Range	Output range	Resolution	Accuracy	Remarks
DC current DCI	30mA	0.000mA~30.000mA	0.001mA	0.05%+4uA	At 20 mA, maximum load 1000Ω resistance. When simulating the transmitter, the external circuit power supply is 5~28V

- Used within one year after calibration, 23°C ± 5°C, 20-70% RH, Accuracy=± (% set value+% reading).
- Uncertainty includes standard uncertainty, hysteresis, nonlinearity, repeatability, and typical long-term stability over the period mentioned (K = 2).
- Maximum applied voltage at input end: about 30Vpk; Maximum applied current at input end: about 25mA
- The temperature range of internal temperature compensated sensor RJC is -10 to 50°C. The temperature measurement accuracy at 18 to 28°C is ±0.5°C, and the temperature measurement accuracy at other temperature is ±1°C. Cold end compensation time is 10S/ times.
- Temperature coefficient: 0.1 × basic accuracy/°C (temperature range < 18°C or > 28°C)

**INPUT OUTPUT FUNCTIONS**

Measurement function	Range	Measurement range	Resolution	Accuracy	Remarks
DC voltage DCV	35V	-35.000V~35.000V	0.001V	0.02%+2mV	Input resistance: approximately 1MΩ
DC current DCI	30mA	-35.000mA~35.000 mA	0.001mA	0.02%+4uA	Shunt resistance: approximately 10Ω Input resistance: approximately 20Ω
Loop power supply LOOP	24 V			10%	Short circuit protection Maximum current: 22 mA Maximum input voltage: 60 V DC

- Used within one year after calibration, 23°C ± 5°C, 20-70% RH, Accuracy=± (% set value+% reading).
- Uncertainty includes standard uncertainty, hysteresis, nonlinearity, repeatability, and typical long-term stability over the period mentioned (K = 2).
- Display refresh rate: 2~3 times / second.
- Maximum applied voltage at input end: 60 Vpk; Maximum applied current at input end: 50mA.
- Current input protection: 100mA/250V Fast FUSE
- Input common-mode rejection: 50Hz /60 Hz > 120 db; Input serial-mode rejection: 50Hz /60 Hz > 60 db
- The temperature range of internal temperature compensated sensor RJC is -10 to 50°C. The temperature measurement accuracy at 18 to 28°C is ±0.5°C, and the temperature measurement accuracy at other temperature is ±1°C. Cold end compensation time is 10S/ times.
- Temperature coefficient: 0.1 × basic accuracy / °C (temperature range <18°C or >28°C)

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**GENERAL SPECIFICATIONS**

- Operating temperature and humidity: 0 to 50°C ≤80%RH without condensation; 40 to 50°C ≤70%RH.
- Storage temperature and humidity: -25 to 60°C ≤90%RH without condensation.
- Electrical safety: EN61010-1:2001
- Withstand voltage: AC3540V(50/60Hz)/5 seconds between terminal and housing.
- Insulation impedance: DC1000V/100MΩ or more between terminal and housing.
- Electromagnetic compatibility (EMC): EN61326-1:2006
- Performance criterion 2 is met, i.e. the function and performance are temporarily reduced or lost, but can be recovered by themselves.
- Protection grade IP40.
- Vibration and fall: IEC 60068-2-64:2008, IEC 60068-2-32:2008
- Random, 2g, 5-500Hz; 1m drop test.
- CE certification.
- Quality standard: developed, designed and manufactured in accordance with TUV ISO 9001.
- Calibration period and preheating time:
  - To ensure the accuracy of the Table, the calibration period is one year.
  - The startup preheating time is more than 30 minutes.
- Instrument display and key
- Segment code LCD display, white backlight
- Rubber key is adopted
- Instrument power supply
- Power: 3 pcs of AA alkaline batteries
- Dimension and weight



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