

ISD-1100-T/1200-T Series

Data line surge protectors



- > Plug and play
- > Surge protection for serial data lines
 - ISD-1110-T/1130-T: EN 61000-4-5 Level 4
 - ISD-1210-T/1230-T: IEC 61632-21 C2 (20 kV protection)
- > Supports RS-232 or RS-422/485
- > Compact size for easy installation
- > Wide temperature model available for -40 to 85°C environments



Introduction

The ISD-1100-T/1200-T series provides surge protection for serial data lines to prevent damage to devices such as modems, fax machines, I/O ports, terminals, instrumentation, hubs, and any other devices that use

serial data connections. The ISD-1100-T/1200-T can add serial data line protection to a variety of serial connections: RS-232, RS-422, and RS-485.

Specifications

Data Line Surge Protection

Maximum Power Protection:

ISD-1110-T/1130-T: 400 watts
 ISD-1210-T/1230-T: 5000 watts

Number of Protected Lines:

ISD-1110-T: 7
 ISD-1130-T/1210-T/1230-T: 4

Surge Capacity:

ISD-1110-T/1130-T: 4 kV, 8/20 μs impulse per line
 ISD-1210-T/1230-T: 20 kV, 8/20 μs impulse per line

Working Voltage:

ISD-1110-T/1210-T: 15 V
 ISD-1130-T/1230-T: 5 V

Maximum Load Current:

ISD-1110-T: 0.1 A (23°C), 0.05 A (85°C)
 ISD-1130-T: 0.12 A (23°C), 0.07 A (85°C)
 ISD-1210-T/1230-T: 0.4 A (20°C), 0.13 A (85°C)

Response Time: < 1 ns

Protection Mode: Line to line, line to ground

Protection Rating: IP30

Bandwidth: 10 MHz loss < 1 dB

Connectors

ISD-1110-T:

Data in: DB9 male
 Data out: DB9 female

ISD-1130-T:

Data in: Terminal block
 Data out: Terminal block

ISD-1210-T/1230-T:

Data in: Terminal block
 Data out: Terminal block

Physical Characteristics

Housing:

ISD-1110-T/1130-T: Plastic
 ISD-1210-T/1230-T: Metal

Dimensions:

ISD-1110-T: 53 x 37 x 20.6 mm (2.01 x 1.46 x 0.81 in)
 ISD-1130-T: 53 x 37 x 20.6 mm (2.01 x 1.46 x 0.81 in)
 ISD-1210-T: 95 x 53 x 25 mm (3.74 x 2.01 x 0.98 in)
 ISD-1230-T: 95 x 53 x 25 mm (3.74 x 2.01 x 0.98 in)

Weight:

Product only
 ISD-1110-T: 58 g (0.13 lb)
 ISD-1130-T: 30 g (0.07 lb)
 ISD-1210-T: 214 g (0.47 lb)
 ISD-1230-T: 212 g (0.46 lb)
 Packaged
 ISD-1110-T: 119 g (0.26 lb)
 ISD-1130-T: 96 g (0.21 lb)
 ISD-1210-T: 276 g (0.61 lb)
 ISD-1230-T: 274 g (0.60 lb)

Environmental Limits

Note: Please contact Moxa if you require products guaranteed to function properly at higher altitudes.

Operating Temperature: -40 to 85°C (-40 to 185°F)

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 95% max, non-condensing

Standards and Certifications

EMS:

ISD-1110-T/1130-T: EN 61000-4-5 (Surge): Signal: 4 kV
 ISD-1210-T/1230-T: IEC 61643-21 C2 (20 kV 1.2/50, 10 kA 8/20)

Warranty and RMA Policy

Warranty Period: 5 years (limited to 1-time use)

Warranty Details: See www.moxa.com/warranty

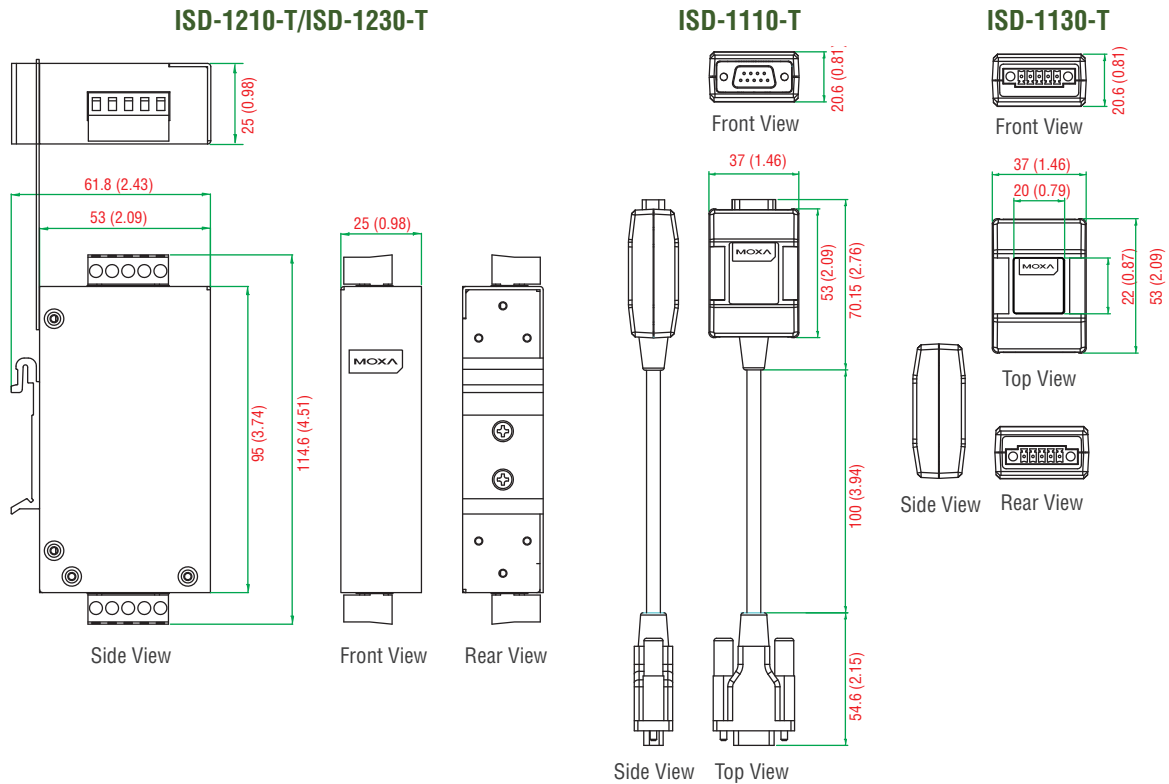
Note: ISD products will only be repaired once within 5 years of purchase. After the first repair, the product's warranty will no longer be valid.

RMA Policy: Moxa does not provide RMA service for ISD products whose PCB board was destroyed by a surge.

Note: Be sure to purchase the ISD product with maximum surge protection suitable for your environment.

Dimensions

Unit: mm (inch)



Ordering Information

Available Models

- ISD-1110-T:** 7 data line entry surge protector, RS-232, 4 kV surge protection, -40 to 85°C operating temperature
- ISD-1130-T:** 4 data line entry surge protector, RS-422/485, 4 kV surge protection, -40 to 85°C operating temperature
- ISD-1210-T:** 4 data line advanced surge protector, RS-232, 20 kV surge protection, -40 to 85°C operating temperature
- ISD-1230-T:** 4 data line advanced surge protector, RS-422/485, 20 kV surge protection, -40 to 85°C operating temperature

Package Checklist

- 1 surge protector
- Hardware installation guide (printed)
- Warranty card