

Product End of Life Notification

Date: December 22nd, 2011

Product Being Discontinued

Model Number	Description
232PCLIN	IND RS232 TO CL CONV

Replacement Product

Model Number	Description
232CLDR	CONV DIN RAIL W/LEDS

Orders will be accepted and shipped until the following dates

Last Time Buy:	April 1 st , 2012
Last Time Ship:	April 30 th , 2012

The replacement product is not an exact match. Please refer to the attached documentation for differences.

Contact us immediately if you have any special needs for this product or have any other concerns.

Thank You,

Brian Foster, Product Manager
bfoster@bb-elec.com

232CLDR

Isolated RS-232 to Current Loop Converter

- ✓ **Converts RS-232 to 20mA Current Loop**
- ✓ **2000V Optical Isolation**
- ✓ **One Transmit & One Receive Current Loop**
- ✓ **Current Loops can be set to Active or Passive**
- ✓ **-40 to 80°C Operating Temperature**



The 232CLDR is a DIN Rail mountable RS-232 to Current Loop Converter. It has one optically isolated 20 mA transmit loop and one optically isolated receive loop. Each loop can be set to either "Active" or "Passive." When set to "Active" an isolated 20 mA current is supplied for each loop (transmit and receive). One 10 to 30 VDC power supply provides power to the converter and both current loops.

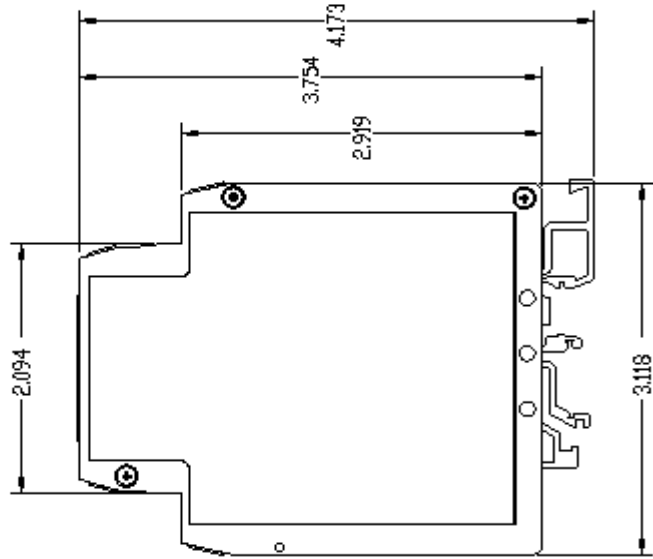
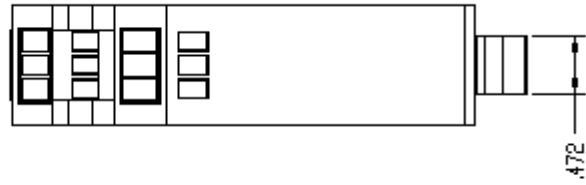
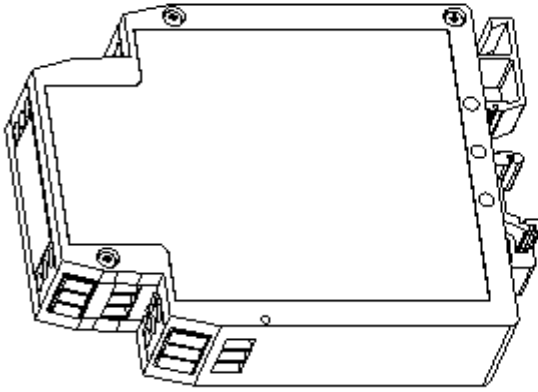
The 232CLDR communicates at baud rates up to 19.2 kbps and can extend communications up to 2000 feet (600 meters). 2000V Optical Isolation protects equipment from damaging ground loops and surges. Two LED's indicate data flow. Connections are made to a terminal block.

