Datasheet

Black Oak Engineering

precision electronic instruments

New York · USA · blackoakeng.com · (347) 467-0912

Dongle TTL-RS232



Part number BE-DOTR Version 1.1



Description. Many electronic devices expose the UART only as logic (TTL) levels. In order to interface with a traditional RS232 port, the signals must be converted to higher, bipolar voltages. That's what the Dongle does. It can be self-powered with its batteries, or you may include a separate power source. It has digital input and output lines on a terminal block, so any device can be wired in. It also has shunts to change the Dongle from Normal operation to Null modem. The RS232 connector is a standard DSub-9.

Basic specifications

- Baud rate to 250 kbps.
- Operating signal voltage: 3 to 5.5 Vdc.
- Standard DsubB-9 female DCE connector.
- Can be easily configured for straight or null modem.
- Signals connected via terminal block or by header. Pinout clearly labeled.
- Compact size: $2.75 \times 1.30 \times 1.00$ in = $80 \times 33 \times 25$ mm.
- Power LED.
- Slide on-off switch.
- Signals are diode protected.
- Powered by two CR2032 batteries, *or* by external power $5\sim12$ Vdc, 100 mA.
- 15 kV ESD protected.
- Meets EIA/TIA-232 and V.28/V.24 specifications.

Package includes one four-wire cable, 4", 100-mil socket. Does not include batteries due to restrictions upon shipping.

BOE is continuously improving. We also strive to keep one step ahead of procurement shortfalls. We will deliver to you the latest hardware version possible. In some cases specifications will change.

Environmental

- Temperature range. -4 to +158 °F, -20 to +70 °C.
- Humidity / water exposure. The PCBA does not include a protective enclosure. Nor is it conformally coated. Condensing humidity and water exposure must be completely avoided.

Approvals & Compliance

- RoHS. REACH.
- California Prop 65. There are no listed toxic materials in the PCBA.
- CE. The system is designed and tested to meet or exceed CE requirements for laboratory, non-safety-critical electronic devices.



Warranty Policy. Any instrument ordered from BOE may be returned for full refund, less shipping costs, within 30 days of delivery, provided that the instrument has not, in the opinion of BOE been damaged or misused. An RMA number is required in all cases. See our *Standard Terms & Conditions - Instruments* for more details.

BOE reserves the right to make changes to these specifications as it deems necessary. All technical information contained herein is as accurate as possible; however BOE shall not be held responsible for any errors or for product use, nor for any infringements upon the rights of others which may result from its use. BOE products are not to be used in life support or safety critical applications.

All BOE products are designed and manufactured in the USA.

Rev Dec 21