PROCESS MONITOR

AS-103A

✻BCD, Analog Output Option

■ DC Voltage Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-103A-11	±199.9mV	Offset ±1000	100MΩ	±250V
AS-103A-12	±1.999V		100MΩ	±250V
AS-103A-13	±19.99V	Fullscale	10MΩ	±250V
AS-103A-14	±199.9V	±100~1999	10MΩ	±500V

Accuracy: ±0.1% rdg. ±2 digits (23°C ±5°C)

■ DC Current Measurement

Model	Range	Display Adjustable	Internal Resistance	Input Protection
AS-103A-21	±199.9μA	Offset ±1000	1kΩ	±10mA
AS-103A-22	±1.999mA		100Ω	±50mA
AS-103A-23	±19.99mA		10Ω	±150mA
AS-103A-24	±199.9mA	Fullscale	1Ω	±500mA
AS-103A-25	±1.999A	±100~1999	0.1Ω	±3A

Accuracy: 0.2% rdg. ±2 digits (23°C ±5°C)

■ 1~5V Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-103A-1V	1~5V	Offset ±1000 Fullscale 100~1999	1MΩ	±250V

Accuracy: ±0.1% rdg. ±2 digits (23°C ±5°C)

■ 4~20mA Measurement

Model	Range	Display Adjustable	Internal Resistance	Input Protection
AS-103A-2A	4~20mA	Offset ±1000 Fullscale 100~1999	51Ω	±100mA

Accuracy: ±0.1% rdg. ±2 digits (23°C ±5°C)

■ Specifications

Input Configuration:	Single Ended
Input Bias Current:	2nA (Typ.)
Conversion Rate:	2.5/sec or 12.5/sec (50Hz), 15/sec (60Hz)
Normal Mode Rejection:	More than 40dB (50/60Hz)
Display:	LED, 14.2mm 3 1/2 digits
Polarity:	A "-" is displayed automatically
Decimal Point:	Settable to any digit position
Overrange Indication:	When input exceeds the maximum display, 1999 flashes
Fullscale Adjustment:	100~1999
Offset Adjustment:	±1000
Span:	2000 counts
Analog Output:	0~±2V
Output:	Open Collector for all output, Sink current 10mA (Max.) Vce 30V (Max.) ¥ Data Output Parallel BCD (Isolation) ¥ Polarity Output Current sink when display is (+) ¥ Overrange Output Current sink when input signal exceeds 1999 ¥ Print Command Output Current sink for 1ms after measurement is finished
Power Supply:	AC110V ±20%, AC220V ±20%, DC24V ±20%
Operating Temperature:	0~50°C, 35 to 85%RH
Power Consumption:	2VA
Dimensions:	48(H) × 96(W) × 95(D)mm DIN Size
Weight:	Approx. 220g
Dielectric Strength:	Between input (Lo) terminal and digital common, DC ±500V Between power supply terminal and input terminal, earth, common, AC1500V/1 min.
Insulation Resistance:	DC500V 100MΩ at above terminals

■ Features

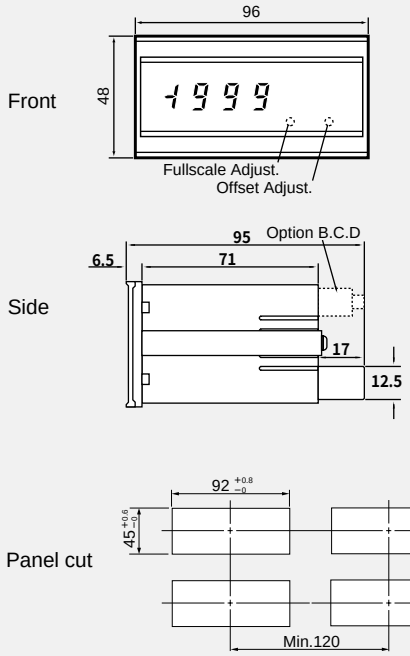
- Easily adjustable for offset-fullscale from the front panel (Span 2000 counts)
- Bright LED, 14.2mm (Red)
- Screw terminals for input and power supply
- DIN size 48(H) × 96(W)mm
- Parallel BCD output (Open collector) (option)
- Analog output (0.1mV/digit) (option)
- Leading Zero Suppression

■ Ordering Code

AS-103A-□□-□□-□

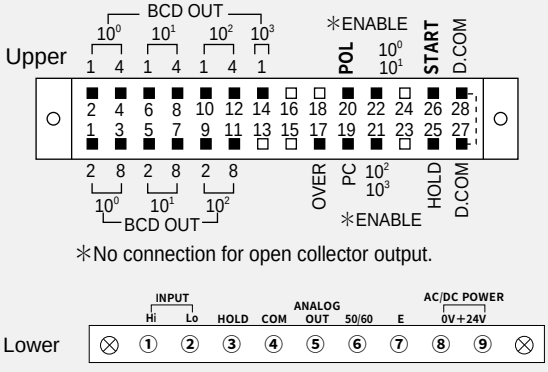
- BCD Out: 1. None / 2. TTL / 3. Open Collector
- Output: 1. None / 2. BCD / 3. ANALOG / 4. BCD.ANALOG — 2.5/sec; 5. None / 6. BCD / 7. ANALOG / 8. BCD.ANALOG — 12.5/sec or 15/sec
- Power Supply: 1. AC110V ±20% / 2. AC220V ±20% / 4. DC24V (Isolated)
- Range: 11 21 1V / 14 25 2A

