

# Digital Panel Meters

## Process meters/FDS-203

### FDS-203 process meters

#### ■ Features

- Ultra-compact (24 × 48mm) DIN size of snap-on mounting
- Supports process control input
- Scaling function to convert and display input signals between 1 and 5V or 4 and 20mA into appropriate values.
- Offset value within a range of ±1000 settable on the front panel
- Full-scale range is adjustable between 100 and 1999 digits on the front panel



#### ■ Instrumentation input / DC voltage measurement

Type	Measurement range	Display	Accuracy	Input impedance	Max. input voltage
<b>FDS-203-1V</b>	1 to 5V	Offset: ±1000 Full scale: 100 to 1999	±0.1%rdg ±2 digits (23°C ±5°C)	Approx. 1MΩ	±250V

#### ■ Instrumentation input / DC current measurement

Type	Measurement range	Display	Accuracy	Internal impedance	Max. input current
<b>FDS-203-2A</b>	4 to 20mA	Offset: ±1000 Full scale: 100 to 1999	±0.1%rdg ±2 digits (23°C ±5°C)	51Ω	±70mA

#### ■ DC voltage measurement

Type	Measurement range	Display	Accuracy	Input impedance	Max. input voltage
<b>FDS-203-11</b>	±199.9mV	Offset: ±1000 Full scale: ±100 to ±1999	±0.1%rdg ±2 digits (23°C ±5°C)	100MΩ	±100V
<b>FDS-203-12</b>	±1.999V			100MΩ	±250V
<b>FDS-203-13</b>	±19.99V			10MΩ	±250V
<b>FDS-203-14</b>	±199.9V			10MΩ	±500V

#### ■ DC current measurement

Type	Measurement range	Display	Accuracy	Internal impedance	Max. input current
<b>FDS-203-21</b>	±199.9μA	Offset: ±1000 Full scale: ±100 to ±1999	±0.2%rdg ±2 digits (23°C ±5°C)	1kΩ	±10mA
<b>FDS-203-22</b>	±1.999mA			100Ω	±50mA
<b>FDS-203-23</b>	±19.99mA			10Ω	±150mA
<b>FDS-203-24</b>	±199.9mA			1Ω	±500mA

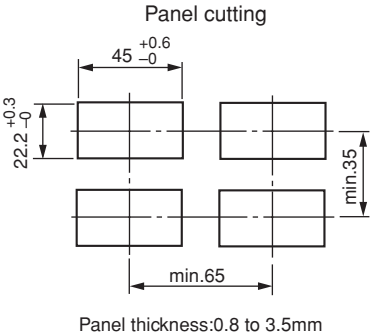
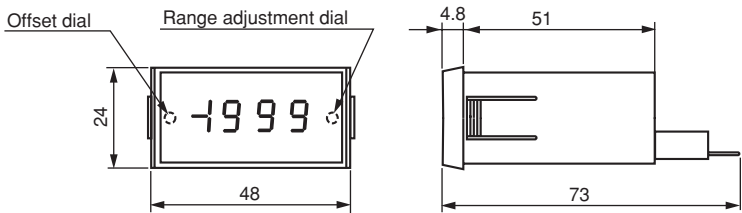
#### ■ Basic specifications

Measurement function	DC voltage or current measurement
Operation method	Double integral method
Sampling speed	2.5 times/s
Noise reduction ratio	NMR 40dB min. (50/60Hz)
Over-range alarm	Blinking 1999
Display	8mm-high, 7-segment red LED display
Max. display value	1999
Polarity display	Negative symbol (–) automatically displayed for negative operation values
External control	Hold, start, blanking, and decimal point
Standard	IEC 1010-1, EN 50082-2, EN-50081-2 Installation Class II, pollution degree 2 (IEC 1010-1)

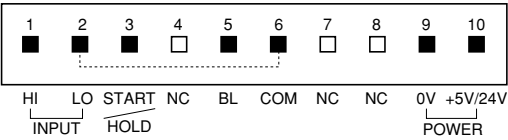
#### ■ General specifications

Operating condition	0 to 50°C, 85%RH max. (no condensation)
Power supply	24V DC ±20%, 30mA max. 5V DC ±5%, 120mA max.
Power consumption	Approx. 480mW
Mass	Approx. 46g
Dielectric strength	1,500V AC 1 minute between input terminal and mounting panel 500V DC 1 minute between power supply and input terminals
Insulation resistance	100MΩ min. at 500V DC megger between the terminals described in above
Optional output	Connector

■ **Dimensions, mm**

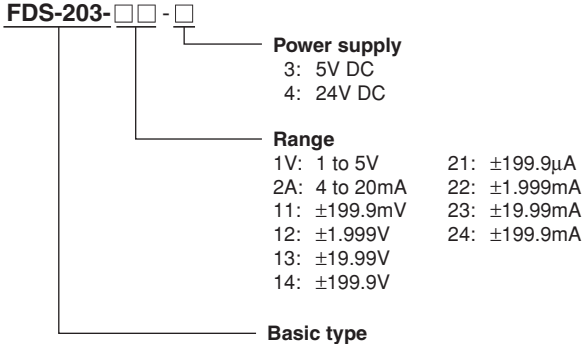


■ **I/O connector terminal arrangement**



Note: NC is unused, don't connect this terminal.

■ **Type number nomenclature**



■ **Ordering information**

Specify the following:  
 1. Type number