

# BB-422TTL

## TTL to RS-422 Converter



### Introduction

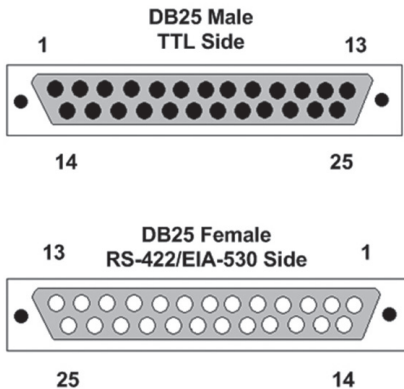
Model BB-422TTL converts RS-422 or EIA-530 signals to 5V TTL at data rates up to 115.2 kbps. Two channels are used to convert RS-422 to TTL and two channels are used to convert TTL to RS-422.

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 converter supports RD, TD, RTS, and CTS. Pin 7 is Signal Ground for both connectors.

The converter supports baud rates up to 115.2 kbps. Open pads are provided for each line. If desired, 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 Quick Start Guide).

The converter inverts the TTL signal. Refer to the specifications table to determine polarity. An external +12 Vdc power supply is required (not included, sold separately).

### Pinouts



### Features

- Convert 2 channels in each direction from TTL ("Transistor Transistor Logic") to RS-422
- 5V TTL
- Baud rates up to 115.2 kbps
- Quick, inline installation
- Open pads to change pin configuration
- Power supply required (sold separately)

### Ordering Information

Model No.	RS-422 Connector	TTL Connector	TTL Vdc	Power Supply Required?
BB-422TTL	DB25 Female	DB25 Male	DB25 Female	Yes

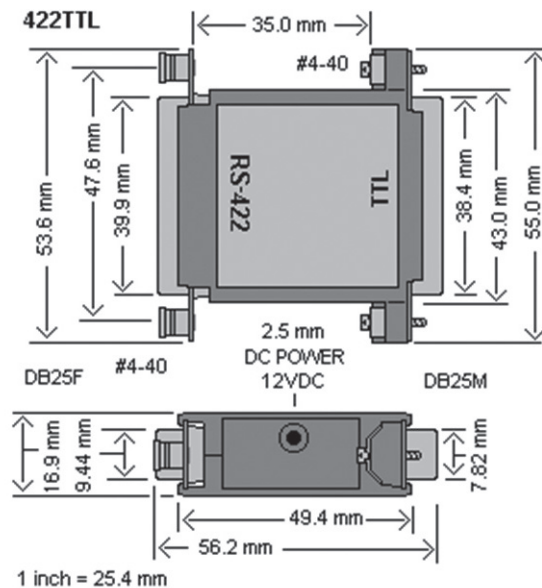
### Accessories – Sold Separately

BB-SMI6B12V-P230C1 – Power Supply, 12 Vdc 6 W, 2.5mm plug, International AC Input, International AC Blades (NATAM, EU, UK, Australia, China)

BB-232AMF5 - Serial Cable, DB25M to DB25F, 1.8 meters

### Mechanical Diagram

Units - cm/in



### Specifications

Serial Technology	
Data Rate	Up to 115.2 Kbps baud
RS-422 Connector	DB25 female
RS-422 Signals (EIA-530 pinout)	TDA(-), TDB(+), RDA(-), RDB(+), RTS A(-), RTS B(+), CTS A(-), CTS B(+)
TTL Connector	DB25 male
TTL Signals	TD, RD, RTS, CTS
Vdc Level	5 V
Polarity	
TTL Input	V(A) - V(B)
High	Negative
Low	Positive
TTL Output	RS-422 / EIA-530 Input
High	Negative
Low	Positive
Power	
Source	External, 2.5 mm positive tip (Not included, sold separate.)
Input Voltage	12 Vdc (<100 mA)
Output Voltage (transceiver)	Logic: -0.5V to (VCC+0.5V), maximum

Mechanical	
Dimensions	5.4 x 5.1 x 1.6 cm (2.1 x 2.02 x 0.62 in)
Meantime Between Failures (MTBF)	
MTBF	1539882 hours
Calculation Method	MIL 217F using Parts Count Reliability Prediction
Environmental	
Operating Temperature	0 to +70 °C (+32 to +158 °F)
Storage Temperature	-40 to +85 °C (-40 to +185 °F)
Regulatory – Approvals / Standards / Directives	
FCC, Part 15	
CE - Directives	2014/30/EU – Electromagnetic Compatibility (EMC) 2011/65/EU – Amended by (EU) 2015/863 Reduction of Hazardous Substances (RoHS) 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE)
CE - Standards	EN 55032: Class B – Electromagnetic Compatibility of Multimedia Equipment – Emission Requirements EN 55024 – Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement

### Schematic