■ Dimensions



Panel thickness 0.8 to 5.0mm

■ Connection Diagram



PROCESS MONITOR

AS-104

✻With Excitation Power Supply

■ DC Voltage Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-104-1V	1-5V	Offset ±1000 Fullscale 100-1999	1MΩ	±250V
AS-104-0V	0-1V		100MΩ	
AS-104-2V	0-5V		1MΩ	
AS-104-3V	0-10V		1MΩ	
AS-104-5V	0-100mV		100MΩ	

Accuracy: ±0.1% rdg. ±2 digit (23°C±5°C)

■ DC Current Measurement

Model	Range	Display Adjustable	Internal Resistance	Input Protection
AS-104-2A	4-20mA	Offset ±1000 Fullscale 100-1999	125Ω	±50mA
AS-104-0A	0-1mA		100Ω	
AS-104-1A	0-10mA		100Ω	
AS-104-3A	0-20mA		50Ω	

Accuracy: ±0.1% rdg. ±2 digit (23°C5°C)

■ Analog Output Specifications

Model	Output	Load Resistance
AS-104-□□-1V	1~5V	Min. 1kΩ
AS-104-□□-2A	4~20mA	0~600Ω
AS-104-□□-0V	0~1V	Min. 500Ω
AS-104-□□-2V	0~5V	Min. 1kΩ
AS-104-□□-3V	0~10V	Min. 1kΩ
AS-104-□□-4V	0~10mV	Min. 10kΩ
AS-104-□□-5V	0~100mV	Min. 100kΩ
AS-104-□□-0A	0~1mA	0~12kΩ
AS-104-□□-1A	0~10mA	0~600Ω
AS-104-□□-3A	0~20mA	0~600Ω

■ Specifications

Input Configuration:	Single Ended
Input Bias Current:	2nA(TYP.)
Conversion Rate:	2.5/sec(Can adjust 0.3/sec to 2/sec)
Normal Mode Rejection:	More than 50dB(50/60Hz)
Temperature Characteristic:	Less than 100PPM/°C
Display:	LED, 14.2mm(Red)
Polarity:	A "-" is displayed automatically
Decimal Point:	Settable to any digit position
Overrange Indication:	When input exceeds the maximum display, 000 flashes
Fullscale Adjustment:	100-1999
Offset Adjustment:	±1000
Span Range:	2000 counts
Zero Display:	Leading zero suppression(Select by front switch)
Last Digit Suppression:	Can fix 100 digit to "0" (Select by internal jumper wire)
Hold:	Negative signal 0V or short
Excitation Supply:	DC24V±10% 30mA, DC12V±10% 60mA
Operating Temperature:	0-50°C, 35 to 85%RH
Power Consumption:	5VA
Power Supply:	AC90~132V, AC180~264V
Dimensions:	48(H) × 96(W) × 144(D)mm DIN Size
Weight:	Approx. 450g
Dielectric Strength:	Between power supply and input, output, earth, COM, AC1500V/min Between input and output, AC1500V/1 min.
Insulation Resistance:	DC±500V, 100MΩ at above terminals

■ Features

- Offset Adjustabl±e1000
- Fullscale Adjustable 100~1999
- Span Range 2000 Counts
- Leading Zero Suppression
- Last digit suppression available
- Analog Output(Isolated)(option)
- Excitation Power Supply DC24V, 12V for Transducer
- Power Supply AC90~132V, AC180~264V
- Dimensions 48(H) × 96(W) × 144(D)mm
- Bright LED, 14.2mm(Red)
- Variable conversion rate 0.3/sec~2/sec(option)

■ Analog Output

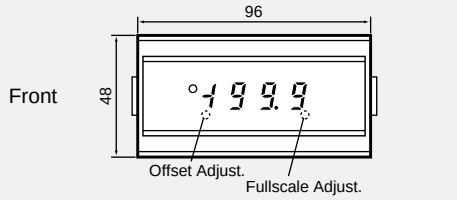
Allowable:	0.15% F.S.(23°C±5°C)
Linearity:	0.1% F.S
Response Time:	Less than 0.5 sec(0~90%)
Temperature Coefficient:	Less than 200PPM/°C
Output Adjustable Range:	Zero:More than±3% of Span Span:More than±3% of Span

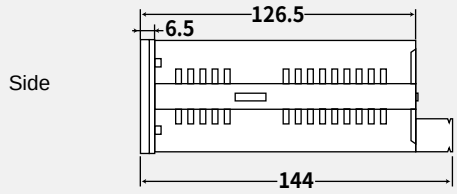
■ Ordering Code

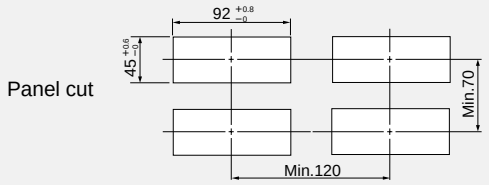
AS-104-□□-□□-□□

- Excitation Supply: 2. DC24V / 3. DC12V
- Power Supply: 1. AC90~132V / 2. AC180~264V
- Output: 01 None / 1V / ⋮ / 3A
- Range: 1V 2A / ⋮ ⋮ / 5V 3A

