

Model SD2000

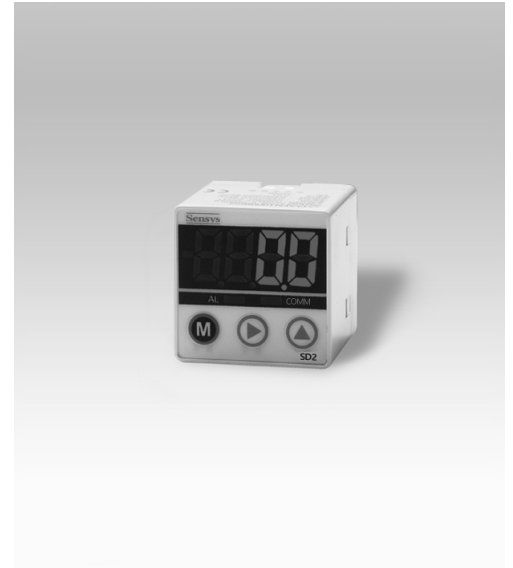
Compact Size(30X30mm) Digital Indicator

Description

SD2000 is a digital indicator with a compact size of 30X30mm. The display has a 4 digit LED. Analog input can be selected from 0~5Vdc, 1~5Vdc, 4~20mA with the front button. Digital output is RS485 MODBUS RTU. Alarm output is provided in 1-channel NPN open collector and PNP open collector types and can be selected when ordering.

Features

- ▶ Compact design(30mm×30mm)
- ▶ ±4Digit LED display
- ▶ Input Signal : 1~5, 0~5VDC, 4~20mA
- ▶ Digital Output : RS485 MODBUS RTU
- ▶ Switch Output : 1CH NPN or PNP open collector output
- ▶ 0.5%FS accuracy



Specifications

Model	SD2000	SD2100
Power	12~24VDC±10%(Ripple P-P Max. 10%) ¹⁾	
Power Consumption	max. 1.2W (max. 24VDC, 50mA) ²⁾	
Display	±9999(Red LED)	
Power for Sensor	12~24VDC±10%(max. 200mA) ³⁾	
Input Signal	V	0~5VDC, 1~5VDC (Input Impedance min. 1MΩ)
	mA	4~20mA (Input Impedance min. 250Ω ±1%)
Switch Output	1-Ch. NPN open collector output (max. 24VDC/100mA)	1-Ch. PNP open collector output (max. 24VDC/100mA)
Digital Output	RS485 MODBUS RTU	
Accuracy	±0.5%FS±1digit at 25°C	
Resolution	Input : 16bit	
Thermal Effect	±0.02%FS/°C	
Sampling Time	0.1~9.9 sec.	
Operating Temperature(Humidity)	-10~50°C (10~90%RH)	
Storage Temperature(Humidity)	-20~80°C (5~95%RH)	
Dimension	W30 X H30 X D33	

¹⁾ Protection circuit for connecting reverse input power.

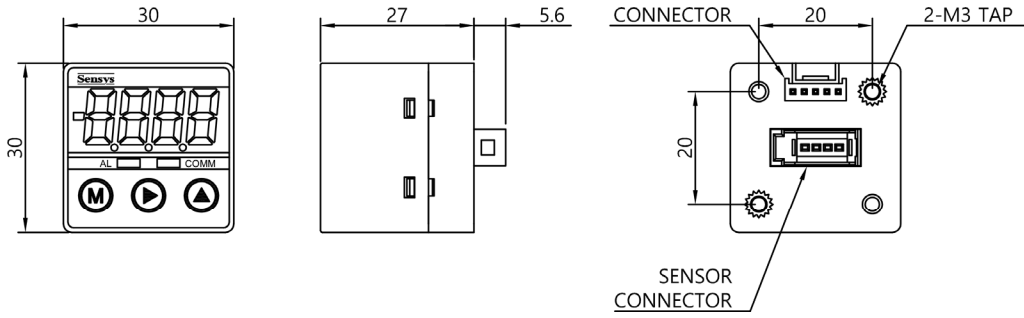
²⁾ This value excludes the power consumption of the sensor

³⁾ The sensor power supply is a ByPass circuit that uses the power input as it is.

