

UNIVERSAL TYPE DIGITAL PANEL METER

A8000

NEW!



Input Specifications

DC voltage , current

● A83□1-0□ (DC voltage)

range	Measurement Range	Display	Input Protection	Accuracy (23°C ± 5°C, 35 to 85%RH)
11	± 199.99mV	offset ± 19999 full scale ± 19999	± 50V	± (0.1% of rdg + 2 digit)
12	± 1.9999V		± 50V	
13	± 19.999V		± 250V	
14	± 199.99V		± 250V	

● A83□2-0□ (DC current)

range	Measurement Range	Display	Input Protection	Accuracy (23°C ± 5°C, 35 to 85%RH)
22	± 1.9999mA	offset ± 19999 full scale ± 19999	± 50mA	± (0.2% of rdg + 2 digit)
23	± 19.999mA		± 50mA	
24	± 199.99mA		± 3A	
25	± 1999.9mA		± 3A	

AC voltage, current (TRUE-RMS)

● A83□4-0□ (AC voltage)

range	Measurement Range	Display	Input Protection	Accuracy (23°C ± 5°C, 35 to 85%RH)
11	199.99mV	offset ± 19999 full scale ± 19999	50V	± (0.2% of rdg + 20 digit)
12	1.9999V		50V	
13	19.999V		250V	
14	199.99V		250V	

Frequency range : 40Hz to 1kHz

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

Dead band : 100 digit

● A83□5-0□ (AC current)

range	Measurement Range	Display	Input Protection	Accuracy (23°C ± 5°C, 35 to 85%RH)
23	19.999mA	offset ± 19999 full scale ± 19999	50mA	± (0.5% of rdg + 20 digit)
24	199.99mA		3A	
25	1999.9mA		3A	

Frequency range : 40Hz to 1kHz

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

Dead band : 100 digit

Process

● A83□B-0□

range	Measurement Range	Display	Input Protection	Accuracy (23°C ± 5°C, 35 to 85%RH)
1V	1 to 5V	Offset : ± 19999 Fullscale ± 9999	± 50V	± (0.1% of rdg + 3digit)
2V	4 to 20mA		± 50mA	

Excitation power supply : 24VDC ± 10% 30mA

Features

- Power Supply : 5V to 12VDC, 12V to 24VDC
- BCD Output (option)
- 4 1/2 digit

Thermocouple • RTD

● A83□C-0□ (Thermocouple)

range	Sensor type	Measurement Range	Maximum Resolution	Accuracy (23°C ± 5°C, 35 to 85%RH)
KA	K	-50.0 to 199.9°C	0.1°C	± (0.5% of FS)
KB	K	-50 to 1200°C	1°C	± (0.2% of FS)
J	J	-50 to 1000°C	1°C	± (0.2% of FS)
T	T	-50 to 400°C	1°C	± (0.6% of FS)
S	S	0 to 1700°C	1°C	± (0.4% of FS)
R	R	-10 to 1700°C	1°C	± (0.4% of FS)
B	B	100 to 1800°C	1°C	± (0.4% of FS) applied over 500°C

Cold junction compensator accuracy : ± 2°C (10 to 40°C)

Sensor lead resistance : less than 50

Linearizing method : Digital linearizing

Burn out alarm : - - - -

● A83□D-0□ (RTD)

range	Sensor type	Measurement Range	Maximum Resolution	Accuracy (23°C ± 5°C, 35 to 85%RH)
PA	PT100	-100.0 to + 199.9°C	0.1°C	± (0.15% of FS)
PB	PT100	-100 to + 600°C	1°C	± (0.3% of FS)

available Fahrenheit display

Output Specification

● BCD output

Type of output: Open collector or TTL

Logic: Changeable

Output rate: DC30V 10mA (open collector)

Funout 2 (TTL)

● External Control

Hold: Shorted HOLD terminal and COM terminal or equipotential, Hold ON

Digital Zero: Shorted DZ terminal and COM terminal or equipotential, Digital zero ON

Peak Hold: Shorted PH terminal and COM terminal or equipotential, Peak hold ON

Common Specification

Display: Red LED 10mm height

Maximum display: -19999 to 19999

Conversion rate: 20times/sec

Overrange indication: When input exceed the maximum display display 0L or -OL

Zero display: Leading zero suppression

Decimal point: Settable to any digit position

Operating temp: 0 to 50° C (35 to 85% RH)

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

Power supply: 5V to 12VDC, 12V to 24VDC

Power consumption: Approx x 1.5W

Dimensions: 48mm (W) x 24mm (H) x 96mm (D)

DIN size

Weight (unit only): Approx x 100g

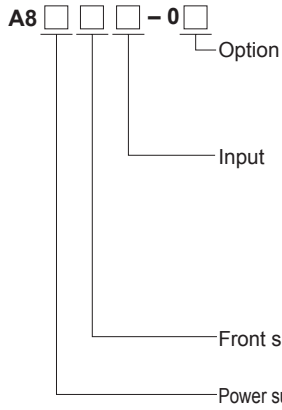
Dielectric strength: Power supply/input terminal/output terminal/external control DC500V/min
Input terminal/output terminal/external control DC500V/min
Case/each terminal AC1500V/min

Insulation resistance: DC500V more than 100M Ω at the above terminals

UNIVERSAL TYPE DIGITAL PANEL METER

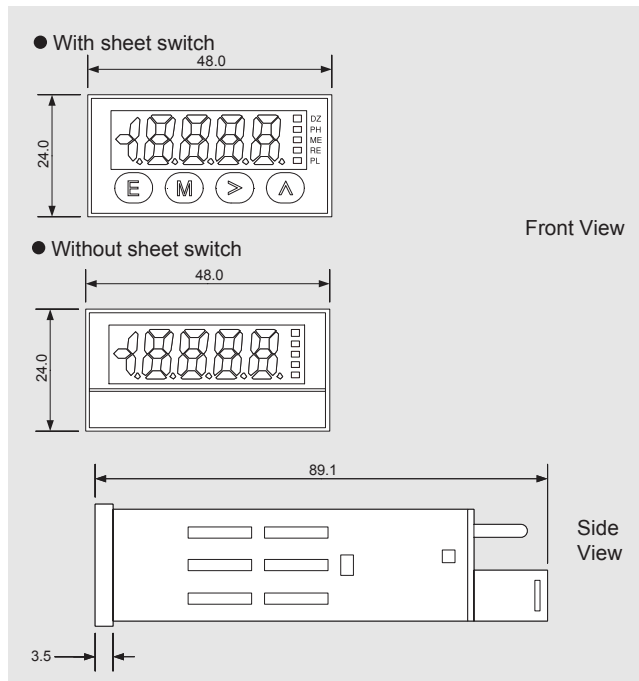
A8000

Ordering Code



1. none
 2. BCD (TTL), external control
 3. BCD (Open collector), external control
1. DC voltage
 2. DC current
 4. AC voltage
 5. AC current
- B. Process
C. Thermocouple
D. RTD
1. with sheet switch
 2. without print sheet switch
3. 5V to 12VDC
 4. 12V to 24VDC

Dimensions



We reserve the right to change specifications without notice.

Watanabe Electric Industry Co.,Ltd

6-16-19, Jingumae, Shibuya-ku,

Tokyo 150-0001, Japan

Phone : +81-33400-6147

Fax : +81-33409-3156

<http://www.watanabe-electric.co.jp>

Printed in Japan, Jun. 2005 (KP)

Watanabe Electric Industry Co.,Ltd