

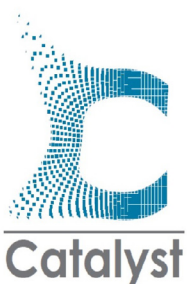
Development Systems

Catalyst



CATAL-4016

RS-485/RS-422 To 5V TTL Converter



Development Systems

Overview

The CATAL- 4016 is an industrial-grade RS-485/RS-422 to 5V TTL converter. It converts a two-wire RS-485 signal (half - duplex) or a four-wire RS-422 signal (full-duplex) to a 5V TTL signal, and vice versa. The unit is powered from an external 5VDC power supply. External power supply reverse polarity protection is applied. The unit supports data direction auto-turnaround, and therefore, no software drivers or flow control is required.

CATAL- 4016 has Built-in 120Ω end-of-line terminator selectable.



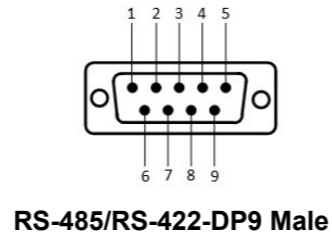
Features

- Plug - and - Play
- Data direction auto-turnaround, no software drivers or flow control is required
- Built-in 120Ω end-of-line terminator selectable
- External power 5Vdc can be applied
- External power supply reverse polarity protection
- 2 years warranty

Hardware features

RS-485/RS-422 Pin Out - DP9 Male

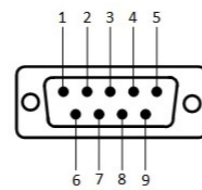
Pin #	1	2	3	4	5	9
RS-485	485+	485-			GND	OPT.
RS-422	T+	T-	R-	R+	GND	5V



RS-485/RS-422-DP9 Male

TTL Pin Out - DP9 Male

Pin #	1	2	3	4	5	9
RS-485	TTL IN	TTL OUT			GND	OPT. 5V



TTL-DP9 Male

Note: Pin 9 in RS-485/RS-422 side and TTL side are shorted.

