

# SLIM TYPE ANALOG ISOLATED TRANSMITTER & CONTROLLER METER RELAY

MODEL  
SMATR



## ■ FEATURES

- Accuracy 0.05% F.S. $\pm$ 1 digit
- Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Termocouple/Load Cell/Resistor/etc.....
- Programmable rate -19999~99999 digit
- Max. two alarm function (optional)
- 16 bit DAC analog output function (optional)
- Digit RS-485 interface function (optional)
- Wide input range for auxiliary power
- Dimension small & Higt stability

1.MODEL:SMATR - □ □□ - □ □ □ □

NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Load cell	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux.Power
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	61	2mV/V	0	None	0	None	N	None	A	AC/DC18~60V
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	62	3mV/V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC18~260V
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	63	2mV/V	2	Two	2	DC0~10V	Modbus mode 9 SPECIFIED	• Relay contact (AC250V-2.5A, DC30V-5A) • 61/62 Exciting DC5V(<50mA) • 63/64 Exciting DC10V(<50mA)	• When two-alarm output, only one analog output or another RS-485 output	• Less 4VA for AC/DC input
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	64	3mV/V	69 SPECIFIED	• Three wire connection • Exciting voltage DC2.5V(<10mA)	• 61/62 Exciting DC5V(<50mA) • 63/64 Exciting DC10V(<50mA)	• When analog & RS-485 output, only one alarm output	• When two-alarm output, only one analog output or another RS-485 output	• Less 4VA for AC/DC input		
E	Transmitter	15	0~54V	25	0~199.99mA	35	10~90%	69	SPECIFIED								
F	Pt-100(RTD)	16	0~110V	26	0~1.9999A	39	SPECIFIED	• 61/62 Exciting DC5V(<50mA) • 63/64 Exciting DC10V(<50mA)	• When analog & RS-485 output, only one alarm output	• When two-alarm output, only one analog output or another RS-485 output	• Less 4VA for AC/DC input						
G	Thermocouple	17	0~600V	27	0~5.000A												
H	Load Cell	19	SPECIFIED	29	SPECIFIED	• 61/62 Exciting DC5V(<50mA) • 63/64 Exciting DC10V(<50mA)	• When analog & RS-485 output, only one alarm output	• When two-alarm output, only one analog output or another RS-485 output	• Less 4VA for AC/DC input								
R	Resistor																

## 2.SPECIFICATION

- Measuring accuracy : 0.05% F.S. $\pm$ 1 digit  
(23 $\pm$ 5°C)  
0.2% F.S. $\pm$ 1 digit(AC(RMS))  
0.2% F.S. $\pm$ 0.5°C (CJC)(Thermocouple)
- Sampling time : 16 cycles/sec.
- Readout range : -19999~99999 digit adjustable
- Alarm delay time : 0~99.9 second adjustable
- Alarm action : HI or Lo adjustable
- Relay contact output : AC 250V-2.5A, DC 30V-5A
- Analog output resolution : 16 bit DAC
- Response time : < 250ms(0~90%)
- Output drive capability : < 10mA for voltage mode  
< 10V for current mode
- Output ripple (p-p) : < 0.1% F.S.
- RS-485 address : "01"~"FF"(0~255)
- RS-485 baud rate : 19200/9600/4800/2400 selective
- RS-485 protocol : Modbus RTU mode
- Temp. coefficient : 50ppm/ $^{\circ}$ C (0~50 $^{\circ}$ 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
- Dielectric strength : 2KVac/1 min. (input/output/power)  
1600 Vdc (input/output)
- Operating condition : 0~60 $^{\circ}$ C (20 to 90% RH non-condensed)
- Storage condition : 0~70 $^{\circ}$ 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  
EN 55024:1998/A1:2001

## 3. OUTSIDE DIMENSION AND CONNECTION DIAGRAM (Unit:mm)

