BB-422PP9R
BB-422PP9TB

RS-422 Converters, Port Powered

Features
- Extend RS-232 data signals up to 1.2 km
- Change RS-232 TD and RD to balanced RS-422 signals
- Baud rates up to 115.2 kbps
- Quick, inline installation
- Powered from RS-232 handshake lines - no power supply required
- At least one handshake line must be present (positive or negative voltage) - no software control needed
- RS-232/RS-422 bidirectional transmission

Specifications

Serial Technology
- Data Rate 115.2 kbps maximum

RS-232
- Connector BB-422PP9R: DB9 female
  BB-422PP9TB: DB9 female
- Signals TD, RD, RTS, CTS, DTR, DSR, DCD, (GND)

RS-422
- Connector BB-422PP9R: DB9 female
  BB-422PP9TB: Terminal block
- Signals TDA+, TDB+, RDS-, RDB+, (GND)
- Operation RS-422, 4-wire
- Biasing Resistors 4.7k Ohms
- Termination None

Power
- Source Port-powered from RS-232 handshake lines
  Optional, external 12-16 Vdc power supply (BB-422PP9TB only)

Mechanical
- Dimensions BB-422PP9R: 6.1 x 3.3 x 1.7 cm
  BB-422PP9TB: 8.9 x 3.3 x 1.7 cm
- Enclosure Plastic, In-line
- Weight 45.3 gm

Meantime Between Failures (MTBF)
- MTBF BB-422PP9R: 2094328
  BB-422PP9TB: 849670
- MTBF Calc. Method MIL 217F Parts Count Reliability Prediction

Environmental
- Operating Temperature 0 to +70 °C
- Storage Temperature -40 to +85 °C
- Operating Humidity 0-95%, non-condensing

Approvals, Directives, Standards
- FCC, CE
- CE - Directives 2014/30/EU – Electromagnetic Compatibility Directive
  2012/19/EU – Waste Electrical and Electronic Equipment (WEEE)
- CE - Standards EN 55032 Class A – Electromagnetic Compatibility of Multimedia Equipment – Emission requirements
  EN 55024 – Information Technology Equipment – Immunity Characteristics – Limits and methods of measurement
  EN 61000-6-4 + A1 – Generic Emission Standard for Industrial Environments (Class A)
  EN 61000-6-2 – Generic Immunity Standard for Industrial Environments

All product specifications are subject to change without notice. Last updated: 26-Nov-2019
### Dimensions

#### BB-422PP9R

- **Height:** 52.9 mm
- **Width:** 33.3 mm
- **Depth:** 17.4 mm

#### BB-422PP9TB

- **Height:** 52.3 mm
- **Width:** 31.8 mm
- **Depth:** 30.2 mm

Unit: mm

### Ordering Information

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RS-232 Connector</th>
<th>RS-422 Connector</th>
<th>Output</th>
<th>External Power Option?</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB-422PP9R</td>
<td>DB9 Female</td>
<td>DB9 Female</td>
<td>RS-422</td>
<td>No</td>
</tr>
<tr>
<td>BB-422PP9TB</td>
<td>DB9 Female</td>
<td>Terminal Block</td>
<td>RS-422</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Accessories — Sold Separately

- **BB-SMI6-12-V-ST**  
  12Vdc, 6W power supply, stripped/tinned, international AC input  
  (Note: external powering option for BB-422PP9TB only.)

- **BB-9PAMF6**  
  DB9 male to DB9 female adapter cable, 1.8 m