■ Dimensions

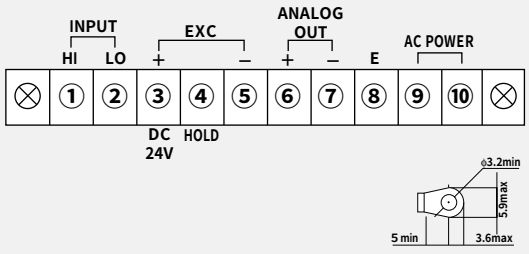






Panel thickness 0.8 to 5.0mm

■ Connection Diagram



PROCESS MONITOR

AS-105

✻HI & Lo setpoints
Excitation supply

■ Features

- Offset adjustable ±1000
- Fullscale adjustable 200～1999
- With excitation supply 24VDC (available 12VDC)
- Hi and Lo setpoint
- Option BCD output (TTL or Open collector)

■ DC Voltage Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-105-1V	1~5V	Offset ±1000 Fullscale 200~1999	1MΩ	±100V
AS-105-2V	0~5V			

Accuracy: ±(0.1% rdg. +2 digit) (23°C±5°C 45~75%RH)

■ DC Current Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-105-2A	4~20mA	Offset ±1000 Fullscale 200~1999	1MΩ	±100V

Accuracy: ±(0.2% rdg. +2 digit) (23°C±5°C 45~75%RH)

■ Specifications

Input configuration:	Single ended
Conversion rate:	2.5/sec
Normal mode rejection:	NMR40dB TYP (50/60Hz)
Display:	Red LED, 14.2mm height
Polarity display:	Automatic "-" display when the computation result is minus
Overrange indication:	When input exceeds the maximum display, 1999 flashed
Temperature coefficient:	Offset ±0.5 digit/˚C(TYP)
	Fullscale ±0.5 digit/˚C(TYP)
Maximum display:	±1999
Excitation supply:	24VDC±10% 20mA (at 100VAC)
	12VDC±10% 30mA (at 100VAC) (Option)
Decimal point:	Settable to any digit position (front dip switch)
Zero display:	Leading zero suppression
Operating temperature:	0~50˚C 35~85% RH
Storage temperature:	-10~70˚C (less than 60% RH)
Power supply:	90~132VAC (50/60Hz)
	180~264VAC(50/60Hz)
Power consumption:	3VA (TYP) (at 100VAC)
Dimensions:	96mm(W) × 48mm(H) × 95mm(D) DIN size
Weight:	Approx. 300g (main unit only)
Dielectric strength:	Input/comparative output, 500VDC/1 min.
	Input/earth, case, 1500VAC/1 min.
	Power supply/input, COM, case, comparative output, 1500VAC/1 min.
Insulation resistance:	500VDC more than 100MΩ at the above terminals
Dielectric noise:	Power supply terminal, normal mode ±1500V
Accessories:	Instruction manual, terminal cover

■ Output Specification

◎BCD data output (isolated input (Lo))

●At TTL

Measured data:	Tri-state paraelle BCD, positive logic, latch output
Polarity signal:	Level "1" at minus input
Over signal:	Level "1" at overflow input
Printing command signal:	Positive pulse approx. 1ms at every measurement completion
	TTL level, funout 2, CMOS 5V
	(Available negative logic for the above signals)

●At open collector

Measured data:	Negative logic transistor "ON" at logic 1
Polarity signal:	Transistor "ON" at minus 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, max 30V current max 15mA
	Saturated output voltage less than 1.2V at 15mA

●Analog output (Terminal 5 and 6)

Voltage output:	0~ ±1999mV (proportion display)
Accuracy:	Within 0.5% FS (23˚C ±5˚C)
Resolution:	1mV/digit
Resistive load:	More than 10KΩ
Ripple:	Less than 10mVP-P
Response speed:	Less than 0.5s

■ Comparison Specifications

Control method:	Analog comparator system
Setting range:	+50~+1999 (Hi and Lo setpoint)
Accuracy:	Setpoint ±2 digit (23˚C ±5˚C) TYP
Setting method:	Volume setting (Hi and Lo)
Comparison output:	For relay:contact capacity
	250VAC 0.1A Resistive load
	120VAC 0.5A Resistive load
	28VDC 1A Resistive load
	For photo coupler: contact capacity
	voltage: Max. 30V
	current: Max. 20mA
	saturation voltage: less than 1.2V at 20mA
Comparison display:	Lit red LED (Hi and Lo)
Comparison condition:	HI setpoint ≦ measured value
	LO setpoint ≧ measured value
Hysteresis:	5~10 digits
Response speed:	100ms (TYP)

