6 Current Loop Connections

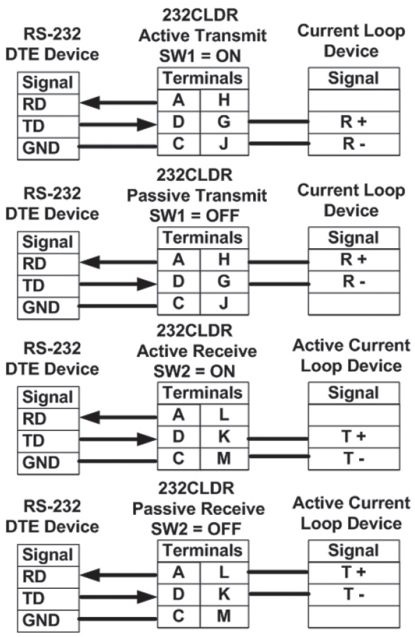
1. The 232CLDR has one optically isolated 20 mA Transmit loop and one optically isolated 20 mA Receive loop. Each loop can be set to either “Active” or “Passive. When set to “Active” an isolated 20 mA current is supplied for each loop (transmit and receive). The same power supply provides power to the 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

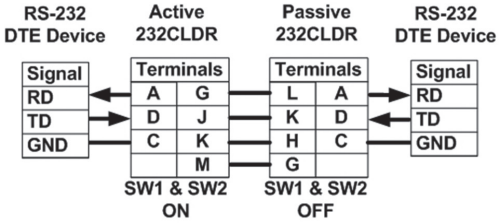
	232CLDR Terminals		
Receive	L	K	M
Active	N/C	Connect to T+	Connect to T-
Passive	Connect to T+	Connect to T-	N/C

N/C = Not Connected.
Refer to DIP Switch Settings is 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.”



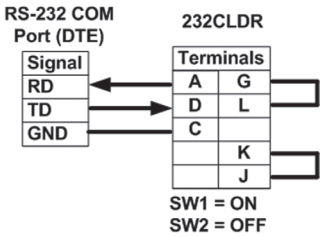
7 Test & Troubleshoot

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.



Recommended Accessories

24VDC, 1.0 A, DIN Rail mount Power Supply
MDR-20-24

DB9 Male to DB9 Female Cable, 6 feet (1.8 m) length
9PAMF6

B+B SmartWorx
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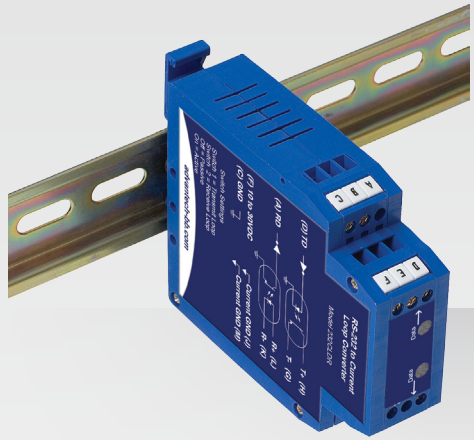
Document Number: 710-10776-00_232CLDR_2117qsg

QUICK START GUIDE



232CLDR

Optically Isolated RS-232 to Current Loop Converter

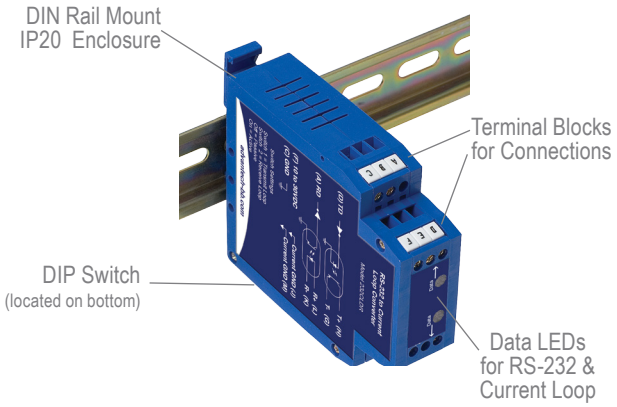
Before you begin, be sure you have the following:

+ 232CLDR, RS-232 to Current Loop Converter
+ 10-30VDC, 2.5W Power Supply (not included)
+ DB9-DB9 Serial Cable (not included)

B+B SmartWorx
Powered by ADVANTECH

Fast and easy on the web: ***www.advantech-bb.com***

Product Overview



232CLDR SPECIFICATIONS	
Isolation	2000 V
Current Draw	20 mA
Data Rate	19.2 kbps maximum
Distance	Up to 2000 ft (600 m)
Power	10-30 VDC
Temperature	-40 to 85 °C (wide operating temperature)

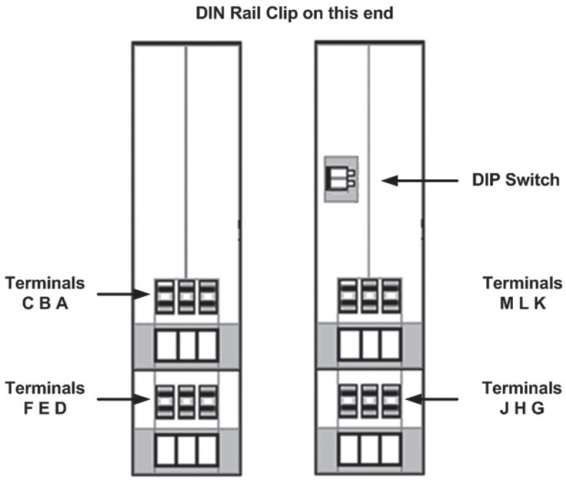
1 UL Installation Information

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

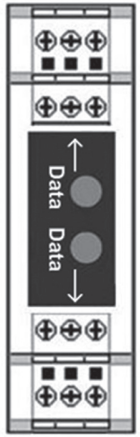
1. The wiring terminals are suitable for factory wiring only.
2. This device is to be mounted in a suitable enclosure in the end-product.
3. This device is suitable for operation at a maximum surrounding air temperature as described in the documentation.
4. These devices are intended for use in a Pollution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

2 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

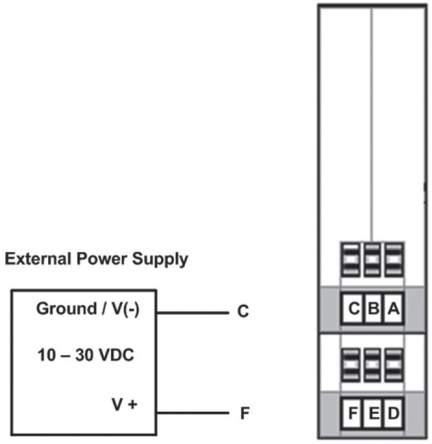


Data LED's are Red and Flash when data is transmitted.

RS-232

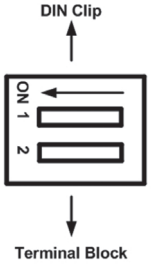
Current Loop

3 Power Connection



Current Loop Converter uses 2.5 W

4 DIP Switch



Transmit	SW-1
Active	ON
Passive	OFF

Receive	SW-2
Active	ON
Passive	OFF

5 RS-232 Connections