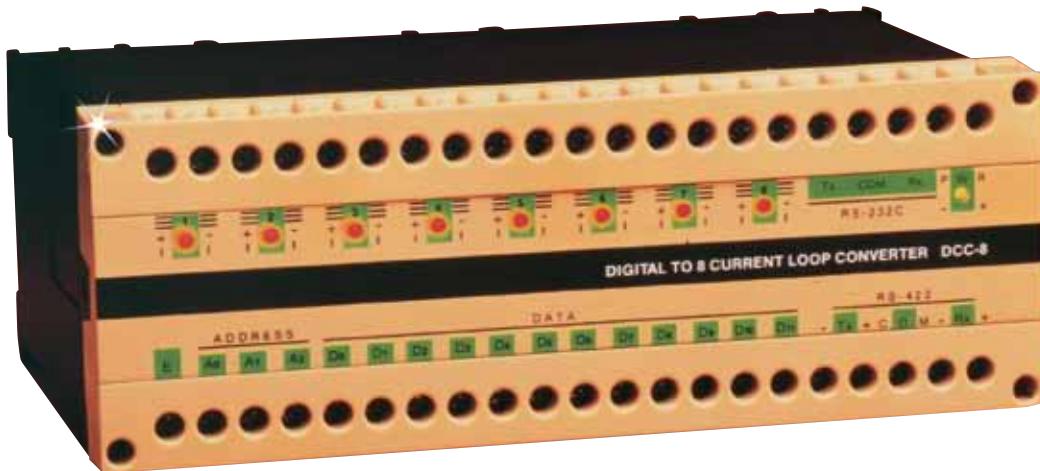


SIGNAL CONDITIONERS

Digital to 8 Current Loop Converter



DRA-DCC-8



- ✓ Parallel/Serial Communications Ports
- ✓ ±0.1% Accuracy
- ✓ 12 Bit Resolution
- ✓ Solid-State Technology

The DRA-DCC-8 is a microprocessor-based unit which converts digital data into eight continuous analog current loops. The processor controls the digital input, handles the active memory of the unit and updates the current outputs. For digital input range of 000 HEX to FFF HEX, the unit provides two user selected output current spans of either 4 to 20 mA or 0 to 20 mA.

One parallel and two serial ports are available. The parallel input port receives an asynchronous 15 bit bus composed of a 3 bit output channel address and 12 bits of data representing the output current value. DRA-DCC-8 units can be connected in parallel to the input bus and selected by controlling the Enable (E) input terminal. The unit's controller continuously scans the input data field and compares it to the previously stored data. When new data is encountered, the old data is replaced and the proper output current is updated.

The DRA-DCC-8 provides both RS-232C and RS-422 full duplex serial communications ports. The RS-422 serial communications port enables use of up to eight DRA-DCC-8 units in a multi-drop configuration. A set of seven internal DIP switches enables parameters such as baud rate, unit identity code, digital input mode (parallel or serial) and output current span (4 to 20 mA or 0 to 20 mA) to be set by the user.

DRA-DCC-8 shown smaller than actual size.

Specifications

GENERAL

Accuracy: ±0.1% of span typical; ±0.2% of span max

Resolution: ±0.025% of span typical; ±0.05% of span max

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

Supply Voltage: 15 to 32 Vdc regulated

Operating Current Consumption: 85 mA max (not including output currents)

Maximum Loop Resistance: $R_{max} (\text{Ohms}) = (V_{supply} - 6)/.02$

Operating Ambient: 0 to 55°C (32 to 131°F), 5 to 95% RH noncondensing

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

Enclosure: polycarbonate

Mounting: standard 35 mm DIN rail or wall mount

Weight: 0.7 kg (1.5 lb)

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

PARALLEL INPUT

Parallel Input: 3 - Output current loop address (ADDRESS); 12 - Output current value (DATA); 1 - Enable (E)

Logic Levels: 0 < "0" < 0.5 V; 4 < "1" < 60V

Input Data Holding Time: 150 microseconds

Maximum Parallel Input Rate: 6000 updates per second

SERIAL INPUT

Serial Communications: RS-232C/RS-422 full duplex

Baud Rates: 2400, 4800, 9600, 19200 baud

Parity: even

Stop Bits: one

Echo Back: after each channel block transfer

Status Report: unit reports status on request

Multi-Drop Capability: up to 8 units on RS-422

OUTPUTS

Outputs: 8 continuous current loops

Output Current Span: 0 to 20 mA or 4 to 20 mA user selected

Output Current Settling Time: 4.2 millisecond max for 99.3% of step



OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.

To Order

Model No.	Description
DRA-DCC-8	Digital to 8 current loop converter
DRN-PS-1000	Power supply, 95 to 240 Vac input, 24 Vdc @ 1A output

Comes with complete operators manual.

Ordering Example: DRA-DCC-8 digital to 8 current loop converter with DRN-PS-1000 power supply.