Specifications

RS-232	
Connector	Terminal Block
Signals	TD, RD, GND
Current Loop	
Signals	T+, T-, R+, R-, GND
Isolation	
Method	Optical
Rating	2000 V
Power	
Connector	Terminal Block
Voltage	10 to 30 VDC
Power Consumption	2.5 W
Source	External
Terminal Blocks	
Wire Size	24 to 14 AWG
Torque	4 kgf-cm
LED Indicators	
2 DATA LEDs (RED)	Data LEDs for RS-232 & Current Loop flash when data transmitted
Enclosure	
Material	Plastic
IP Rating	20
Dimensions	1.0 x 3.1 x 3.7 in (2.5 x 7.9 x 9.5 cm)
Mounting	35 mm DIN (Panel Mount Adapter is available)
Environmental	
Operating Temperature	-40 to 80 C (-40 to 176 F)
Storage Temperature	-40 to 85 C (-40 to 185 F)
Operating Humidity	0 to 95% Non-condensing
MTBF	401834 hours
MTBF Calculation Method	MIL217F Parts Count Reliability
Agency Approvals	
	CE, FCC cULus Recognized, File E222870
Ordering Information	
Model Number	232CLDR
Power Supply	An external source is required. MDR-20-24 Recommended
Panel Mount Adapter	DRPM25

PRODUCT INFORMATION

B&B ELECTRONICS



Quick Start Guide

232CLDR

Optically Isolated RS-232 to Current Loop Converter



1. Required Hardware

- ❑ 232CLDR Optically Isolated RS-232 to Current Loop Converter
- ❑ This Quick Start Guide
- ❑ Additional Items Required but not included
 - Power Supply (10 to 30 VDC, 2.5 W)
 - Cabling

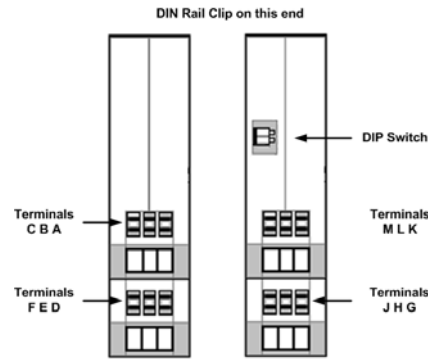
2. UL Installation Information

Underwriters Laboratories Conditions of Acceptability – When installed in the end-use equipment, consideration should be given to the following:

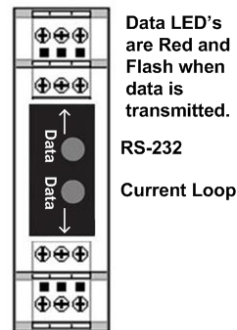
1. The wiring terminals are suitable for factory wiring only.
2. This device is to be mounted in a suitable enclosure in the end-product.
3. This device is suitable for operation at a maximum surrounding air temperature as described in the documentation.
4. These devices are intended for use in a pollution degree 2 environment.

- Input Voltage: 10 – 30 VDC
- Input Power: 2.5 Watts
- Wire Range: 12 – 24 AWG
- Tightening Torque: 4 kgf-cm
- Temperature rating of field installed conductors is 105 C minimum, sized for 60 C ampacity.
- Use copper wire only
- Maximum surrounding ambient air temperature 80 C.

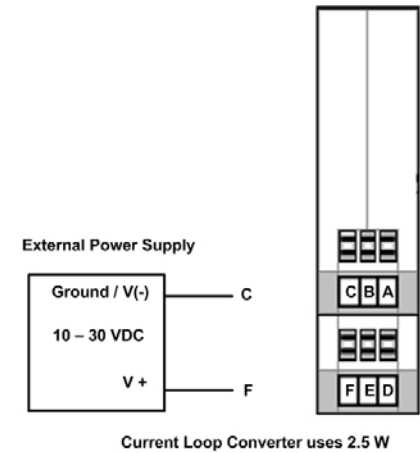
3. Information – Connectors & Indicators



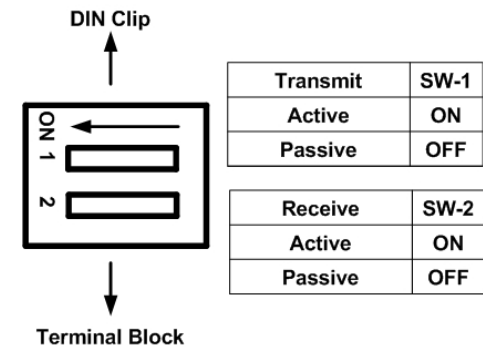
Terminal Block	Signal
A	RS-232 RD (Output)
B	Not Used
C	Ground
D	RS-232 TD (Input)
E	Not Used
F	+10 to 30 VDC
G	T(-)
H	T(+)
J	Current Ground
K	R(-)
L	R(+)
M	Current Ground