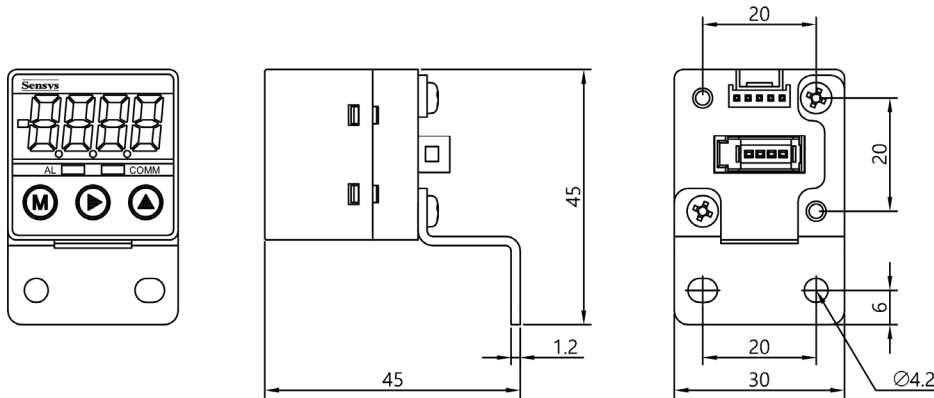
There is no separate reverse connection protection and short circuit protection circuit, so be careful when wiring.

Dimension

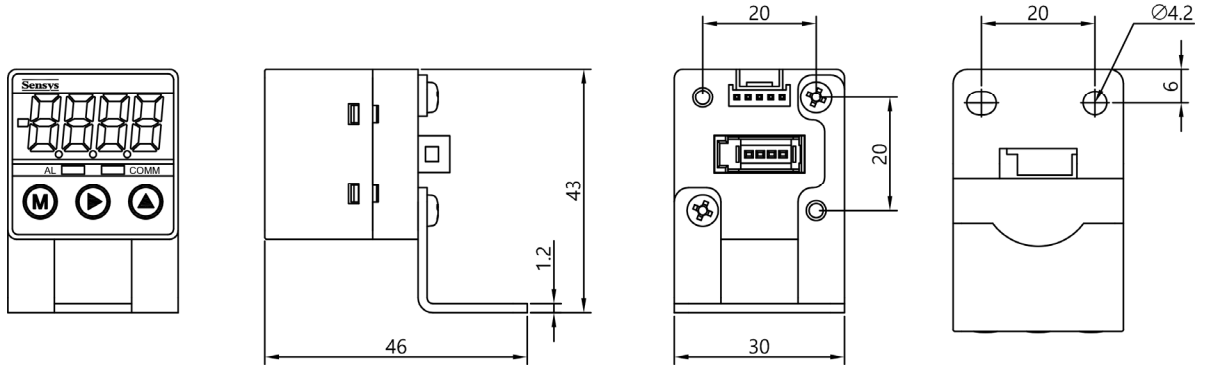
► Dimension



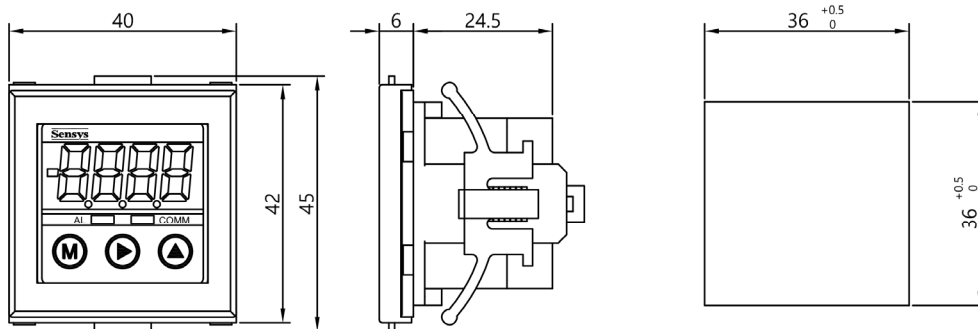
- Bracket A



- Bracket B

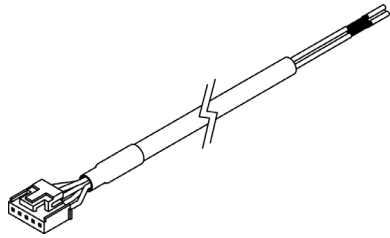


- Panel Mounting Bracket

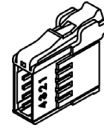


Panel Cut Size
(Panel Thickness 1~8mm)

▶ Accessory

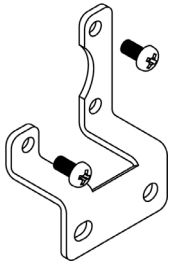


Connector Ass'y (Length : 2m)



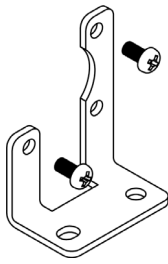
Sensor Connector(e-CON)

