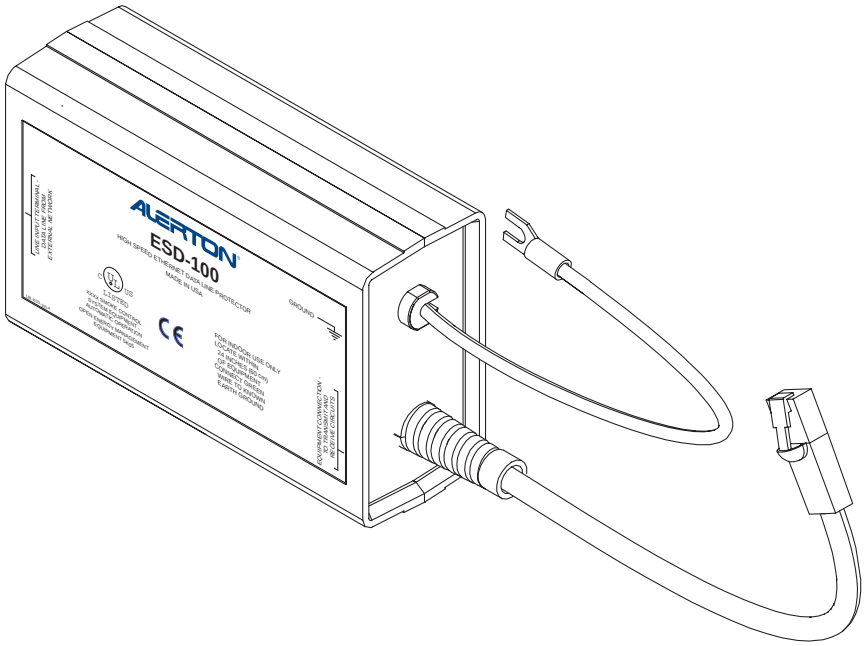
# ESD-100

## Features and highlights

- **Effective**
  Two-stage transient protection: direct to ground and voltage clamping.
- **Rugged**
  Plastic case, UL 94V-0 rated.
- **Simple**
  RJ-45 jack and plug provide simple connection to the network and protected equipment.




The Alerton ESD-100 is an Ethernet data line protector, which protects equipment connected to unshielded twisted pair (UTP) Ethernet networks from transient voltage. Use the ESD-100 on 10Base-T or 100Base-TX Ethernet networks.

The ESD-100 is a low capacitance, two-stage transient voltage protector that provides primary and secondary protection against lightning, inductive switching, and electrostatic discharge (ESD). The first stage directs the transient current through the ground terminal return path, and the second stage clamps the voltage to a safe level without interrupting service.The ESD-100 is designed to protect circuits from common-mode (line-to-ground) and differential (line-to-line) transients.

An RJ-45 modular jack provides a simple connection to the network, and a pigtail lead with an RJ-45 plug provides connection to the protected equipment. For maximum protection, a 14 AWG grounding wire provides connection to a known good earth ground at the equipment panel.

A keyhole mounting system on the back of the unit simplifies installation.

Use the ESD-100 in combination with the BTI-S global controller in smoke control applications. Also use it to protect equipment in harsh environments where electrical transients are common.

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# ESD-100

## Technical Data

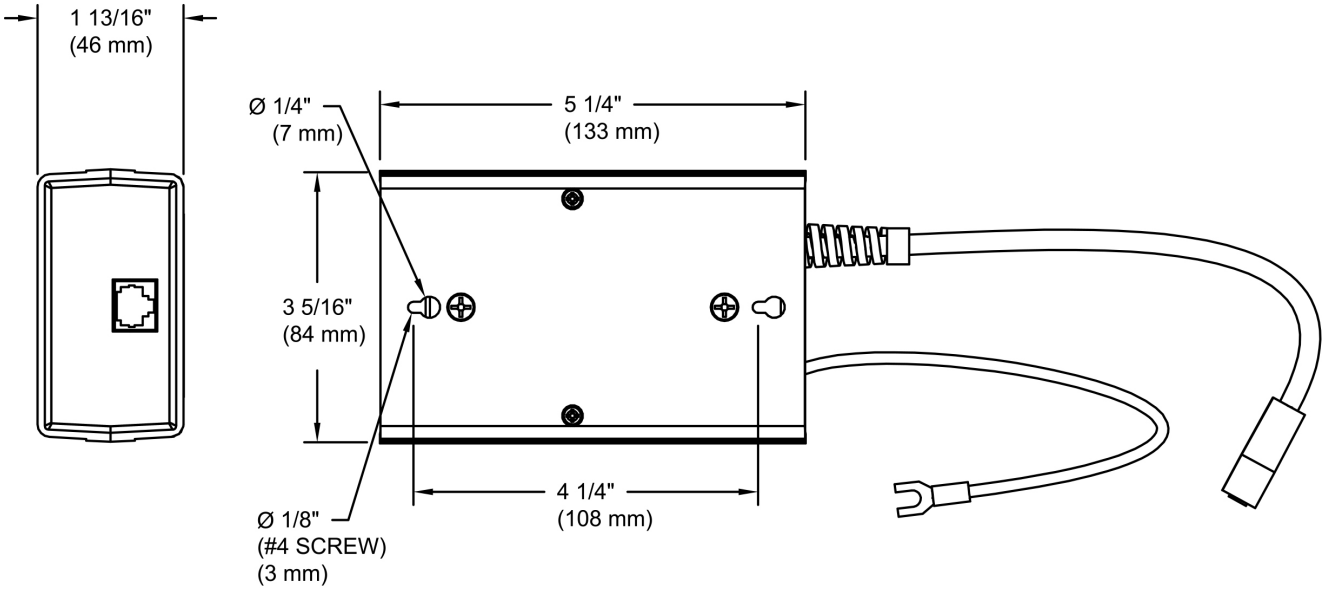
- **Electrical**
  Resistance, throughput: 62 ohms
  Response time: > 100 volts per microsecond
  Maximum transient withstand (line-to-line and line-to-ground): 2400 volts for 80–1110 microseconds (1.2 joules maximum)

- **Environmental**
  -20 to 140 deg. F (-29 to 60 deg. C)

- **Input wiring**
  Approved Ethernet Category 5 or better drop cable with RJ-45 modular plug

- **Cabling**
  Ethernet: 24-inch pigtail with RJ-45 plug
  Ground: 24-inch 14 AWG ground lead with #10 stud spade tongue terminal

- **Ratings**
  Listed Underwriters Laboratory for Open Energy Management (PAZX) under the UL Standard for Safety 916. Listing in U.S. only
  Underwriters Laboratories, Inc. Listed UL 864 / UUKL Smoke Control System Equipment in U.S. only
  EMC Directive 89/336/EEC (European CE Mark)
  FCC Part 15, Subpart J, Class A




## Ordering information

| Item number | Description |
|---|---|
| ESD-100 | Ethernet data line protector |


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