

TSM100-K

Transient Suppression Module for RS485 Communications



Features

- ▶ Power supply protection (immunity and fused)
- ▶ Signal (RS485) protection (isolation and immunity)
- ▶ 2.5kV galvanic Isolation of the RS485 Ports
- ▶ ESD Protection (EN 61000-4-2): Level 4 (8kV Contact and 15 kV Air)
- ▶ EFT Protection (EN 61000-4-4): Level 4 (4kV on power port, 2kV on signal port)
- ▶ Surge Protection (EN 61000-4-5): Level unspecified (6 kV)
- ▶ Simple LED system status indication
- ▶ RS485 ports have selectable fixed terminations
- ▶ Baud rate selectable from 9600 - 115200 bits/sec
- ▶ DIN rail mounting



Description

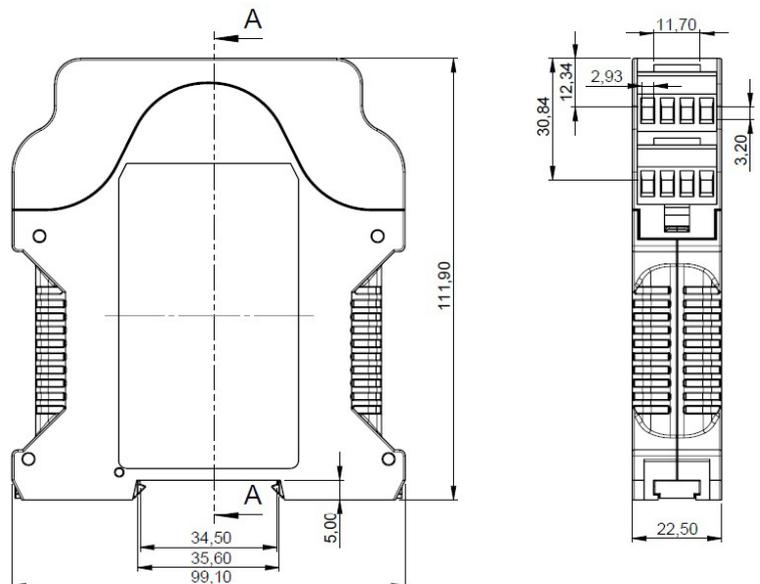
TSM100-K RS-485 Transient Suppression Module has been developed to protect the RS-485 communication systems against the following common electrical disturbances:

- ▶ Electrostatic Discharge (ESD) – Caused by personnel, who may have become electrostatically charged, touching the equipment or other equipment nearby.
- ▶ Electrical Fast Transient (EFT) – Bursts of fast low energy transients, produced by the switching of inductive loads, that are induced into signal and data circuits.
- ▶ Slow high energy voltage surge (Surge) – Slow high energy transients which may be induced into power and signal cables by lightning strikes in the vicinity.

TSM100-K features two galvanically isolated RS-485 ports. Modules can be installed between communication equipment in areas that are susceptible to electrical disturbances offering an increased level of protection to the communication equipment.

Specification

Dimensions	99.1 X 111.9 X 22.5mm
Weight	200g
Mounting	DIN Rail



Specification

Operating Voltage	18 to 36V (24V DC nominal)
Current Consumption	100mA (at 24V)
Current Rating	1.0A (fused)
RS485	Port A: Selectable Fixed Termination (120Ω) Port B: Selectable Fixed Termination (120Ω) Port A & Port B: Isolated (2.5kV) Baud Rate: 9600 to 115200 (selectable / configurable)
Power Supply	Power In to Power Out, 1.0A fused
Operating Temperature	-10 to 50°C
Storage Temperature	-40 to 70°C
Agency Approvals and Standards	CE, RoHs, WEEE compliant
EMC	EN 61000-6-2, Immunity Standard (Industrial Environments) EN 61000-6-4, Emission Standard (Industrial Environments)
Safety	EN 60950, IT Equipment