

Development Systems

Catalyst



CATAL-4021

USB To RS-485/RS-422 Converter



Development Systems

Overview

The CATAL- 4021 is an industrial-grade USB to RS-485/RS-422 converter. It converts USB lines to a two-wire RS-485 signal (half - duplex) or a four-wire RS-422 signal (full-duplex), and vice versa. The unit is powered from the USB port. It supports data direction auto-turn-around, and therefore, no software drivers or flow control is required.



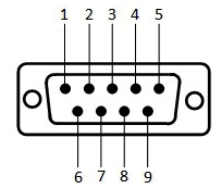
Features

- Plug - and - Play
- Data direction auto-turnaround, no software drivers or flow control is required
- USB 1.1 and 2.0 compatible
- Built-in 120Ω end-of-line terminator selectable
- Port powered - no external power needed
- Built-in surge and static protection
- Data transfer rates from 300 baud to 1 Mbaud
- 2 years warranty

Hardware features

RS-485/422 Pin Out - DP9 Male

Pin #	1	2	3	4	5
RS-485	485+	485-			GND
RS-422	T+	T-	R-	R+	GND



RS-485/422-DP9 Male

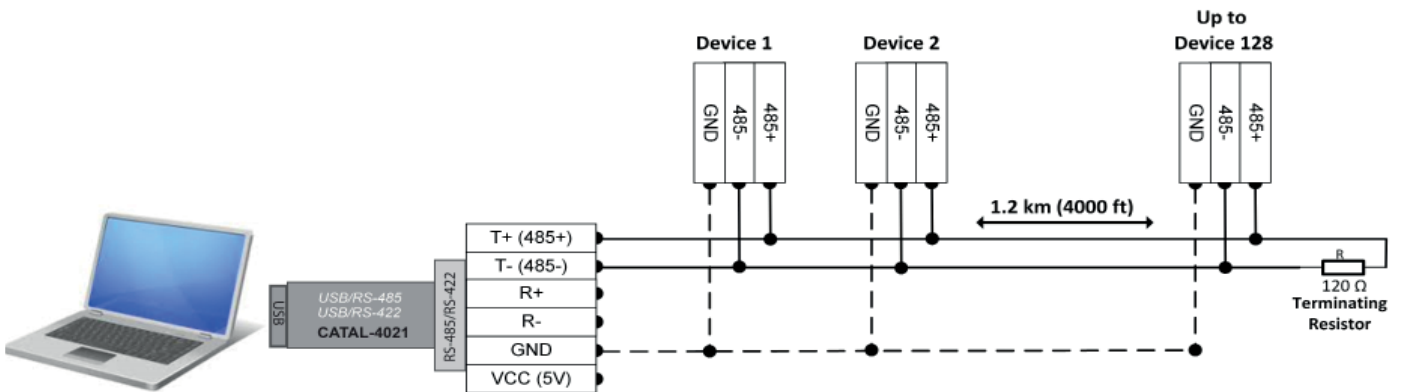
Windows 8 32,64-bit, Windows 7 32,64-bit, Windows XP and XP 64-bit, Windows Vista and Vista 64-bit, Windows XP Embedded, Windows CE 4.2, 5.0 and 6.0, Mac OS-X, Linux 3.2 and greater and Android.

Specifications

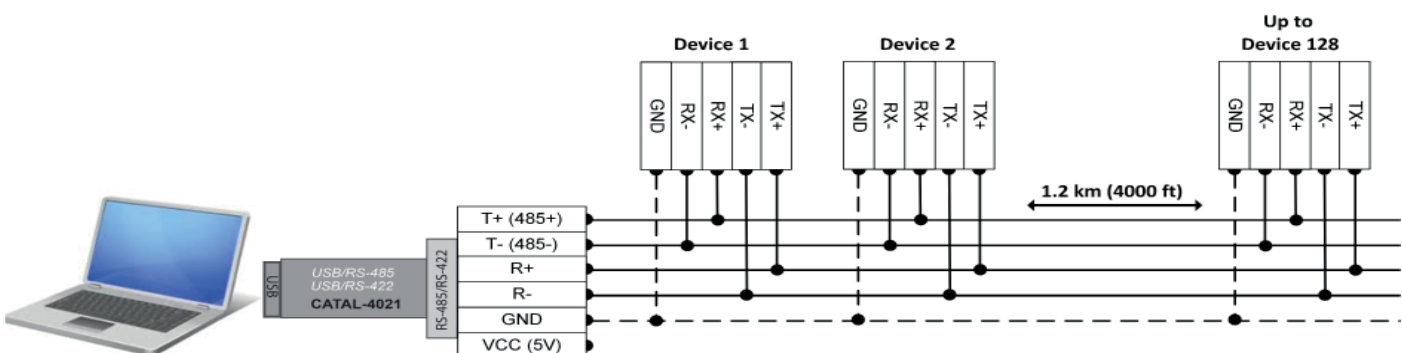
Compatibility:	USB 1.1 & 2.0 Standards, RS-485 and RS-422 standard
Data Rate:	Up to 1 mbps
Cable Length	1 m (3 ft)
Distance:	USB side: Up to 3m (10 ft) RS-485/RS-422 side: Up to 1.2 km (4000 ft) at 19,200bps
Connector:	USB side: Type A Female. RS-485/RS-422 side: DB-9 male and Termination Board supplied with DB-9 Female and a 5-Way Terminal Block.
End-of-Line Terminator:	120Ω (built-in, selectable by Termination Board)
Static Protection (ESD):	Up to 15KV
Surge Protection:	600W
Power:	power: USB port
Housing:	Rugged ABS (can be metal on request)
Dimensions (L x W xH):	Without Termination Board: 46.5 mm X 31 mm X 16.1 mm (1.83" X 1.22" X 0.63") With Termination Board: 72.5 mm X 33.5 mm X 16.1 mm (2.85" X 1.31" X 0.63")
Weight:	38 g

Connections

RS-232 TO RS-485 Converter (Two-Wire mode):

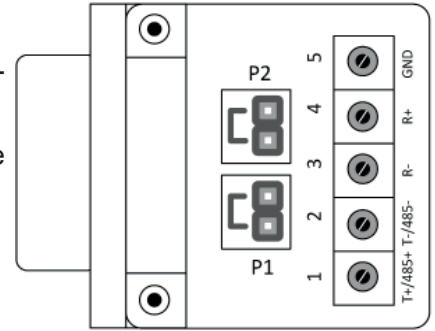


RS-232 TO RS-422 Converter (Four-Wire mode):



Termination Board

- It have DB-9 female connector that connected to DB-9 male of the main device (RS-485 side).
- Terminal block pins have the numbers that indicate the pin assignment of the DB-9 male of the main device and the pin functions.
- It have two jumpers (P1 and P2) that enable built in 120Ω end-of-line terminator.



Recommended: Built in 120Ω end-of-line terminator should be used when the data rate is more than 19.2 kbps or the RS-485/RS-422's distance exceeds 200m (660ft).