PROCESS MONITOR

AS-143A

Sales, Service, Technical support
Topac Inc.
101 Derby St., Hingham MA 02043 USA
www.topac.com, sales@topac.com
Tel: 781 740 8778 Fax: 781 740 8779

*BCD, Analog Output (Option)

■ DC Voltage Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-143A-11	±199.99mV	Offset ±10000 Fullscale ±100~19999	100MΩ	±250V
AS-143A-12	±1.9999V		100MΩ	±250V
AS-143A-13	±19.999V		1MΩ	±250V
AS-143A-14	±199.99V		1MΩ	±500V

Accuracy: ±0.05% rdg. ±5 digits (23°C ±5°C)

■ 1~5V Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-143A-1V-	1~5V	Offset ±10000 Fullscale 100~19999	1MΩ	±250V

Accuracy: ±0.05% rdg. ±5 digits (23°C ±5°C)

■ 4~20mA Measurement

Model	Range	Display Adjustable	Internal Resistance	Input Protection
AS-143A-2A	4~20mA	Offset ±10000 Fullscale 100~19999	127Ω	±50mA

Accuracy: 0.05% rdg. ±5 digits (23°C ±5°C)

■ Specifications

Input Configuration:	Single Ended
Input Bias Current:	2nA (Typ.)
Conversion Rate:	2.5/sec or 6.25/sec (50Hz), 7.5/sec (60Hz)
Normal Mode Rejection:	More than 50dB (50/60Hz)
Temperature Coefficient:	Offset (Max.) ±0.5digit/°C Span (Max.) ±0.01% of span/°C
Display:	LED, 14.2mm 4 1/2 digits
Polarity:	A "-" is displayed automatically
Decimal Point:	Settable to any digit position
Overrange Indication:	When input exceeds the maximum display, 000 flashes
Fullscale Adjustment:	100~19999
Offset Adjustment:	±10000
Span:	20000 counts
Analog Output:	0~±2V

■ BCD Data Output (Isolated from input (Lo))

• At Open Collector

Measured data:	Negative logic transistor "ON" at logic "1"
Polarity signal:	Transistor "ON" at plus input
"OVER" signal:	Transistor "ON" at overflow input
Printing command signal:	Transistor "ON" during a period of approx. 1ms at every measurement completion
Transistor output capacity: (NPN)	Applied voltage, 30V max. current, 10mA max. Saturated output voltage less than 1.2V at 10mA

• At TTL level

Measured data:	Tri-state parallel BCD positive logic latch output
Polarity signal:	"1" level at plus input
"OVER" signal:	"1" level at overflow input
Printing command signal:	A positive pulse of approx. 1ms at every measurement completion
Each signal of the above:	TTL level Fanout=2 * Each signal of the above can be changed to negative logic
Power Supply:	AC90~132V, AC180~264V, DC24V ±10%
Operating Temperature:	0~50°C, 35 to 85%RH
Power Consumption:	2.5VA
Dimensions:	48(H) × 96(W) × 95(D)mm DIN Size
Weight:	Approx. 250g
Dielectric Strength:	Between input (Lo) terminal and digital common, DC500V Between power supply terminal and input terminal, earth, common, AC1500V/1 min.
Insulation Resistance:	DC500V 100MΩ at above terminals

■ Features

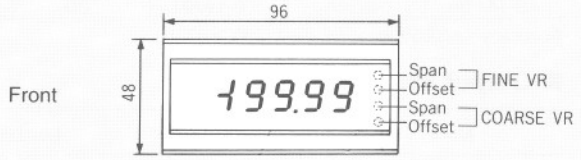
- Easily adjustable offset-fullscale from the front panel (Span 20000 counts)
- Leading zero suppression
- Last Digit Suppression
- Parallel BCD output (Open collector) (option)
- Analog output (0.1mV/digit) (option)
- Variable conversion rate (option)
- Screw terminals for input and power supply
- DIN size 48(H) × 96(W)mm
- Bright LED, 14.2mm (Red)

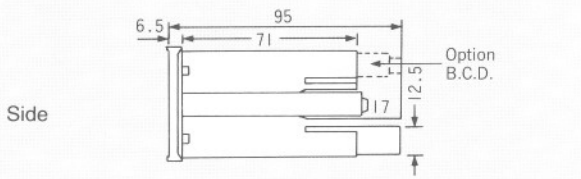
■ Ordering Code

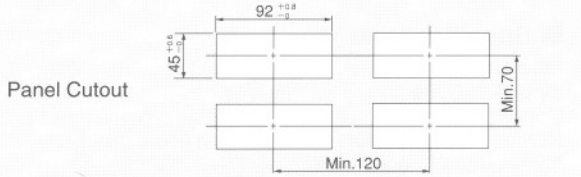
AS-143A-□□-□□-□

- BCD output: 1. None, 2. TTL, 3. Open Collector
- Output: 1. None, 2. BCD, 3. ANALOG, 4. BCD. ANALOG — 2.5/sec; 5. None, 6. BCD, 7. ANALOG, 8. BCD. ANALOG — 6.25, 7.5/sec
- Power Supply: 1. AC90~132V, 2. AC180~264V, 4. DC24V (Isolated)
- Range: 11 1V ~ 14 2A

■ Dimensions







Panel thickness 0.8 to 5.0mm

■ Connection Diagram