CATAL- 4016

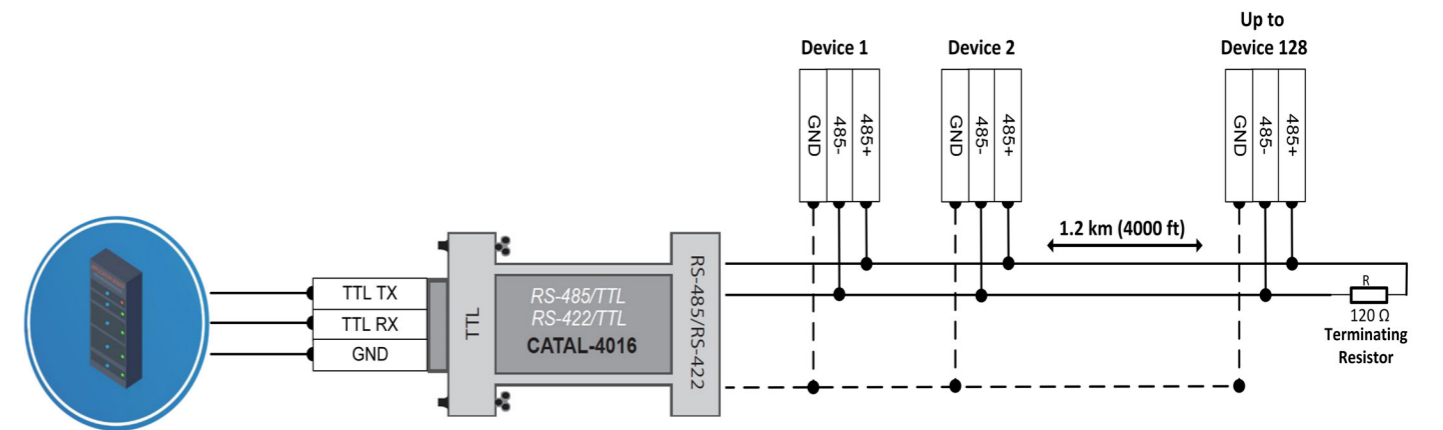
CATAL- 4016

Specifications

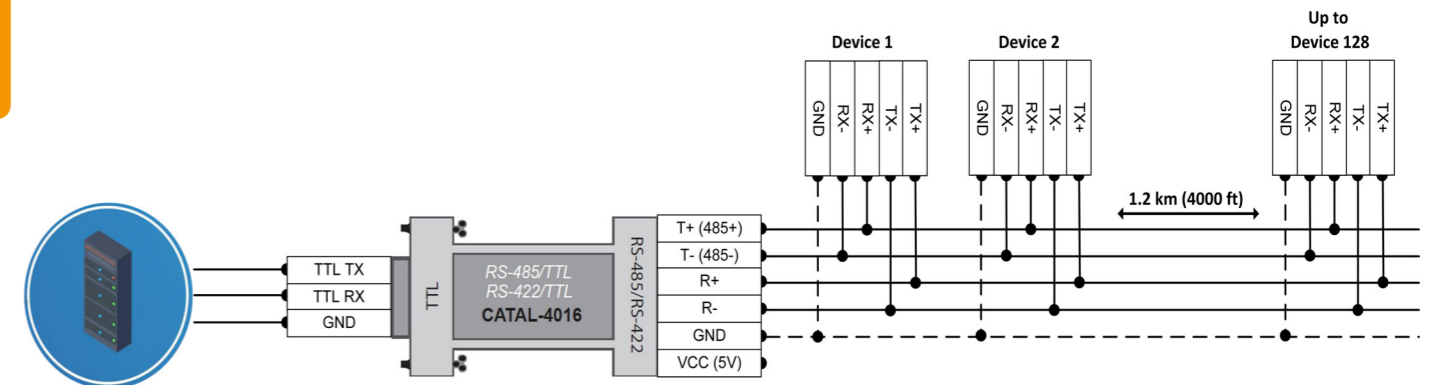
Compatibility:	EIA/TIA RS-485 and RS-422 standard and TTL 5VDC
Data Rate:	Up to 115.2 kbps
Distance:	TTL side: Up to 10ft (3m) RS-485/RS-422 side: Up to 4000ft (1.2km) at 19,200bps
Connector:	TTL side: DB-9 male and Termination Board supplied with DB-9 Female and a 4-Way Terminal Block. RS-485/RS-422 side: DB-9 male and Termination Board supplied with DB-9 Female and a 6-Way Terminal Block.
End-of-Line Terminator:	120Ω (built-in, selectable by Termination Board)
Static Protection (ESD):	Up to 15KV
Surge Protection:	600W
Power:	Ex. power supply: +5VDC (±5%) Regulated Power Supply (not included)
Housing:	Rugged ABS (can be metal on request)
Dimensions (L x W xH):	Without Termination Board: 63.0 mm X 33.5 mm X 16.8 mm (2.48" X 1.31" X 0.66") With Termination Board: 91.3 mm X 33.5 mm X 16.8 mm (3.59" X 1.31" X 0.66")
Weight:	Without Termination board : 28 g
Temperature Rating:	-40° C to 85° C (-40°F to 185° F)

Connections

RS-485 TO 5V TTL Converter (Two-Wire mode):



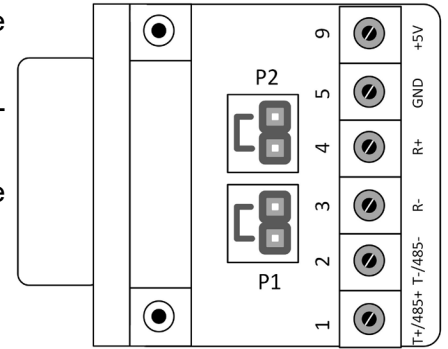
RS-422 TO 5V TTL Converter (Four-Wire mode):



Termination Board

RS-485/RS-422 side:

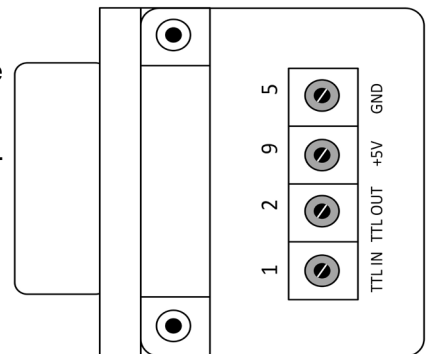
- have DB-9 female connector that connected to DB-9 male of the main device (RS-485 side).
- Terminal block pins have the numbers that indicate the pin assignment of the DB-9 male of the main device and the pin functions.
- It have two jumpers (P1 and P2) that enable built in 120Ω end-of-line terminator.



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).

TTL side:

- It have DB-9 female connector that connected to DB-9 male of the main device (TTL 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.



For more about our products, Please visit our website www.catalystsys.com
If you have any questions or problems, Please contact us at support@catalystsys.com