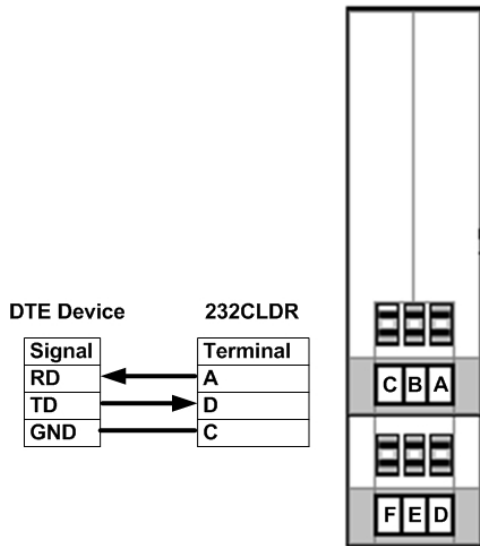
4. Power Connection



5. DIP Switch



6. RS-232 Connections



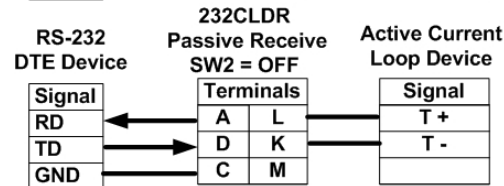
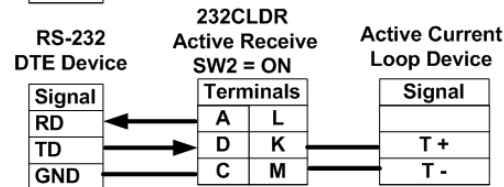
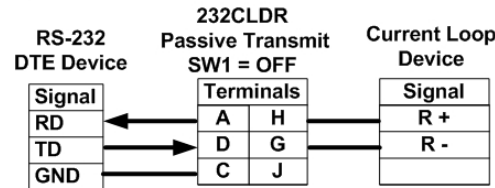
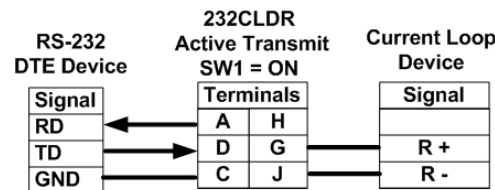
7. Current Loop Connections

1. The 232CLDR has one optically isolated 20 mA transmit loop and one optically isolated 20 mA receive loop. Each loop can be set to either "Active" or "Passive". When set to "Active" an isolated 20 mA current is supplied for each loop (transmit and receive). The same power supply provides power to the converter and both current loops.
2. The 232CLDR can communicate at baud rates up to 19.2 kbps and distances up to 2000 ft (600 m).

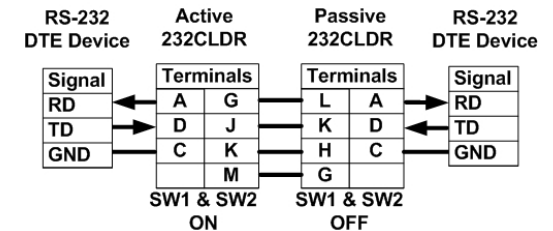
232CLDR Terminals			
Transmit	H	G	J
Active	N/C	Connect to R+	Connect to R-
Passive	Connect to R+	Connect to R-	N/C

232CLDR Terminals			
Receive	L	K	M
Active	N/C	Connect to T+	Connect to T-
Passive	Connect to T+	Connect to T-	N/C

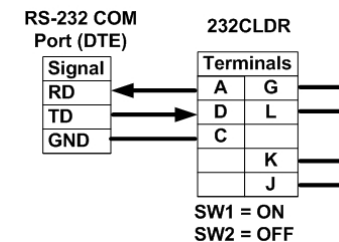
N/C = Not Connected.
 Refer to DIP Switch Settings in Section 5



3. To determine if your current loop device is "active" or "passive" a multi-meter is required. Set the meter to DC Volts and put the positive (red) lead on the T+ line and the negative (black) lead on the T- line of the current loop device. If a voltage is displayed on the meter, your device is active.
4. The following is an example of how to extend RS-232 using two 232CLDR Current Loop Converters. The converter on the left is configured as "active" the converter on the right is configured as "passive."



8. Test / Troubleshoot



- Connect your PC to the RS-232 side.
- Place a jumper between Terminal G & L and Terminal H & J.
- Using hyper terminal or similar program, connect to the appropriate COM port. Turn off hyper terminal local echo.
- Transmit data. The same data should be returned. Data LED will indicate data being transmitted.