▶ Option



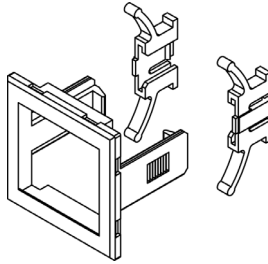
Bracket A

(O/C : SMA-O-A)



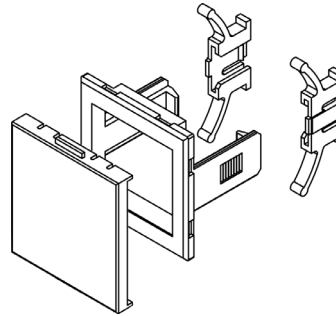
Bracket B

(O/C : SMA-O-B)



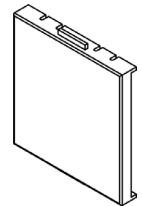
Panel Mounting Bracket Set

(O/C : SMA-O-C)



Panel Mounting Bracket Set + Front Protection Cover

(O/C : SMA-O-D)



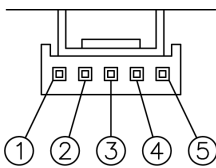
Front Protection Cover

(O/C : SMA-O-E)

*. O/C : Ordering Code

Connection

▶ Connector



Pin No.	Wire Color	Connections
1	Brown	Power+(12~24VDC)
2	Gray	485+
3	Black	485-
4	White	Alram
5	Blue	Com.

▶ Sensor Connector



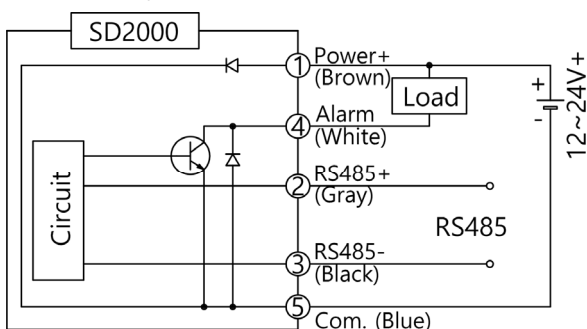
Pin No.	Input SignalSensor	
	3Wire 0~5Vdc 1~5Vdc 4~20mA	2Wire 4~20mA
1	Power+	+
2	Signal+(Only mA)	-
3	com.	X
4	Signal+(Only V)	X

Function

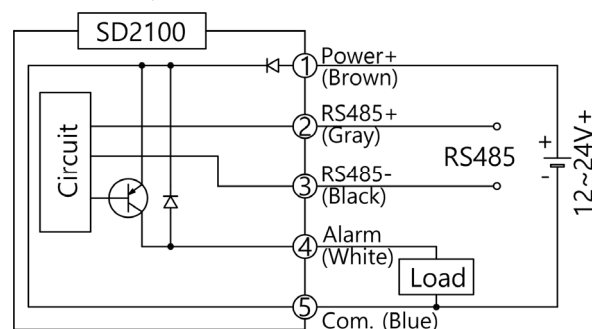
- ▶ Lock On/Off
- ▶ Zero-Adjustment
- ▶ Factory Reset
- ▶ Error Information
- ▶ Input Signal Control
- ▶ Response Time Control
- ▶ Display Scale Control
- ▶ Decimal Point Control
- ▶ Display Lower-Limit Control
- ▶ Alarm Contact N.O/N.C Setting
- ▶ Alarm HI/LOW/A/B Setting
- ▶ Peak Value View & Reset
- ▶ RS-485 Modbus RTU Communication

Internal Circuit Diagram

▶ NPN Type

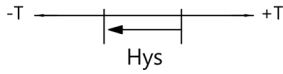
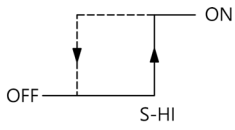


▶ PNP Type

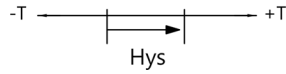
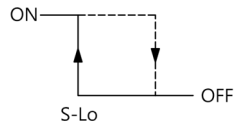


Alarm Mode

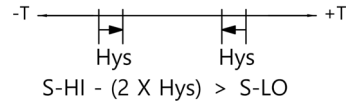
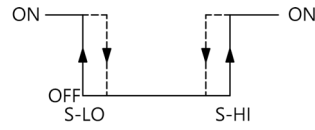
▶ Hi Mode



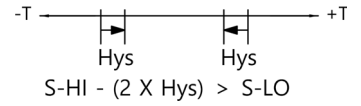
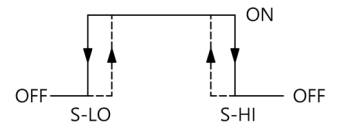
▶ Low Mode



▶ A Mode



▶ B Mode



Ordering Information

