

# BB-232PDRI

## Industrial RS-232 Isolated Repeater



### Introduction

Model BB-232PDRI is Advantech's premium RS-232 isolated repeater. IT is UL Listed and Class 1/Division 2 certified for rugged industrial environments. Powerful optical isolation on both data ports protects equipment and data from damaging ground loops and surges. Additional isolation on power supply circuits adds a third degree of protection.

The BB-232PDRI has a wide temperature range, IP30 plastic case and 35mm DIN rail mount bracket. It can be integrated into control panels or other industrial equipment.

Installation and configuration is easy. Data is connected with a DB9 female connector (DCE) and a DB9 male connector (DTE). Power is connected through a terminal block that accepts 10 to 48 Vdc from an external source. Power supply required, not included, sold separately.

### Features

- Extend RS-232 data another 15.2 m
- 2000 V 3-way optical isolation
- Data rates up to 115.2 kbps
- -40 to +80 °C wide operating temperature
- DIN rail mount IP30 case
- 10 to 48 VDC input power (power supply required, sold separately)
- UL C1/D2, UL 508, FCC, CE

### Ordering Information

Model No.	Description
BB-232PDRI	Industrial RS-232 Isolated Repeater

### Accessories – Sold Separately

BB-DR-20-24 – DIN rail mount power supply, 24VDC, 1.0 A output power

BB-EK-CLIP-MPC – Replacement DIN rail clip for enclosure

BB-TBKT1 – Replacement terminal block - 2-position, 5.08mm, 8A, 300V

## Specifications

Serial Technology	
Serial Connectors	DB9 Female (DCE), DB9 Male (DTE)
Data Rate	Up to 115.2 Kbps
Isolation	2 kV RMS, 1 minute
Power	
Power Source	External source
Power Connector	2-position removable terminal block
Input Voltage	10 to 48 Vdc (56 Vdc, maximum)
Power Consumption	0.6 W, typical
Terminal Blocks	
Wire Size Accepted	28 to 12 AWG, Copper wire only
Pitch	5.08 mm
Insulation Resistance	≥500 MΩ @ 500 Vdc
Maximum Torque	5 Kg / cm
LED Indicators	
Power	Red LED
TD / RD	Red LED TD, RD, CTS, RTS
Mechanical	
Dimensions	12.3 x 11.3 x 3.2 cm
Enclosure	IP30 plastic, 35 mm, DIN mount
Weight	195 gm

Environmental	
Operating Temperature	-40 to +80 °C
Storage Temperature	-40 to +85 °C
Operating Humidity	0 to 95%, non-condensing
Mean Time Between Failures (MTBF)	
MTBF	177250 hours
Calculation Method	Parts Count Reliability Prediction
Regulatory – Approvals / Standards / Directives	
FCC, CE, UL C1/D2 File Number E245458, UL 508 File Number E222870	
CE - Directives	2014/30/EU - Electromagnetic Compatibility Directive 2011/65/EU - amended by (EU) 2015/863 Reduction of Hazardous Substances Directive (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 requirements
EN 61000-6-1	Generic immunity standard of residential, commercial and light industrial environments

## Mechanical Drawing