■ Ordering Code

AS-105 -□□-□□-□□

- Excitation supply { 1. 24VDC, 2. 12VDC }
- Analog output { 1. None, 2. 0~±2V }
- Output { 1. None, 2. BCD (open collector), 3. BCD (TTL), 5. Analog Hi, Lo comparator (relay output), 6. Analog Hi, Lo comparator (Photo coupler) }
- Power supply { 1. 90~132VAC, 2. 180~264VAC }
- Input range { 1V, 2V, 2A }

PROCESS MONITOR

AS-144

✻With Excitation Power Supply

■ DC Voltage Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-144-1V	1-5V	Offset ±10000 Fullscale 100-19999	1MΩ	±250V
AS-144-0V	0-1V		100MΩ	
AS-144-2V	0-5V		1MΩ	
AS-144-3V	0-10V		1MΩ	
AS-144-5V	0-100mV		100MΩ	

Accuracy : ±0.05% rdg. ±5 digit (23°C5±)

■ DC Current Measurement

Model	Range	Display Adjustable	Internal Resistance	Input Protection
AS-144-2A	4-20mA	Offset ±10000 Fullscale 100-19999	125Ω	±50mA
AS-144-0A	0-1mA		100Ω	
AS-144-1A	0-10mA		100Ω	
AS-144-3A	0-20mA		50Ω	

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

■ Output Specifications

Model	Output	Load Resistance
AS-144-□□-1V	1~5V	Min. 1kΩ
AS-144-□□-2A	4~20mA	0~600Ω
AS-144-□□-0V	0~1V	Min. 500Ω
AS-144-□□-2V	0~5V	Min. 1kΩ
AS-144-□□-3V	0~10V	Min. 1kΩ
AS-144-□□-4V	0~10mV	Min. 10kΩ
AS-144-□□-5V	0~100mV	100kΩ
AS-144-□□-0A	0~1mA	0~12kΩ
AS-144-□□-1A	0~10mA	0~600Ω
AS-144-□□-3A	0~20mA	0~600Ω

■ Specifications

Input Configuration:	Single Ended
Input Bias Current:	2nA(TYP.)
Conversion Rate:	2.5/sec(Can adjust 0.3/sec to 2/sec)
Normal Mode Rejection:	More than 50dB(60/50Hz)
Temperature Characteristic:	Less than 100PPM/Deg. C
Display:	LED, 14.2mm(Red)
Polarity:	A "-" is displayed automaticaly
Decimal Point:	Settable to any digit position
Overrange Indication:	When input exceeds the maximum display, 0000 flashes
Fullscale Adjustment:	100~19999
Offset Adjustment:	±10000
Span Range:	20000 counts
Zero Display:	Leading zero suppression(Select by front switch)
Fixed Zero Display:	Can fix 100 digit to "0" (Select by internal jumper wire)
Hold:	Negative signal 0V or short
Excitation Supply:	DC24V±10% 30mA
Operating Temperature:	0~50°C, 35 to 85%RH
Power Consumption:	5VA
Power Supply:	AC90~132V, AC180~264V
Dimensions:	48(H) × 96(W) × 144(D)mm Din Size
Weight:	Approx. 450g
Dielectric Strength:	Between power supply and input, output, earth, EX(-), AC1500V/min Between input and output, AC1500V/1min.
Insulation Resistance:	DC±500V, 100MΩ at above terminals

■ Features

- Offset Adjustable±10000
- Fullscale Adjustable 100~19999
- Span Range 20000 counts
- Leading Zero Suppression
- Last Digit Suppression
- Analog Output(Isolated)(option)
- Excitation Power Supply DC24V, DC12V Transducer
- Power Supply AC90~132V, AC180~264V
- Dimensions 48(H)X96(W)X144(D)mm
- Bright LED, 14.2mm(Red)

■ Analog Output

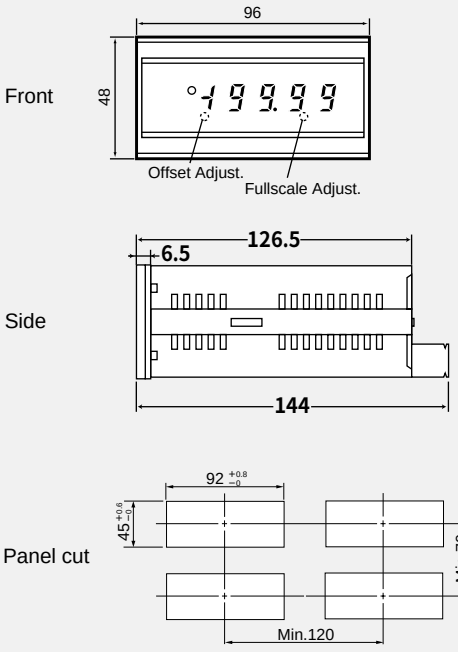
Allowable:	0.15% F.S.(23°C5°C)
Linearity:	0.1% F.S.
Response Time:	Less than 0.5 sec(0~90%)
Temperature Coefficient:	Less than 200PPM/°C
Output Adjustable Range:	Zero:More than±3% of Span Span:More than±3% of Span

