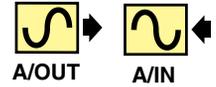


# SIGNAL CONDITIONERS

## Analog Multiplexer/Demultiplexer System



### DRA-MDM-11



- ✔ Transfer up to Sixteen 4 to 20 mA Process Current Loop Signals Accurately Via a Single Pair of Wires
- ✔ Saves Cable and Installation Costs
- ✔ ± 0.1% Accuracy
- ✔ Failure Alarm
- ✔ Solid-State Technology



The DRA-MDM-11 is a mux/demux system which transfers analog information accurately via a single pair of wires. The multiplexer unit (DRA-M-11) accepts up to sixteen 4 to 20 mA process current inputs. The multiplexed inputs are transferred to the demultiplexer unit (DRA-DM-11) at a scan rate of up to 1000 channels/sec up to a distance of 2 kilometers (1.2 miles).

At the demultiplexer the current outputs are reproduced in the same order and magnitude as the inputs. The demultiplexer is provided with an alarm (flashing LED and dry contact output) which is operated whenever there is any interruption in communication due to mux failure, cable discontinuity or short-circuit. Use of the DRA-MDM-11 mux/demux system enables a considerable reduction in cabling costs for a new installation or considerable expansion of analog data transfer capability in an existing installation.

#### MECHANICAL (TYPICAL FOR DRA-M-11 MULTIPLEXER & DRA-DM-11 DEMULTIPLEXER)

**Enclosure:** Polycarbonate  
**Mounting:** Standard 35 mm DIN rail or wall mount  
**Weight:** 0.7 kg (1.5 lb)  
**Dimensions:** 73 x 200 x 121 mm (2.88 x 7.88 x 4.76")  
**DRA-M-11 MULTIPLEXER**  
**Inputs:** Sixteen, 4 to 20 mA process current  
**Addition to Loop Resistance:** 360 Ω  
**V - Transmitter Supply:**  $V_{supply} - 1$  Vdc  
**Output:** multiplexed current loop  
**Scan Rate:** 250, 500, 1000 channels/sec (selectable) for distance of 2000, 1000 and 500 meters respectively  
**Supply Voltage:** 24 Vdc ±10% regulated  
**Indicators:** 16 red LEDs for current inputs, one yellow power on LED  
**Current Consumption:** 20 mA max

#### DRA-DM-11 DEMULTIPLEXER

**Input:** multiplexed current loop  
**Analog Outputs:** Sixteen, 4 to 20 mA continuous current loops  
**Alarm Output:** Dry contact (closed on alarm), rated 1A @ 230 Vac  
**Scan Rate:** 250, 500, 1000 channels/sec (selectable) for distance of 2000, 1000 and 500 meters respectively  
**Indicators:** 16 red LEDs for output currents, one yellow power on LED, one red alarm LED  
**Current Consumption:** 500 mA max (including output currents)  
**Supply Voltage:** 24 Vdc ±10% regulated

### Specifications

#### DRA-MDM-11 MUX/DEMUX SYSTEM

**Accuracy:** ±0.1% of span typical; ±0.25% of span max

**Communications Cable:** 2 wire

**Operating Ambient:** 0 to 70°C (32 to 158°F) 5 to 95% RH, noncondensing

**Storage Temperature:** -25 to 85°C (-13 to 185°F)

### To Order

Model No.	Description
DRA-MDM-11	Analog multiplexer/demultiplexer system
DRN-PS-1000	Power supply, 95-240 Vac input, 24 Vdc @ 1A output

Comes with complete operator's manual. Includes both DRA-M-11 multiplexer and DRA-DM-11 demultiplexer.

**Ordering Example:** DRA-MDM-11 multiplexer/demultiplexer system with two DRN-PS-1000 power supplies.