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PRODUCT INFORMATION

422TTL & 422TTL33
Four Channel RS-422 / EIA-530 to TTL Converter

✓ **Converts two RS-422 channels in each direction**

✓ **Open pads to change pin configuration**

✓ **5V and 3.3V TTL**

CE

The 422TTL and 422TTL33 convert RS-422 or EIA-530 signals to TTL at data rates up to 115.2 Kbps. Two channels are used to convert RS-422 to TTL and two channels are used to convert TTL to RS-422. Select the 422TTL for 5 VDC TTL or the 422TTL33 for 3.3 VDC TTL. A DB25 Male connector is used on the TTL side and a DB25 Female connector is used on the RS-422 / EIA-530 side. The converters support RD, TD, RTS, and CTS.

Pin 7 is signal ground for both connectors. These units can work at baud rates up to 115.2 Kbps. Open pads are provided for each line. Therefore, if you choose to, you can change the pin connectors for any of the 4 channels.

When converting a second RS-422 channel, use the corresponding RTS A and RTS B pins (refer to the diagram on the next page).

These converters invert the TTL signal. Refer to the specifications table to determine polarity.

An external +12 VDC power supply is required (not included).

Specifications

Serial Technology

RS-422 (EIA-530 Pin-out)	TDA(-), TDB(+), RDA (-), RDB (+) RTS A(-), RTS B (+), CTS A (-), CTS B (+)
TTL	TD, RD, RTS, CTS
TTL Level	5VDC or 3.3VDC
Data Rate	Up to 115.2 Kbps
RS-422 Connector	DB25 Female
TTL Connector	DB25 Male

Polarity (Volts)

	RS-422 / EIA-530 Output
TTL Input	**V (A) – V (B)**
High	Negative
Low	Positive

	RS-422 / EIA-530 Input
TTL Output	**V (A) – V (B)**
High	Negative
Low	Positive

Power

Source	External (2.5 mm Positive Tip)
Input Voltage	12 VDC (<100 mA)

Mechanical

Dimensions	2.1 x 2.2 x 0.7 in (5.4 x 5.6 x 1.7 cm)

Regulatory

Approvals	FCC, CE (Declaration available for Download)

Ordering Information

422TTL	RS-422 to 5V TTL Converter
422TTL33	RS-422 to 3.3V TTL Converter

Accessories (Not Included)

422PS	Power Supply, 12VDC, 100mA 2.5mm Positive Tip Jack

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PRODUCT INFORMATION

422TTL

35.0 mm
#4-40
53.6 mm
47.6 mm
39.9 mm
RS-422
TTL
38.4 mm
43.0 mm
55.0 mm
2.5 mm
DC POWER
12VDC
DB25F
#4-40
DB25M

16.9 mm
9.44 mm
7.82 mm
49.4 mm
56.2 mm

1 inch = 25.4 mm

DB25 Male
TTL Side
1
13
14
25

DB25 Female
RS-422/EIA-530 Side
13
1
25
14

DB25 Male
TTL Side

DB25 Female
RS-422 / EIA530Side

Open Pads Internal to Converter

Converter Circuitry

TTL Side		RS-422/EIA-530 Side
TD	PIN 9	PIN 2 → TD A(-)
		PIN 14 → TD B(+)
RD	PIN 14	PIN 3 ← RD A(-)
		PIN 16 ← RD B(+)
RTS (TD#2)	PIN 16	PIN 4 → RTS A(-) (TD A(-) #2)
		PIN 19 → RTS B(+) (TD B(+) #2)
CTS (RD#2)	PIN 23	PIN 5 ← CTS A(-) (RD A(-) #2)
		PIN 13 ← CTS B(+) (RD B(+) #2)
SG	PIN 7	PIN 7 — SG

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