

CDN067

DeviceNet 422/485 Gateway

Features

- Fully isolated RS422/485 serial channel
- Powered from DeviceNet 11-28 Vdc power
- Rotary MacId and Baud rate switches
- Rotary Serial Channel Baud Rate switch
- 2 Bi-color LED's for DeviceNet status
- 2 Bi-color LED's for serial channel status
- 64 bytes FIFO's flow control



Description

The CDN067 is a compact RS232 to DeviceNet serial gateway. The unit is housed in a 2 ½ X 3 ¼ plastic housing with mounting tabs. A 5 pin micro connector provides the DeviceNet interface and a 9 pin D connector provides the RS232 interface. The RS232 serial channel is fully isolated from the DeviceNet power.

The CDN067 may be used to interface peripheral devices to a DeviceNet system. The RS433/485 serial stream is internally buffered, allowing a DeviceNet Master node to send and receive data using standard POLL or EXPLICIT messaging

The DeviceNet power is conditioned by a loss-of-ground protection circuit and applied to a non-isolated DC-DC converter to provide 5 volts @ 250 mA. A Newport NML0505S isolated DC-DC converter to provide power to the RS232 components.

DeviceNet Model

CDN067 provides a fully buffered serial interface between DeviceNet and peripheral devices. Internal FIFOs buffers up to 64 bytes of receive and transmit data, easing the interface to slower RS422/485 based devices. Hardware or software flow control is supported. The DeviceNet object description may be found in the CDN067 DeviceNet Specification manual.

<u>Characteristic</u>	<u>Description</u>
Serial Interface	RS422/485 150-19.2 Kbaud
Can Interface	ISO 11898
Power(RS232)	Optically isolated
Bus Power	11-28vdc @50 mA

DeviceNet Connector(5 pin MALE micro)

<u>PIN</u>	<u>Function</u>
1	Drain
2	Bus +
3	Bus -
4	CAN H
5	CAN L

RS422(485)Connector (DB-9 Male)

<u>PIN</u>	<u>Function</u>
1	RxA (485 A)
2	RxB (485 B)
3	Terminate Rx (connect to 2)
4	Mode Select (connect to 5)
5	Mode Select (connect to 4)
6	TxA
7	TxB
8	Clear to Send
9	Terminate Rx (connect to 7)

DeviceNet Interface

Power Requirements	11-28vdc @ 50mA
Loss of Ground	Yes
Reverse Polarity	-30 VDC
Signal Levels	ISO11598

RS422

Isolation	500 Volts
ESD Protection	+/-10 kv
Overload Protection	+/-30 Volt
Short Circuit	Indefinite
Output levels	
Data size	8/7 bits (software config.)
Parity	Even/Odd/None
Stop bits	1/2 (software configurable)
Data Rate	300,1220,2400,4800,9600, 19.2 (software selected)
Flow Control	None. X-ON/ X-OFF

Environmental

Temperature	0-70 °C
Size	3.25 X 2.37 X 1.08
Mounting	½ inch tab, 3/16 diameter Mtg Hole
Encapsulation	RTV Silicon Compound

Serial Stream Instance 1 Attributes

Attribute	Access	Name	Type
3	Get	Receive Data	See Notes
4	Set	Transmit Data	See Notes
5	Get/Set	Status	USINT
6	Get/Set	Baud Rate	USINT
7	Get/Set	Parity	USINT
8	Get	Data Size	USINT
9	Get	Stop Bits	USINT
10	Get/Set	Flow Control	USINT
11	Get/Set	Receive Count	USINT
12	Get/Set	Transmit Count	USINT
13	Get/Set	Max. Receive	USINT
14	Get/Set	Data Format	USINT
15	Get/Set	Block Mode	USINT
16	Get/Set	Receive Delimiter	USINT
17	Get/Set	Pad Char	CHAR
18	Get/Set	Max. Trasmit	USINT
19	Get/Set	Idle String	Short String
20	Get/Set	Fault String	Short String
21	Get/Set	Status Enable	USINT
22	Get/Set	Status Clr.Enable	USINT

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** See Notes = DeviceNet Specifications

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