■ Ordering Code

AS-144 -□□-□□-□□

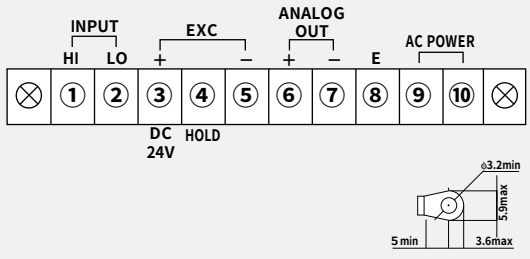
- Excitation Supply: 2. DC24V / 3. DC12V
- Power Supply: 1. AC90~132V / 2. AC180~264V
- Output: 01 None / 1V / ⋮ / 3A
- Range: 1V 2A / ⋮ ⋮ / 5V 3A

■ Dimensions



Panel thickness 0.8 to 5.0mm

■ Connection Diagram



AS-201

✻ Fullscale Adjustable

■ DC Voltage Measurement

Model Code	Range	Display Adjustable	Input Impedance	Input Protection
AS-201-1V	1~5V	0-100~1999	1MΩ	±250V
AS-201-2V	0~5V	0-100~1999	1MΩ	±250V
AS-201-3V	0~10V	0-100~1999	1MΩ	±250V

Accuracy: ±0.1% rdg ±2 digit (23°C ±5°C)

■ Specifications

Input Configuration:	Single Ended
Input Bias Current:	2nA(Typ.)
Conversion Rate:	2.5/sec
Normal Mode Rejection:	40dB Typ. (50/60Hz)
Temperature Coefficient:	±0.1 digit (Typ.)/°C ±0.3 digit (Max.)/°C
Display:	LED, 10.2mm 3 1/2 digit
Polarity:	1V Range:When input less than 1V, a "-" is displayed automatically. 2V, 3V Range:When input less than 0V, a "-" is displayed automatically.
Decimal Point:	Settable to any digit position
Overrange Indication:	When input exceeds the maximum display, 1999 flashes
Full-scale Adjustment:	100~1999
External Hold:	Negative 0V or Short
Power Supply:	DC 5V±5% 70mA (Typ.)
Operating Temperature:	0~50°C, 35 to 85%RH
Power Consumption:	350mW
Dimensions:	24(H) X 48(W) X 73(D)mm DIN Size
Weight:	40g
Dielectric Strength:	Between Input(Lo) and Mounted panel, AC1500V/1 min.
Insulation Resistance:	DC500V 100MΩ or more at above terminals

■ Features

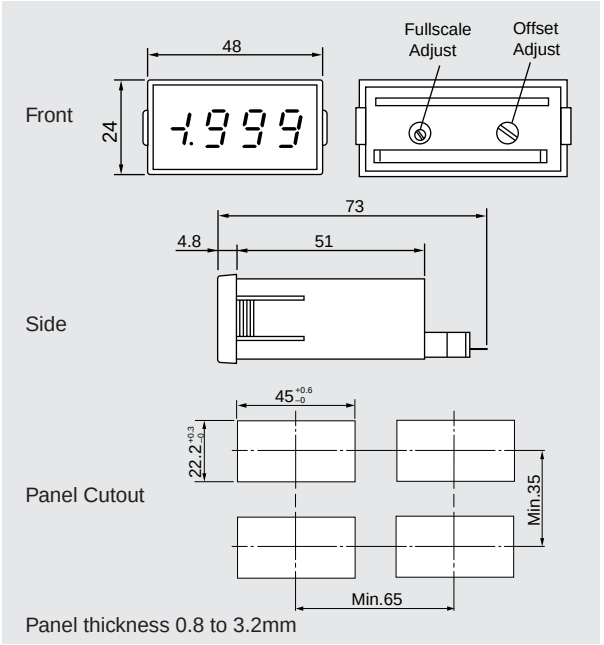
- Adjustable full scale
- Bright LED 10.2mm
- Din size 24(H) X 48(W)
- 1-5V, 0-5V, 0-10V measurement
- Power supply DC5V (NO-ISOLATED)

■ Ordering Code

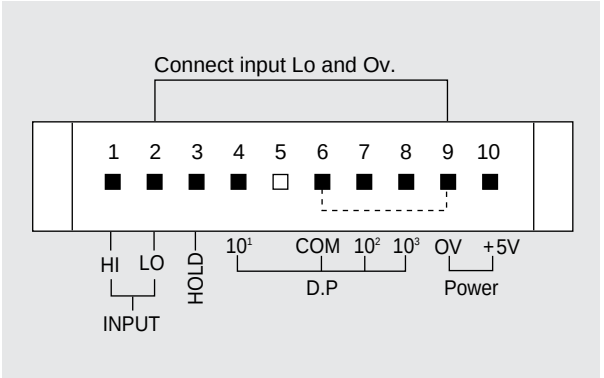
AS-201 -□□

Range { 1V / 2V / 3V

■ Dimensions



■ Connection Diagram



PROCESS MONITOR

AS-203A

✻Miniature Size

■ DC Voltage Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-203A-11	±199.9mV	Offset ±1000	100MΩ	±100V
AS-203A-12	±1.999V		100MΩ	±250V
AS-203A-13	±19.99V	Fullscale	10MΩ	±250V
AS-203A-14	±199.9V	±100~1999	10MΩ	±500V

