Introduction
The ESIP Series of Subminiature D interface protectors will ensure the reliable operation of parallel and serial devices such as printers and external modems, point-of-sale terminals, mainframes, dumb terminals, and most other devices using Subminiature D connectors which are sensitive to destructive transient energies. Standard applications include Ethernet, RS-232, RS-422 and LAN/WAN interfaces.

ESIPs Offer
- State-of-the-art, avalanche diode and thyristor technology
- Compact, in-line installation
- High speed, high energy handling capability
- Low shunt capacitance to reduce signal loss

You Receive
- Affordable, superior, equipment protection
- Improved reliability and maximized system up-time
- Protection at the interface card
- Adaptability to most industry applications

Transient surges can enter electronic equipment through any pathway provided and damage expensive communications hardware. If a facility has a reliable AC power protection system in place, transient surge energies can still be generated within a building by sources such as inductive load switching, ground loop currents, lightning and electrostatic discharge.

ESIP Series protectors combine compact enclosures with extremely fast response times of less than 5 nanoseconds. They are specifically designed to give added security to electronic devices sensitive to voltage rises or ground loop energies and have been particularly effective in areas prone to lightning activity.

Subminiature D (9,15 and 25 pin) interface connectors are available in configurations protecting all pins or specific pins as required.

All these features make Eaton’s ESIP protectors the most cost-effective and versatile devices of their kind available today.

Installation
To install, insert the protector in series between the incoming communication line and the I/O port of the equipment to be protected. The protector ground wire must be connected to the metal chassis of the equipment being protected. Units should be installed at both ends of the data cable for the most effective protection.

Caution!
Ground wire MUST be grounded directly to the metal chassis of the equipment being protected. The equipment chassis MUST be connected to earth through a properly grounded AC power receptacle.

Warranty
Eaton Corporation offers a standard 5-year warranty for data communications surge protection. For more information, visit www.EatonElectrical.com.
### Electrical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Standard Clamp Voltage</th>
<th>Peak Pulse Current (10/1000 us s.c. Waveform @ Vcl)</th>
<th>Response Time</th>
<th>Maximum Shunt Capacitance</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-422/RS-423/RS-485</td>
<td>7.5 Volts</td>
<td>132 Amps</td>
<td>&lt; 5 Nanoseconds</td>
<td>&lt;30 pF</td>
</tr>
<tr>
<td>Parallel</td>
<td>7.5 Volts</td>
<td>132 Amps</td>
<td>&lt; 5 Nanoseconds</td>
<td>&lt;30 pF</td>
</tr>
<tr>
<td>RS-232</td>
<td>18 Volts</td>
<td>60 Amps</td>
<td>&lt; 5 Nanoseconds</td>
<td>&lt;30 pF</td>
</tr>
</tbody>
</table>

### System Application and Catalog Number

#### DB 9 Series

- **Pins Protected**: Protects All Pins
- **RS-422/RS-423/RS-485**: EDB9-RS422
- **RS-232**: EDB9-RS232

#### DB 15 Series

- **Pins Protected**: Protects All 15 Pins (Unless Specified)
- **RS-422/RS-423/RS-485**: EDB15-RS422
- **RS-232**: EDB15-RS232
- **Ethernet**: EDB15-EN (Protects IEEE 802.3 Pins)

#### DB 25 Series

- **Standard Pin Configurations**
  - 25-Wire: All 25 Pins Protected
  - 4-Wire: Pins (1), 2, 3, 7 & 20
  - 8-Wire: Pins (1), 2, 3, 4, 5, 6, 7, 8 & 20
- **RS-422/RS-423/RS-485**: EDB25-RS422
- **RS-232**: EDB25-RS232
- **Parallel**: EDB25-PARLL

© See Ordering Guidelines below.

**Note**: Special configurations available.

**Note**: All specifications and dimensions are subject to change without notice.

### Ordering Guidelines

**Note**: Do not include any dashes, brackets or hyphens in the catalog numbers when ordering.