



DRA-DCC-8 Digital to 8 Current Loop Converter



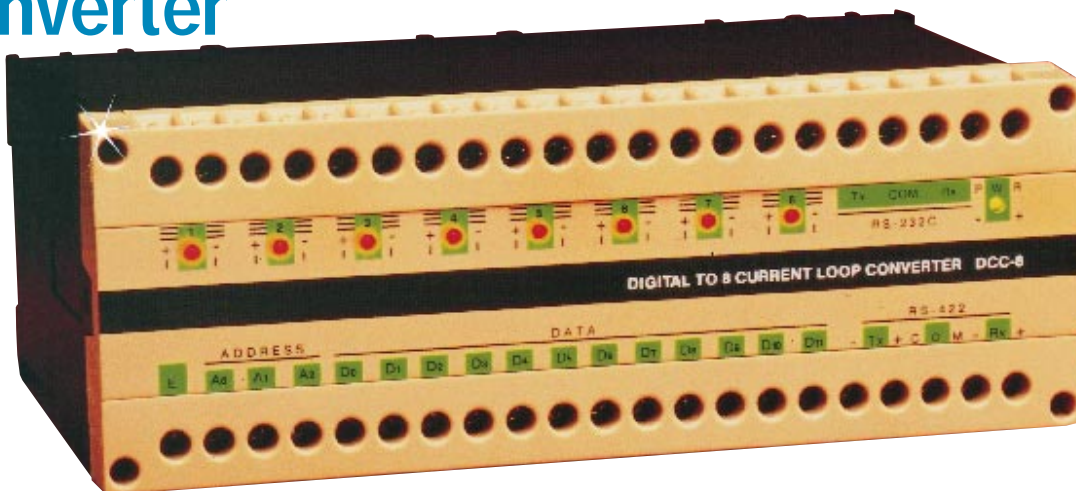
D/I/O



A/O/UT



SERIAL I/O



\$820

- ✓ 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 (4-20 mA or 0-20 mA) to be set by the user.

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" < 0.5V; 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

To Order (Specify Model Number)

Model No.	Price	Description
DRA-DCC-8	\$820	Digital to 8 current loop converter
DRN-PS-1000	150	Power supply, 95-240 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, \$820 + 150 = \$970



UNITED STATES

www.omega.com
1-800-TC-OMEGA
Stamford, CT.

CANADA

www.omega.ca
Laval(Quebec)
1-800-TC-OMEGA

GERMANY

www.omega.de
Deckenpfronn, Germany
0800-8266342

UNITED KINGDOM

www.omega.co.uk
Manchester, England
0800-488-488

FRANCE

www.omega.fr
Guyancourt, France
088-466-342

CZECH REPUBLIC

www.omegaeng.cz
Karviná, Czech Republic
596-311-899

BENELUX

www.omega.nl
Amstelveen, NL
0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters