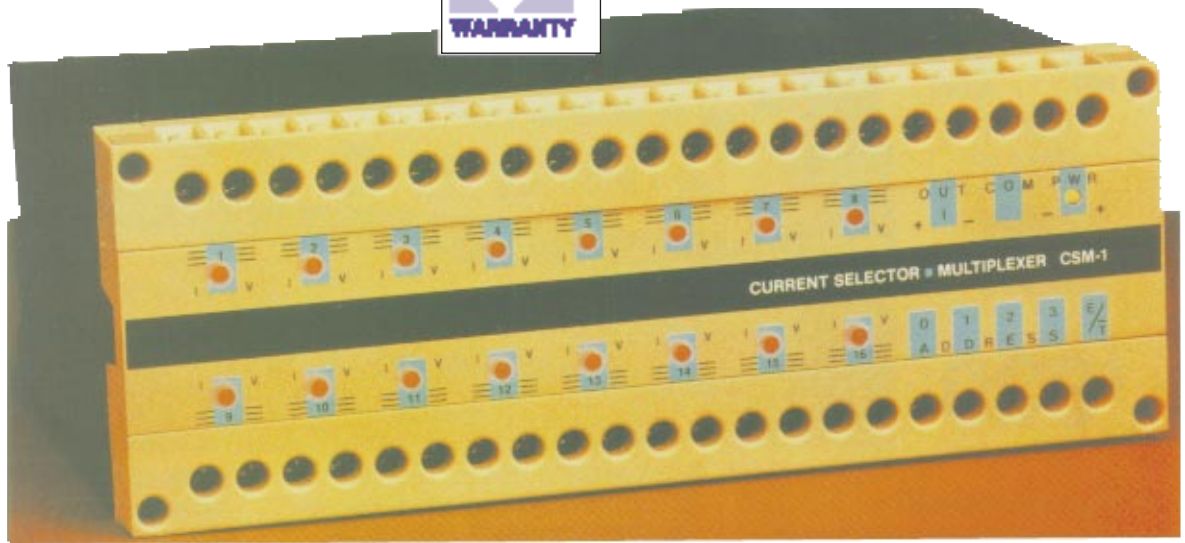


# DRA-RTM-8 16-Channel Analog Multiplexer



**\$900**



- ✓ **Eight 3-Wire 100 Ohm Platinum RTD Inputs**
- ✓ **Eight 4-20 mA Process Inputs**
- ✓ **All 16 Inputs are Multiplexed into a Single 4-20 mA Output**
- ✓ **100 Ohm Platinum Linearization and Lead Length Compensation for RTD Inputs**

The DRA-RTM-8 is a 16 channel analog multiplexer. Eight channels accept 3-wire 100 Ohm Pt RTD inputs, and the other eight channels accept 4-20 mA process inputs. All 16 inputs are multiplexed into a single 4-20 mA current loop output. The selection function is performed via four binary control lines generated by the host controller (PLC program).

Model DRA-RTM-8 is an all solid state unit that multiplexes the input channels at a switching time of less than 20 microseconds. Each of the RTD inputs is completely signal conditioned including a 6 dip-switch array for coarse channel ranging as well as zero and span trimmers on the front panel for fine ranging. Special attention is given to the lead length compensation parameter because, unlike ordinary transmitters, the DRA-RTM-8 could be mounted relatively far from the RTD sensors. The 4-20 mA output

from the DRA-RTM-8 is linearized to the RTD input.

The DRA-RTM-8's superb accuracy and simple operation make it a very attractive unit allowing tremendous cost savings by reducing the need for expensive PLC or data acquisition analog inputs.

## Specifications

### GENERAL

**Accuracy:**  $\pm 0.1\%$  of span max

**Switching Time:**  $< 20$  microseconds (resistive load)

**Indicators:** 8 red LEDs for current inputs, one yellow power on LED

**Supply Voltage:** 24 Vdc  $\pm 10\%$  regulated

**Operating Current Consumption:** 90 mA  $\pm 10$  mA

**Temperature Stability:**  $\pm 0.01\%$  of span/ $1^{\circ}\text{C}$

**Operating Ambient:** 0 to  $60^{\circ}\text{C}$  (32 to  $140^{\circ}\text{F}$ ), 5 to 95% RH noncondensing

**Storage Temperature:** -25 to  $85^{\circ}\text{C}$  (-13 to  $185^{\circ}\text{F}$ )

**Enclosure:** polycarbonate

**Mounting:** standard 35 mm DIN rail or wall mount

**Weight:** 0.9 kg (2.0 lb)

**Dimensions:** 73 H x 200 W x 121 mm D (2.88" x 7.88" x 4.76")

### RTD INPUTS

**RTD Inputs:** eight 3-wire 100  $\Omega$  Platinum,  $\alpha = 0.00385$

**Current Excitation:**  $< 1.1$  mA

**Zero:**  $-50$  to  $200^{\circ}\text{C}$  ( $-58$  to  $392^{\circ}\text{F}$ )

**Span:** 50 to  $750^{\circ}\text{C}$  (122 to  $1382^{\circ}\text{F}$ )

**Lead Compensation:** 0.025 $^{\circ}\text{C}/10$   $\Omega$  lead resistance max error

**Lead Resistance:** 60  $\Omega$  one way max

### PROCESS INPUTS

**Process Inputs:** eight, 4-20 mA/0-20 mA

**Input Current:** 30 mA max

**Reverse Polarity Protection:** yes

### CONTROL INPUTS

**Digital Inputs:** 4 address, 1 enable/self-test

**Logic:** true high or true low (user selectable)

**Digital Logic Levels:**  $V_{in}$  "low"  $< 0.5V$   $5V < V_{in}$  "high"  $< 60V$

### OUTPUT

**Analog Output:** selected, 4-20 mA current loop

To Order (Specify Model Number)		
Model No.	Price	Description
DRA-RTM-8	\$900	Analog multiplexer
DRN-PS-750	130	Power supply, 115/230 Vac input, 24 Vdc @ 750 mA output

Comes with complete operator's manual.

**Ordering Example:** DRA-RTM-8 analog multiplexer with DRN-PS-750 power supply, \$900 + 130 = \$1030.