SIGNAL CONDITIONERS

Current Multiplexer

DRA-CSM-1





- Multiplexes Sixteen 4 to 20 mA Inputs Into One 4 to 20 mA Output
- ✓ ±0.01% Accuracy
- Channel Selection Controlled by 4 Discrete Inputs
- Solid-State Technology
- Economical PLC Upgrade

The DRA-CSM-1 Current Multiplexer is a solid state multiplexer capable of transferring the selected 4-20 mA input current signal to the output terminals in less than 10 microseconds at an accuracy better than 0.01%. The DRA-CSM-1 is typically controlled by a PLC thereby obtaining full data synchronization.

The DRA-CSM-1 is provided with a unit enable/disable control line which enables the parallel connection of several multiplexers to the same controller input. The period during which the unit is disabled is used for self-testing according to a self-test procedure which checks the unit's hardware.

Model DRA-CSM-1 is powered by an external DC power supply. Each two-wire 4-20 mA transmitter is connected to the input terminals. Each channel provides a current limited voltage supply for the connected two-wire transmitter. The channel selected by the multiplexer is directed to the control device's (e.g., PLC's) analog inputs. Power is maintained by the multiplexer to the unselected channels thereby maintaining uninterrupted transmitter current flow. Each 4-20 mA input channel on the multiplexer has its own red LED status light which illuminates on presence of current in the loop.

Specifications

Analog Inputs: 16, 4-20 mA current loops Digital Inputs: 4 address, 1 enable/ self-test Logic: true low (user selectable) Digital Levels: "0" < 0.4V, 5V < "1" < 60V Analog Output: selected, 4-20 mA current loop Accuracy: ±0.01% of span (for full temp range) Switching Time: 10 microseconds (resistive load) Current Leakage: unmeasurable when disabled Addition to Loop Resistance: 350 ohm max **Transmitter Current Limitation:** 40 ±2mA Indicators: 16 red LEDs for current inputs, one yellow power on LED Supply Voltage: 15-40 Vdc **Operating Current Consumption:** 12 mA max (not including transmitter currents) Self-Test Current Consumption: 120 mA peak (not including transmitter currents) Mounting: standard 35mm DIN rail or wall mount Operating Ambient: 32 to 158°F (0 to 70°C), 5 to 95% RH noncondensing Storage Temperature: -25 to 85°C (-13 to 185°F) Weight: 0.6 kg (1.3 lb) Dimensions: 73 H x 200 W x 121 mm D (2.88 x 7.88 x 4.76")

A/OUT

A/IN

To Order	
Model No.	Description
DRA-CSM-1	Current multiplexer
DRN-PS-1000	Power supply, 95-240 Vac input, 24 Vdc @1A output
Comes with complete operator's manual.	
Ordering Example: DRA-CSM-1 current multiplexer with DRN-PS-1000 power supply.	

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