Accuracy: 0.1% rdg. ±2 digits (23°C ±5°C)

■ DC Current Measurement

Model	Range	Display Adjustable	Internal Resistance	Input Protection
AS-203A-21	±199.9μA	Offset ±1000	1kΩ	±10mA
AS-203A-22	±1.999mA		100Ω	±50mA
AS-203A-23	±19.99mA		10Ω	±150mA
AS-203A-24	±199.9mA	Fullscale	1Ω	±500mA
AS-203A-25	±1.999A	±100~1999	0.1Ω	±3A

Accuracy: ±0.2% rdg. ±2 digits (23°C ±5°C)
±0.3% rdg. ±1 digit only for AS-203A-25

■ 1~5V Measurement

Model	Range	Display Adjustable	Input Impedance	Input Protection
AS-203A-1V	1~5V	Offset ±1000 Fullscale 100~1999	1MΩ	±250V

Accuracy: ±0.1% rdg. ±2 digits (23°C ±5°C)

■ 4~20mA Measurement

Model	Range	Display Adjustable	Internal Resistance	Input Protection
AS-203A-2A	4~20mA	Offset ±1000 Fullscale 100~1999	51Ω	±70mA

Accuracy: ±0.1% rdg. ±2 digits (23°C ±5°C)

■ Specifications

Input Configuration:	Single Ended
Input Bias Current:	2nA (Typ.)
Conversion Rate:	2.5/sec
Normal Mode Rejection:	40dB (Typ.) (50/60Hz)
Temperature Coefficient:	Offset Typ. ±0.1, Max. ±0.3 digit/°C Fullscale Typ. ±0.1, Max. ±0.3 digit/°C
Display:	LED, 8mm 3 1/2 digits
Polarity:	A "-" is displayed automatically
Decimal Point:	Settable to any digit position
Overrange Indication:	When input exceeds the maximum display, 1999 flashes
Fullscale Adjustment:	100~1999
Offset Adjustment:	±1000
Span:	2000 counts
Power Supply:	DC5V ±5%, 90mA (Typ.) DC24V ±20%, 20mA
Operating Temperature:	0~50¡C, 35 to 85%RH
Power Consumption:	450 mW at 5V, 480 mW at 24V
Dimensions:	24(H) × 48(W) × 73(D)mm DIN Size
Weight:	Approx. 46g
Dielectric Strength:	Between power supply (0V) terminal and input (Lo) terminal, DC500V Between input (Lo) terminal and mounting panel, AC1500V/1 min.
Insulation Resistance:	DC500V 100MΩ at above terminals

■ Features

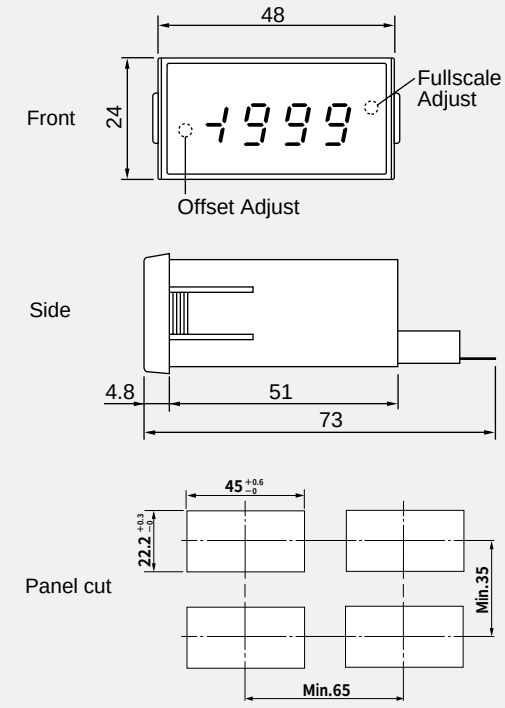
- Easily adjustable offset-fullscale from the front panel (Span 2000 counts)
- Bright LED, 8mm (Red)
- DIN size 24(H) × 48(W)mm
- Power supply DC5V or DC24V (Isolated)
- 200mV~200V, 200μA~2A Measurement
- 1~5V, 4~20mA Measurement

■ Ordering Code

AS-203A-□□-□

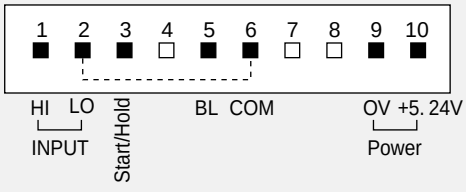
- Power Supply { 3. DC 5V (Isolated) / 4. DC 24V (Isolated)
- Range { 11 21 1V / 14 25 2A

■ Dimensions



Panel thickness 0.8 to 3.5mm

■ Connection Diagram



PROCESS MONITOR

AS-243

✻Standard 4 1/2 Digit

■ Features

- Easily adjustable offset-fullscale (Span 10000 counts)
- Bright LED, 8 mm (Red)
- DIN size 24 (H) × 48 (W) mm
- Power supply DC 24 V (isolated)
- 1-5 V, 0-5 V, 0-10 V, 4-20 mA measurement

