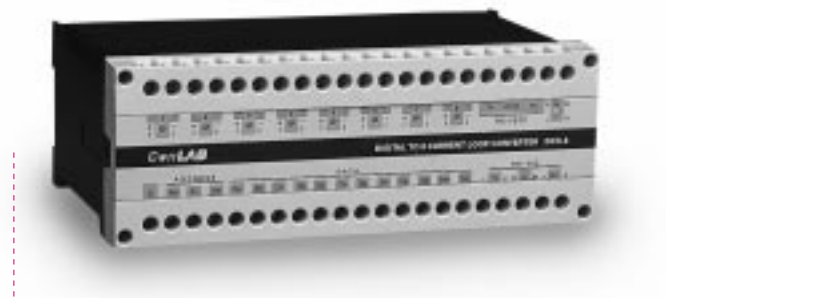


# DIGITAL TO EIGHT CURRENT LOOP CONVERTER

DCC-8

- 8 CURRENT OUTPUTS
- 12 BIT RESOLUTION
- ACCURACY OF 0.1%
- PARALLEL & SERIAL COMMUNICATION PORTS
- PLC ENHANCEMENT
- SAVINGS IN PLC's ANALOG OUTPUTS
- LOW COST
- 3-YEAR WARRANTY



The DCC-8 is a micro-processor based unit which converts digital data into eight continuous analog current loops. The processor controls the digital input, handles the unit's active memory and updates the current outputs.

The DCC-8 was designed to enhance small PLC units which are limited in its analog outputs capability.

The unit provides two user selectable output current spans of 0-20mA or 4-20mA in 12 bits resolution.

One parallel and two serial ports are available. The parallel input port receives an asynchronous 15 bit bus, composed of three bits - output channel designation address and twelve bit - output channel current value data.

The DCC-8 can be synchronously controlled by using the Enable terminal as a strobe input or by leaving

it in the Enable state for continuous asynchronous operation. In this state the digital inputs are continuously monitored and compared to the previous stored value. When new data is encountered, the old data is replaced and the proper output is updated.

The DCC-8 unit provides both RS-232c and RS-422 full duplex serial communication ports. The RS-422 serial communication port enables use of up to eight DCC-8 units in a multi-drop configuration.

A DIP switch array enables parameters such as baud rate, unit ID, digital control mode (serial or parallel) and output span (0-20mA or 4-20 mA) to be configured by the user.

The unit is housed on a polycarbonate plastic enclosure mounted on a standard DIN rail.

# SPECIFICATIONS

# DCC-8

### PARALLEL INPUTS

3 address bits  
 12 data bits  
 1 Enable

### LOGIC LEVELS:

"Low" < 0.4V  
 5< "High" < 40 V  
**Data hold-time:** > 150 microseconds  
**Maximum input rate:** 6000 updates/second

### SERIAL COMMUNICATION:

RS-232c full duplex  
 RS-422 full duplex

### BAUD RATES:

19200, 9600, 4800, 2400 baud  
 Parity: Even  
 Stop bits: One

### MULTI-DROP CAPABILITY:

### OUTPUTS:

8 Continuous current loops  
 0-20 mA or 4-20 mA (user selectable)

**OUTPUT SETTLING TIME:**  
 4.2 mSec. maximum for 99.3% step

**MAXIMUM LOOP RESISTANCE:**  
 According to  $R_{max}(\Omega) = (V_{supply} - 6) / 0.02$

**ACCURACY:** ±0.1% of span (±0.2% maximum)

**RESOLUTION:** ±0.025% of span

**POWER SUPPLY:**  
 15-32 Vdc (reverse polarity protected)

**POWER CONSUMPTION:** <90 mA

**INDICATORS:**  
 Power "ON" yellow LED  
 8 Output channel red LEDs

**AMBIENT TEMPERATURE:**  
 Operation: - 10 to 60°C  
 Storage: -25 to 85°C

**HUMIDITY:** 5 to 95% relative, non condensed

**FUSE:** 0.63A, 5/20 mm fast blow

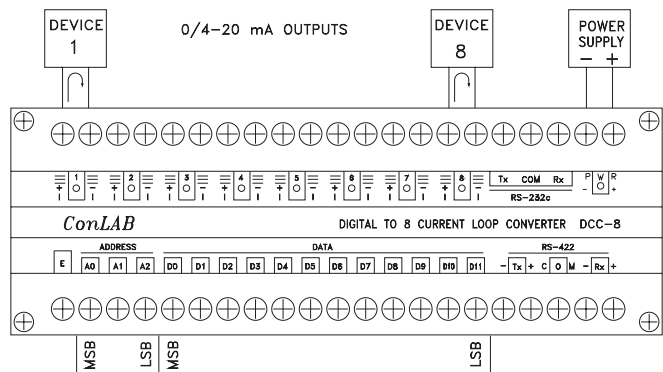
**HOUSING:** Plastic, Polycarbonate

**PROTECTION LEVEL:**  
 Box: According to IP-50 DIN 40050  
 Terminals: According to IP-20 DIN 40050

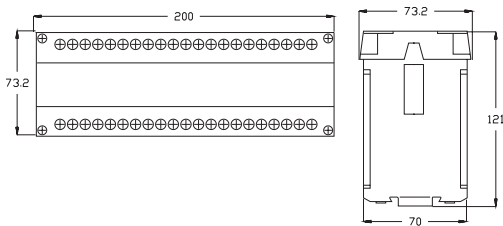
**MOUNTING:** Standard DIN rail

**WEIGHT:** 0.7 Kg

### Connection Diagram



Dimensions (mm)



data subject to change without notice

