

# DIGITAL PANEL METER

## A1000

**NEW!**



### ■ Features

- Low cost
- Bright LED 14.2mm (red)
- AC power and DC power available

### Input Specifications

#### ■ DC Voltage, current

##### • DC voltage measurement (Range 12 to 14)

| Range | Measurement Range | Input Impedance | Input Protection | Accuracy<br>(23°C±5°C, 35 to 85%) |
|-------|-------------------|-----------------|------------------|-----------------------------------|
| 12    | ±1.999V           | 1MΩ             | ±100V            | ± 0.3% of F.S                     |
| 13    | ±19.99V           |                 | ±250V            |                                   |
| 14    | ±199.9V           |                 | ±500V            |                                   |

##### • DC current measurement (Range 23 to 25)

| Range | Measurement Range | Input Resistance | Input Protection | Accuracy<br>(23°C±5°C, 35 to 85%) |
|-------|-------------------|------------------|------------------|-----------------------------------|
| 23    | ±19.99mA          | 10Ω              | ±150mA           | ± 0.5% of F.S                     |
| 24    | ±199.9mA          | 1Ω               | ±500mA           |                                   |
| 25    | ±1.999A           | 0.1Ω             | ±3A              |                                   |

#### ■ AC Voltage, current

##### • AC voltage measurement (Range 12 to 14 Average)

| Range | Measurement Range | Input Impedance | Input Protection | Accuracy<br>(23°C±5°C, 35 to 85%) |
|-------|-------------------|-----------------|------------------|-----------------------------------|
| 12    | 1.999V            | 1MΩ             | 50V              | ± 0.5% of F.S                     |
| 13    | 19.99V            |                 | 50V              |                                   |
| 14    | 199.9V            |                 | 500V             |                                   |

Input Frequency: 40 Hz to 100Hz

Rectifier Circuit: Represents effective value of sine wave by demodulation of mean value

Response time: approx 1 sec (10 to 90%)

##### • AC current measurement (Range 23 to 26 Average)

| Range | Measurement Range | Input Resistance | Input Protection | Accuracy<br>(23°C±5°C, 35 to 85%) |
|-------|-------------------|------------------|------------------|-----------------------------------|
| 23    | 19.999mA          | 10Ω              | 150mA            | ± 1.0% of F.S                     |
| 24    | 199.9mA           | 1Ω               | 500mA            |                                   |
| 25    | 1.999A            | 0.1Ω             | 3A               |                                   |
| 26    | 5A                | 1Ω               | 8A               |                                   |

Input Frequency: 40 Hz to 100Hz

Rectifier Circuit: Represents effective value of sine wave by demodulation of mean value

Response time: approx 1 sec (10 to 90%)

#### ■ Thermocouple (Range KC, JC)

| Range | Sensor Type | Measurement Range | Max Resolution | Accuracy<br>(23°C±5°C, 35 to 85%) |
|-------|-------------|-------------------|----------------|-----------------------------------|
| KC    | K           | 0 to +1000°C      | 1°C            | ± 0.8% of F.S                     |
| JC    | J           | 0 to +400°C       | 1°C            |                                   |

Sensor lead Resistance: less than 50Ω

Burn out: Flash -1999

Over input voltage: ±5VDC

Cold Junction Compensator Accuracy:±2°C

#### ■ RTD (Pt100Ω) (Range PA, PJ)

| Range | Sensor Type | Measurement Range  | Max Resolution | Accuracy<br>(23°C±5°C, 35 to 85%) |
|-------|-------------|--------------------|----------------|-----------------------------------|
| PA    | Pt100Ω      | -100.0 to +199.9°C | 0.1°C          | ± 0.2% of F.S                     |
| PJ    | Pt100Ω      | -200 to +600°C     | 1°C            | ± 0.4% of F.S                     |

Current for resistance: 1mA (TYP)

External lead resistance: less than 1 ohm per lead

#### ■ Process (Range 1V, 2A)

| Range | Measurement Range | Display                | Input Impedance | Input Protection | Accuracy<br>(23°C±5°C, 35 to 85%) |
|-------|-------------------|------------------------|-----------------|------------------|-----------------------------------|
| 1V    | 1 to 5V           | offset ±1000           | 1MΩ             | ±100V            | ± 0.3% of F.S                     |
| 2A    | 4 to 20mA         | fullscale ±100 to 1999 | 51Ω             | 50mA             | ± 0.4% of F.S                     |

#### ■ Common Specification

Input bias current: 50 pA (TYP)

Sampling speed: 2.5/sec

Over range indication: When input exceeds the maximum display flash 1999

Max. display: 1999

Display: Red LED 14.2mm height

Dimensions: 96mm (H) X 48mm (W) X 75mm (D) DIN size

Power supply: 90 to 132 VAC

180 to 264 VAC

5 to 24 VDC

Power Consumption: 1.5 VA at AC power

100mA at DC power

Operating Temp.: 0 to 50°C, 35 to 85%RH

Storage Temp.: -10 to 70°C less than 60% RH

Dielectric Strength: Power supply and input, 1500 VAC/1min at AC power

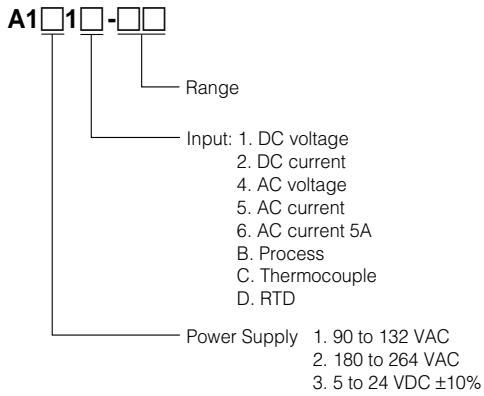
Power supply and input, 500 VDC/1min at DC power

Insulation Resistance : 500 VDC 100MΩ at above terminals

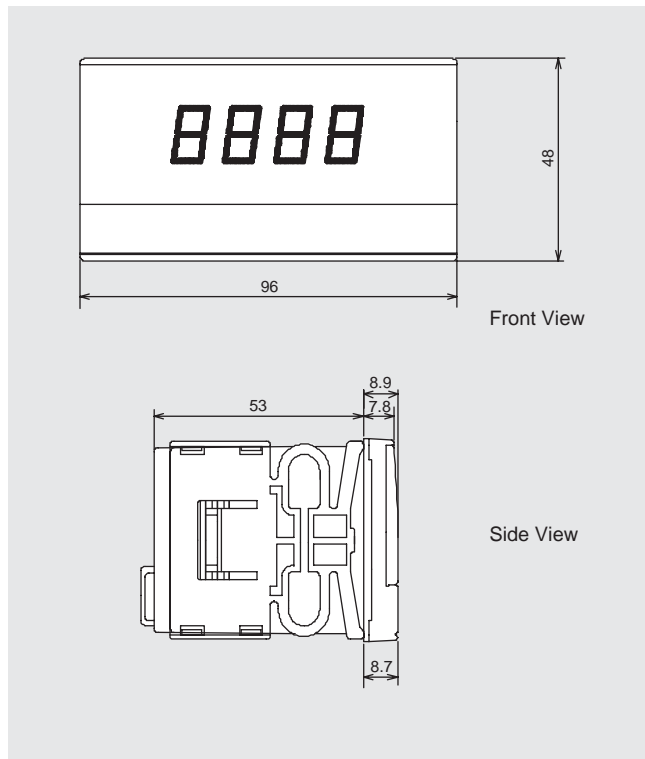
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### Model Code



### Dimensions



### Connection Diagram

