

## MODEL:- TLP-SL12-RS485 Transtech Lightning Protector for RS485 Bus

### GENERAL DESCRIPTION

The TLP-SL12-RS 485 is a very compact **12mm wide** lightning and transient arrester providing protection for equipment connected to the RS 485 multi-point or party line bus by limiting the transient over-voltage to less than twice the normal working voltage.

The TLP-SL12-RS 485 provides protection between all conductors, line to line and each line to earth. It is mounted on to "DIN" rail (46277-3) and offers screen termination via terminals and the earth via a 300 mm earth wire "tail".

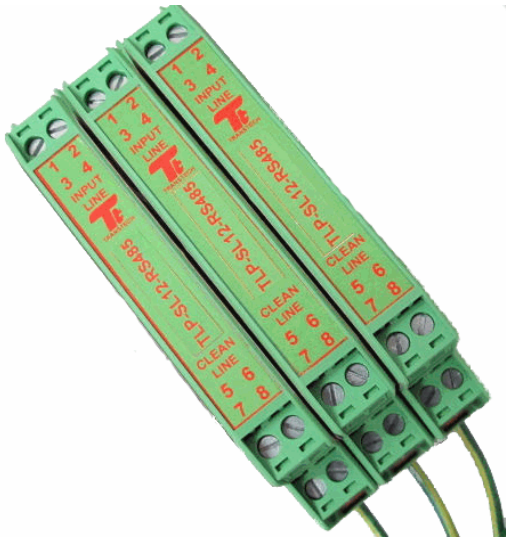
The TLP-SL12-RS 485 is suitable for all types of RS485 protocol due to the unique design whereby it has a high speed voltage sensitive switch which only enables the MOV protection when it senses a surge.

### TECHNICAL DATA

|                                  |  |
|----------------------------------|--|
| <b>Voltage rating</b>            |  |
| Normal working volt              | +/- 12V  |
| Peak let thru volts              | 19V @ 1p = 1A  |
| Peak let thru volts              | 24V @ 1p = 10A                                       |
| <b>Protocols</b>                 | ModBus   ProfiBus   ProfiBus Extender                |
| <b>Current/Resistance rating</b> |  |
| End to End resist.               | Less than 0.6 ohms                                   |
| Max Current                      | 1 Amp  |
| Surge Current I <sub>max</sub>   | 10kA/mode (8/20us)<br>2 kA/mode (10/350us)           |
| <b>Discharge Power</b>           | 400W PPPD @ (8/20uS)<br>(Peak Pulse Power Discharge) |
| <b>Response rating</b>           |  |
| Response time                    | Under 10nsec   |

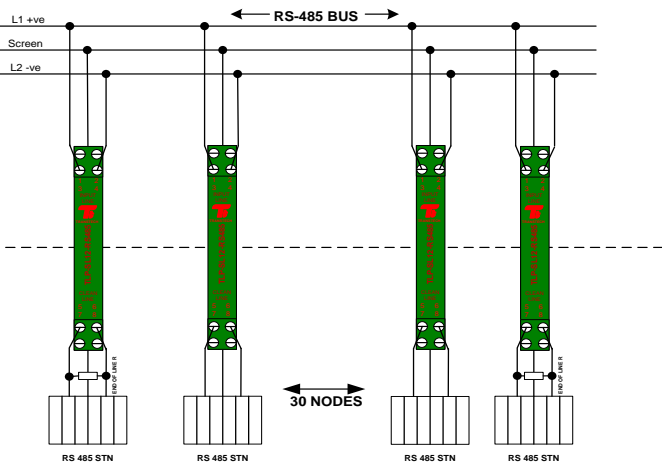
### GENERAL SPECIFICATION

|                  |                          |
|------------------|--------------------------|
| Capacitance      | @ 1mMz, 75pF             |
| Operating Temp   | -10 to 60 Deg C          |
| Storage Temp     | -55 to 75 Deg C          |
| Terminals        | Self-opening 2.5mm/12AWG |
| Housing Material | KRILEN                   |
| Mounting Style   | DIN                      |
| Dimensions       | 100mm X 51.3mm X12.5mm   |
| Weight           | 60 grams                 |



### FEATURES

- ◆ Low "let thru" voltage
- ◆ All common protocols MB | PB | PB/TDR
- ◆ Protection between ALL lines
- ◆ Fast snap on DIN rail mounting
- ◆ Fail to safe status design
- ◆ High speed switch technology to prevent signal attenuation
- ◆ Low line losses (volt drop)
- ◆ Designed and manufactured to ISO 9001
- ◆ C-Tick/ CE Compliant



CONNECTION SCHEDULE

| Model                                    | Working Voltage Frequency.                      |     | I <sub>max</sub> | I <sub>n</sub> | Let Thru V | Response Tim |
|--|---|-----|------------------|----------------|------------|--------------|
|  | Line - Line                                     |     |                  |                |            |              |
| TLP-SL12-RS485                           | +/-12VDC  | DCV | 10kA             | 2kA            | >24        | 10nS         |
| TLP-SL12-RS485MB                         | +/-12VDC  | DCV | 10kA             | 2kA            | >24        | 10nS         |
| TLP-SL12-RS485PB                         | +/-12VDC  | DCV | 10kA             | 2kA            | >24        | 10nS         |
| TLP-SL12-RS485PB/TDR                     | +/-12VDC  | DCV | 10kA             | 2kA            | >24        | 10nS         |
| TLP-DNET                                 | See separate data-sheet for DeviceNet protector |     |                  |                |            |              |
| Other communication protocols on request |   |     |                  |                |            |              |

TABLE No 2

