



Control &

# Type CDN367

## DEVICENET™ SERIAL GATEWAY

The CDN367 is a compact RS422/485 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 RS422/485 interface. The DeviceNet channel is fully isolated from the supplied power.

The CDN367 may be used to interface peripheral devices to a DeviceNet system. The RS422/485 serial stream is internally buffered, allowing a Master node to send and receive data using standard DeviceNet messaging.

The power is conditioned by a loss-of-ground protection circuit and applied to a non-isolated DC-DC converter to provide 5 volts @ 500 mA. A Newport NML0505S isolated DC-DC converter to provide power to the DeviceNet channel.

### DeviceNet™ Model

CDN367 provides a fully buffered serial interface between DeviceNet and peripheral devices. Internal FIFO's, buffer up to 256 bytes of receive and transmit data, easing the interface to slower RS422/485 based devices. Hardware or software flow control is supported.

### Features & Benefits

- Fully isolated DeviceNet channel
- Powered from 11-28 Vdc power
- Rotary MacId and Baud Rate switches
- 2 BI-color LED's for Module status
- 2 BI-color LED's for serial channel status
- Selectable Serial Baud Rate (300-57,600 kbaud)

DeviceNet Connector (5 pin MALE micro connector)		RS422 Connector (DB-9 Male)		RS485 Connector (DB-9 Male)	
Pin	Function	Pin	Function	Pin	Function
1	Drain	1	RxB	1	RS485 B Signal
2	BUS +	2	RxA	2	RS485 A Signal
3	BUS -	3	Terminating Res. 120	3	Rx Terminating Res. 120
4	CAN H	4	Loop interface, connect to pin 5	4 to 8	Do not connect
5	CAN L	5	Loop interface, connect to pin 4	9	Repeater Control, Active Low Rx
		6	6 TxB		
		7	7 TxA		
		8	8 Tx Terminating Res. 120		
		9	9 No connect		

PinOuts



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# Specifications and Ordering Information

## DeviceNet Interface

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

## RS422/RS485

Isolation	500 Volts
ESD Protection	+/-10 kv
Overload Protection	+/-30 Volt
Short Circuit	Indefinite
Data Size	8/7 bits (software config.)
Parity	Even/Odd/None
Stop Bits	1/2 (software configurable)
Data Rate	300,1200,2400,4800,9600, 19.2, 38.4, 57.6
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

## Ordering Code Example: CDN367

Types CDN367	Code	Configuration
Type CDN367 DeviceNet Serial Gateway	CDN367	CDN367

## Serial Stream Instance 1 Attributes

Attribute	Access	Name	Type
3	Get/Set	Baud Rate	UDINT
4	Get/Set	Data Bits	USINT
5	Get/Set	Parity	USINT
6	Get/Set	Stop Bits	USINT
7	Get/Set	Flow Control	USINT
10	Get/Set	Delimiter Mode	USINT
11	Get/Set	Pre-Delimiter List	SHORT_STRING
12	Get/Set	Post-Delimiter List	SHORT_STRING
13	Get/Set	Packet Length	USINT
14	Get/Set	Packet Timeout	USINT

## Serial Stream Transmit Instance Attributes

Attribute	Access	Name	Type
3	Get/Set	Transmit Data	Settable
4	Get/Set	Transmit Toggle	BOOL
5	Get	Transmit Acknowledge	BOOL
6	Get/Set	Mode	USINT
7	Get/Set	String 1	SHORT_STRING
8	Get/Set	String 2	SHORT_STRING
9	Get/Set	Data Type	USINT
10	Get/Set	Data Size	USINT
11	Get/Set	Width	USINT
12	Get/Set	Precision	USINT
13	Get/Set	Conversion	USINT
15	Get/Set	Data In Poll Command	BOOL

## Serial Stream Receive Instance Attributes

Attribute	Access	Name	Type
3	Get/Set	Receive Data	Settable
4	Get	Receive Toggle	BOOL
5	Get/Set	Receive Acknowledge	BOOL
6	Get/Set	Mode	USINT
7	Get/Set	Pre-String	SHORT_STRING
8	Get/Set	Post-String	SHORT_STRING
9	Get/Set	Data Type	USINT
10	Get/Set	Data Size	USINT
11	Get/Set	Width	USINT
13	Get/Set	Conversion	USINT
15	Get/Set	Data in Poll Response	BOOL
16	Get/Set	Enable	BOOL
17	Get/Set	Sync Enabled	BOOL



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