

# SLIM TYPE TWO CHANNEL MICROPROCESS ANALOG SIGNAL INPUT MODULE

**MODEL  
SDMAI**



## FEATURES

- Accuracy 0.05% F.S.  $\pm 1$ digit
- Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Thermocouple/Load Cell/Resistor/etc...
- Programmable rate -19999~99999 digit
- Two channel input signal isolated output RS-485 for design
- Dielectric strength 1.5KVac/1min(input1/input2/output RS-485/power)
- Wide input range for auxiliary power
- Dimension small & High stability

1.MODEL:SDMAI-□ □ □ □

NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Transmitter	NO	Pt-100	NO	Load Cell	NO	Thermocouple	NO	Resistor	NO	Aux.Power
A	DC	11	0~50mV	21	0~99.999uA	41	DC4~20mA	54	-200~850°C	61	2mV/V	71	J(-200~760)°C	91	0~100 ohm(<10mA)	A	AC/DC18~60V
B	AC(RMS)	12	0~5V	22	0~999.99uA	42	DC1~5V	59	SPECIFIED	62	3mV/V	72	K(-200~1360)°C	93	0~1 Kohm(<1mA)	B	AC/DC90~260V
C	AC(TRMS)	13	0~10V	23	0~9.9999mA	43	DC4~20mA	•Three wire connection •Exciting current(<1.24mA) •Pt-100 & thermocouple is same input type		63	2mV/V	73	T(-200~395)°C	96	0~10 Kohm(<100uA)	•Less 4VA for AC/DC input •Input range(sensor current)	
D	Potentiometer	14	0~36V	24	0~99.999mA	44	DC1~5V			64	3mV/V	74	E(-185~990)°C	97	0~100 Kohm(<10uA)		
E	Transmitter	15	0~54V	25	0~999.99mA	49	SPECIFIED	•41/42 non-exciting DC24V •43/44 exciting DC24V (<25mA,only input 1)		69	SPECIFIED	75	R(0~1760)°C	99	SPECIFIED		
F	Pt-100(RTD)	16	0~110V	26	0~2.0000A	•61/62 Exciting DC5V(<50mA) •63/64 Exciting DC10V(<50mA) •Input 1/2 is non-isolating				76	S(0~1750)°C	•CJC traceability < $\pm 0.3^\circ\text{C}$ (0~70°C)					
G	Thermocouple	17	0~600V	27	0~5.0000A			77	B(200~1800)°C								
H	Load Cell	19	SPECIFIED	29	SPECIFIED												
R	Resistor																

## 2.SPECIFICATION

- Measuring accuracy (23 $\pm$ 5°C) :0.05% F.S.  $\pm 1$  digit  
0.1% F.S.  $\pm 1$  digit(Pt-100)  
0.2% F.S.  $\pm 1$  digit(AC(RMS))  
0.2% F.S.  $\pm 0.3^\circ\text{C}$  (CJC)(Thermocouple)
- Sampling time :16 cycles/sec.
- Readout range :-19999~99999 digit adjustable
- Input resistance :>1Mohm(<100V ranges)  
>2Mohm(>100V ranges)  
>5Mohm(>500V ranges)  
<0.2VA(Current ranges)
- Potentiometer exciting voltage:DC1.24V(<10mA)
- Load Cell exciting voltage :DC5V/10V(<50mA)
- Pt-100 exciting current :<1.25mA
- RS-485 address : "00"~"FF" (0~255)
- RS-485 baud rate :19200/9600/4800/2400 selective
- RS-485 protocol :Modbus RTU mode
- Temp. coefficient :50ppm/°C (0~50°C)
- Display :Red high efficiency LEDs high 6.8mm(0.268")
- Parameter setting :Touch switches
- Memory mode :Non-volatile E<sup>2</sup>PROM memory
- Isolation :Input1/Input2/RS-485/Power/Case
- Insulation Resistance :>100Mohm with 500VDC
- Dielectric strength :1.5KVac/1 min.(input1/input2/RS-485/power)  
1200Vdc(input/output)
- Operating condition :0~60°C (20 to 90% RH non-condensed)
- Storage condition :0~70°C (20 to 90% RH non-condensed)
- CE EMC Certification :EN 55022:1998/A1:2000 Class A  
EN 61000-3-2:2000  
EN 61000-3-3:1995/A1:2001  
EN55024:1998/A1:2001

## 3.OUTSIDE DIMENSION(unit=mm) AND CONNECTION DIAGRAM

