# Telemetry Signal Distribution Unit BED-108/2

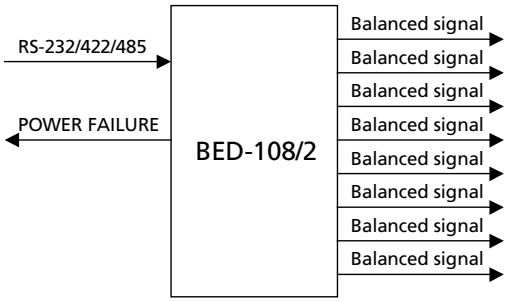
## Features

- The input signal is duplicated onto eight outputs
- Accepts RS-232, RS-422 and RS-485 simplex serial signals
- Outputs up to eight balanced serial signals
- Transmission distance up to 5 km
- Multiple units can be cascaded for more than eight outputs
- Galvanic separation between input and outputs
- Power failure indication
- Mains power selectable between 115 and 230 VAC

## Description

The BED-108/2 is used when the default daisy-chain configuration of the telemetry signal must be changed into a star configuration or if the Ernitec telemetry receivers are daisy-chained on several lines.

In addition to distributing the signal from the input terminal to the eight outputs the BED-108/2 amplifies the signal for extended transmission distance and provides galvanic separation of the input and the outputs thereby eliminating ground loop problems.




*Block diagram of the BED-108/2*

## Specifications

| | |
|---|---|
| **Telemetry Input Specifications** | |
| Input voltage range | 2 to 10 Vpp |
| Signal types | Simplex RS-232, RS-422, RS-485 |
| Input impedance | 120 Ω ±12 Ω |
| Current | > 8 mA |
| **Telemetry Output Specifications** | |
| Number of outputs | 8 |
| Output voltage level | typ. 10 Vpp balanced |
| Signal type | Simplex |
| Load impedance | 120 Ω |
| Transmission distance | < 5 km, on 0.6 mm twisted pair cable |
| **Power Alarm Specifications** | |
| Contact type | Potential free, NO/NC |
| **General Specifications** | |
| Supply voltage<br>115 VAC selected<br>230 VAC selected | 115 VAC and 230 VAC, selectable<br>104 to 126 VAC, 45 to 60 Hz<br>207 to 253 VAC, 45 to 60 Hz |
| Power consumption | < 11 VA |
| EMI / EMC | EN 50081-1, EN 50130-4 |
| Safety | EN 60950 |

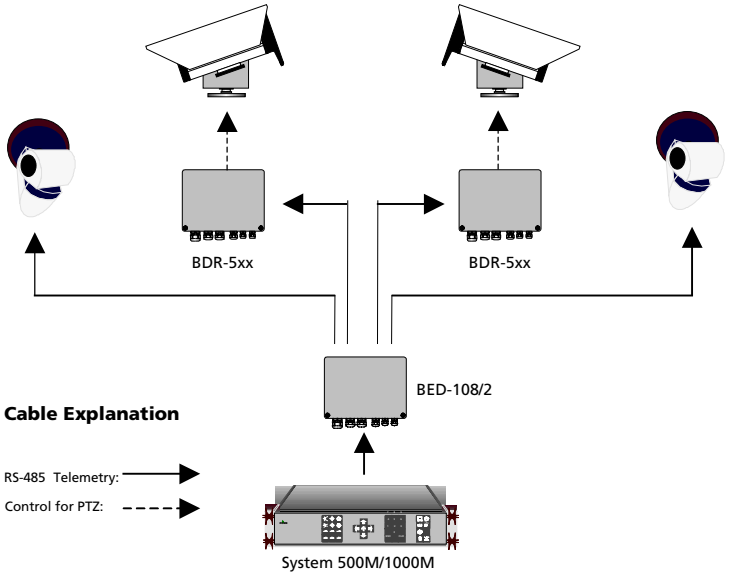
| | |
|---|---|
| Temperature range | -20°C to +55°C |
| Humidity | < 95 %RH |
| **General Specifications (cont.)** | |
| Cable glands | |
| Mains power input | PG 16 |
| All other connections | PG 9 |
| Size (W x H x D) | 240 x 160 x 90 mm, excl. cable glands |
| Weight | 1.2 kg |
| Tightness | IP 65 |
| Enclosure Material | ABS |

# *Applications*

The telemetry control signal from a Matrix 500M or 1000M is usually distributed to a number of telemetry receivers in a daisy-chain configuration, i.e. the signal goes from the matrix to the first telemetry receiver and from there onwards to the next telemetry receiver and so on. This is not always the ideal solution due to the physical location of the PTZ cameras.

An alternative to the daisy-chain configuration is to build a star configuration, i.e. the telemetry control signal is distributed from the matrix to the telemetry receivers on individual cables. In order to do this, a BED-108/2 is required.

It is also possible to combine the daisy-chain and the star configurations as shown in the block diagram below.




*Application diagram for BED-108/2*

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