■ DC Voltage Measurement

Model	Range	Display	Input Impedance	Input Protection
AS-243-1V	1-5 V	Offset ±5000 fullscale 100 to 9999	1MΩ	±250V
AS-243-2V	0-5V		1MΩ	±250V
AS-243-3V	0-10 V		1MΩ	±250V

Accuracy: ±(0.1%of rdg+2 digit) (23˚C±5˚C 45~75%RH)

■ DC Current Measurement

Model	Range	Display	Internal Resistance	Input Protection
AS-243-2A	4-20mA	Offset ±5000 fullscale 100 to 9999	50Ω	±50mA

Accuracy: ±(0.1% of rdg+2 digit) (23˚C±5˚C 45~75%RH)

■ General Specifications

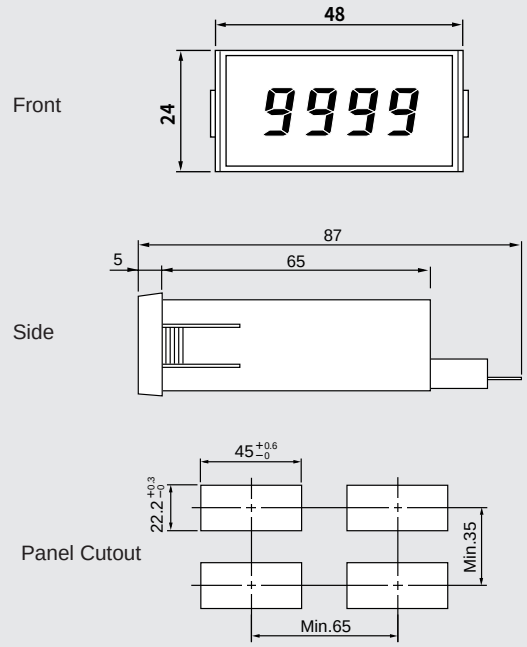
Input configuration :	Single ended
Input bias current :	2 mA (TYP.)
Conversion rate :	2.5/sec
Normal mode rejection :	50dB (TYP.) (50/60 Hz)
Temp. coefficient :	Offset display ±0.5 digit/˚C Fullscale display ±0.01% of span/˚C
Overrange indication :	When input exceeds the maximum display, display flashes
Fullscale adjustment :	100 to 9999
Offset a djustment :	±5000
Span :	10000 counts
Display :	LED, 8 mm (Red)
Polarity :	A "-" is displayed automatically
Scaling :	By switch (rear) and fine volume (front)
Hold :	COM and S/H terminal shorted
Decimal point :	Settable to any digit position
Operating temperature :	0 to 50˚C 35 to 85%RH
Power supply :	DC24V±20%
Power consumption :	30 mA at DC24V
Dimensions :	24(H) × 48(W) × 87(D)mm DIN size
Weight (unit) :	Approx. 50g
Dielectric strength :	Between input (Lo) and mounted panel, AC 1500V/l min. Between input (Lo) and power supply (0V), DC 500 V/l min.
Insulation resistance :	DC 500 V 100 MΩ or more at the above terminals
Accessory :	Connector, Instruction manual

■ Ordering Code

AS-243-□□-4

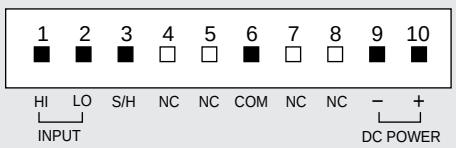
- 4 — Power Supply 4. DC24V
- □□ — Range: 1V, 2V, 3V, 2A

■ Dimensions



Panel thickness 0.8 to 3.5mm

■ Connection Diagram



AL-501A

✻ Self Power(4 to 2omA)

■ Features

- Self power (4~20mA)
- Easily adjustable for offset-fullscale from the front panel
- LCD Display, 12.7 mm
- Screw terminals
- 4~20mA Measurement

■ 4~20mA Measurement

Model	Range	Display Adjustable	Input Protection
AL-501A	4~20mA	Offset ±200 Fullscale 100~1999	±50mA

Accuracy: ±0.1% F.S. ±1 digit (23°C ±5°C)

