

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

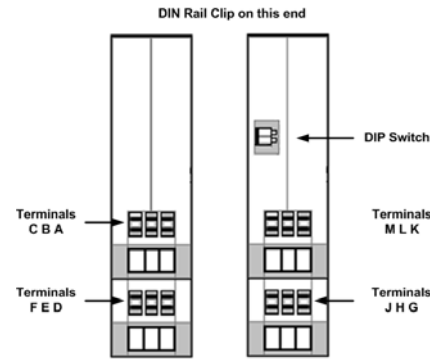
2. UL Installation Information

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

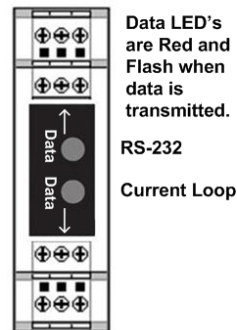
1. The wiring terminals are suitable for factory wiring only.
2. This device is to be mounted in a suitable enclosure in the end-product.
3. This device is suitable for operation at a maximum surrounding air temperature as described in the documentation.
4. These devices are intended for use in a pollution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

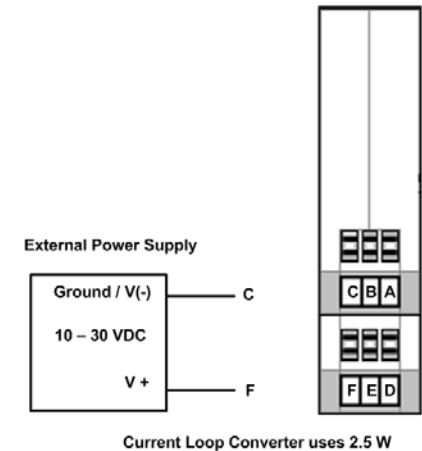
3. Information – Connectors & Indicators



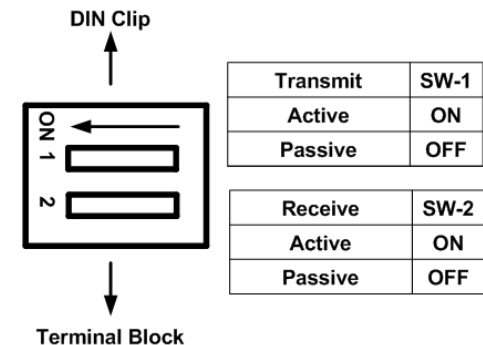
Terminal Block	Signal
A	RS-232 RD (Output)
B	Not Used
C	Ground
D	RS-232 TD (Input)
E	Not Used
F	+10 to 30 VDC
G	T(-)
H	T(+)
J	Current Ground
K	R(-)
L	R(+)
M	Current Ground



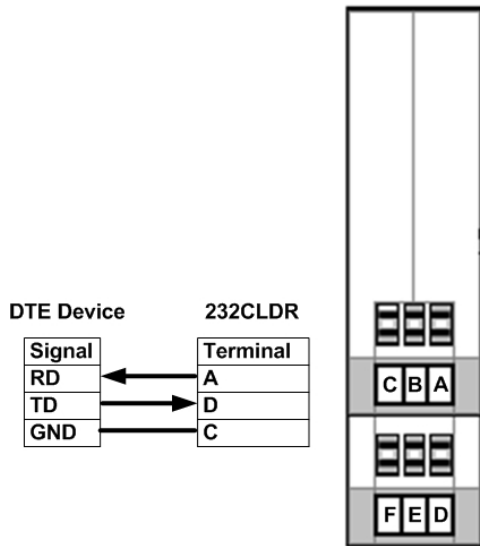
4. Power Connection



5. DIP Switch



6. RS-232 Connections



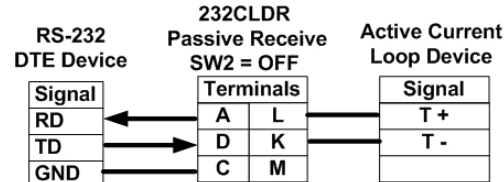
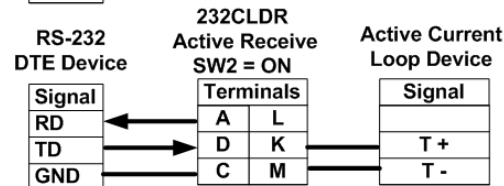
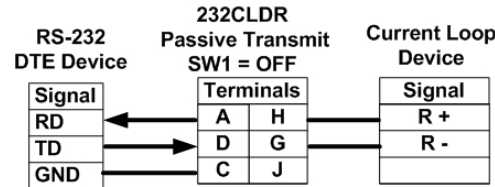
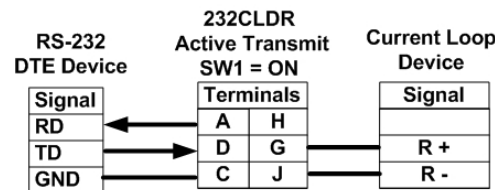
7. Current Loop Connections

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).

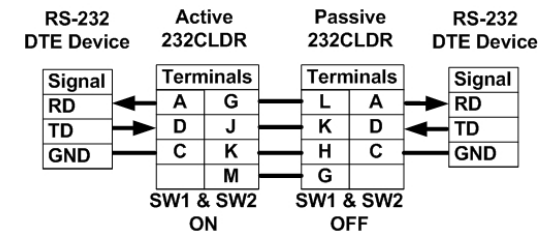
232CLDR Terminals			
Transmit	H	G	J
Active	N/C	Connect to R+	Connect to R-
Passive	Connect to R+	Connect to R-	N/C

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

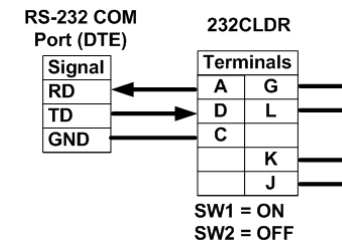
N/C = Not Connected.
Refer to DIP Switch Settings in Section 5



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.