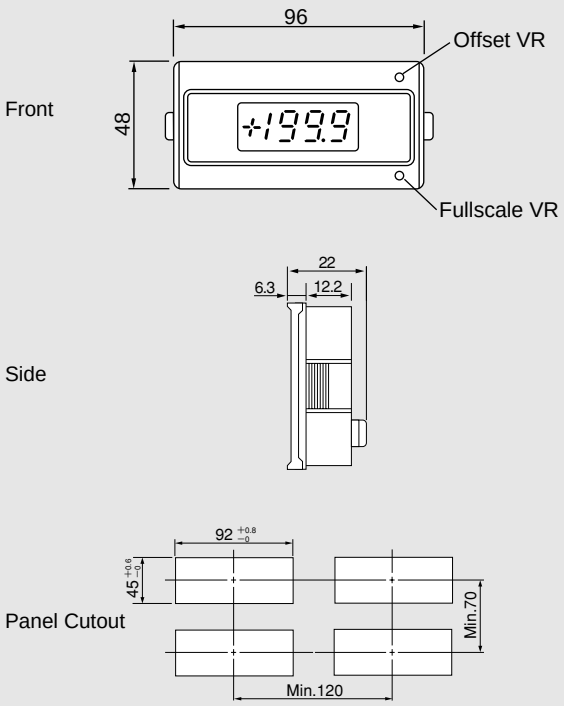
■ Specifications

Input Configuration:	Single Ended
Max. Display:	1999
Conversion Rate:	2.5/sec
Normal Mode Rejection:	NMR 40dB (TYP)
Temperature Coeficient:	Offset display, ±0.3 digit/°C (Max.) Fullscale display,±0.3 digit/°C (Max.)
Overrange Indication:	When input exceeds the maximum display, display +1 and blank other digits
Fullscale Adjustment:	100 to 1999
Offset Adjustment:	±200 digits
Voltage Drop:	2.2V (at 20mA) Typ. 1.6V (at 4mA) Typ.
Display:	LCD, 12.7mm
Polarity:	A "-" is displayed automatically
Decimal Point:	Settable to any digit position
Power Supply:	Current loop power (4 to 20mA)
Operating Temperature:	0 to 50 °C, 35 to 85% RH
Dimensions:	48(H) ✕ 96(W) ✕ 22(D)mm DIN size
Weight:	Approx. 55 g (unit only)
Dielectric Strength:	Input (Lo) terminal and earch(E), 500VDC/1min.
Accessory:	Instruction Manual

■ Ordering Code

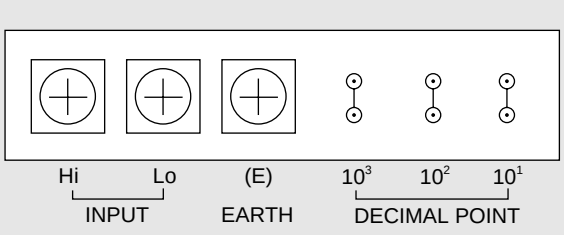
AL-501A

■ Dimensions



Panel thickness 0.8~3.2mm

■ Connection Diagram



PROCESS MONITOR

AL-203

✻Self Power

■ Featuers

- Loop Power(4~20mA)
- Abjustable offset and full scale
- LCD display 7.4mm
- 4~20 mA measurement
- Option-30°C~+80°C operating

■ 4~20mA Measurement

Model	Range	Display Adjustable		Input Protection
AL-203	4~20mA	Offset	±200	±50mA
		Full-scale	100~1999	

Accuracy: ±0.2% F.S. ±2 digit (23°C±5°C)

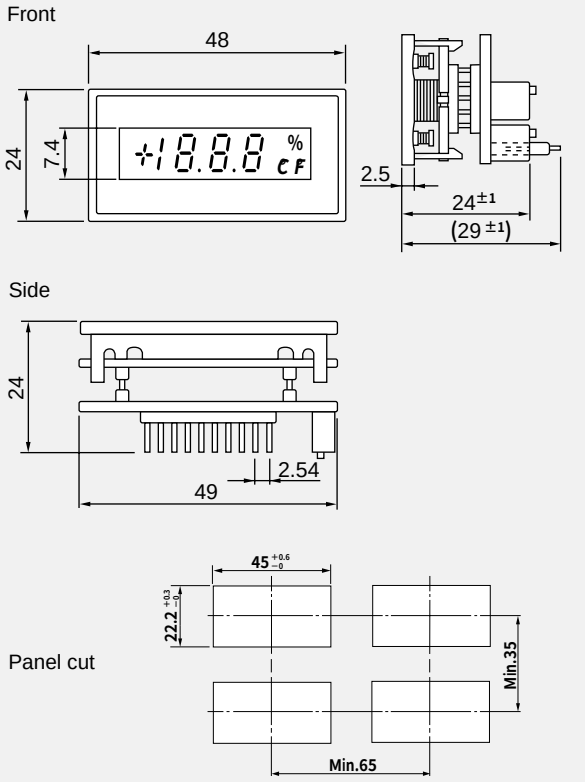
■ Specifications

Input Configuration:	Single Ended
Conversion Rate:	2.5/sec
Normal Mode Rejection:	NMR 40 dB or more(50/60 Hz)
Temperature Coefficient:	Offset ±0.3digit/°C(MAX.)
	Full-scale ±0.3digit/°C(MAX.)
Overrange Indication:	When input exceeds the maximum display, display+1
Full-scale Adjustment:	100~1999
Offset Adjustment:	±200
Span:	2000 Counts
Voltage Drop:	2.4V(at 20mA)Typ.
	2.1V(at 4mA)Typ.
Display:	LCD, 7.4mm
Polarity:	A "-" is displayed automatically
Decimal Point:	Settable to any digit position
Engineering Unit:	%, °C, °F
Operating Temp:	0~+50°C, (OPTION-30°C~+80°C)35~85% RH
Power Supply:	Current loop power(4~20mA)
Dielectric Strength:	Between Lo and Earth, DC 500V
Dimension:	24(H) × 48(W) × 24(D)mm DIN Size
Weight:	20g

■ Ordering code

AL-203

■ Dimensions



■ Connecion Diagram