



*ITRSP Residential Surge Protector*

### Introduction

Since 1980, Eaton's Innovative Technology has provided Surge Protective Devices (SPDs) to power quality equipment users around the world. Whatever your electrical surge protection need may be, Eaton's Innovative Technology has a Surge Protective Device to fill it!

Innovative Technology Residential Surge Protectors are designed to protect residential electrical and electronic loads from external electrical transients. The ac modules can withstand up to 75 kA of surge current per phase and can be installed adjacent to the electrical service panel.

In addition to ac line Transient Voltage Surge Suppression (TVSS), surge suppressors for telephone and cable lines are available. The combination of ac, telco and cable TVSS isolates your sensitive electronics from the damaging effects of transient voltage events.

### General Features

- Compact design
- LED suppression status indicators
- Modular protection
- Peak surge current capacity per phase (amperes):  
20 kA ITRSPMIC, 50 kA ITRSPMAX, 75 kA ITRSPULT
- Energy handling capacity per phase (joules):  
750 J ITRSPMIC, 1500 J ITRSPMAX, 3500 J ITRSPULT
- Weatherproof ac enclosure for outdoor installation
- Flushmount kit available
- Warranty replacement and equipment protection policy

### ac Module Mechanical and Electrical Features

- Circuit design: bi-directional, internally fused, parallel connected
- Input power frequency: 50 – 420 Hz (60 Hz nominal)
- Response time: <1 nanosecond
- EMI/RFI attenuation: up to 41 dB
- Protection modes: L-L, L-N, L-G and N-G
- Diagnostics: super-bright LED indicator, normally on
- Circuit Interrupt — Reference installation instructions for details
- Warranty: lifetime
- Connected equipment coverage:  
\$25,000 ITRSPMIC, \$50,000 ITRSPMAX, \$75,000 ITRSPULT

### Telco/Data Module Features

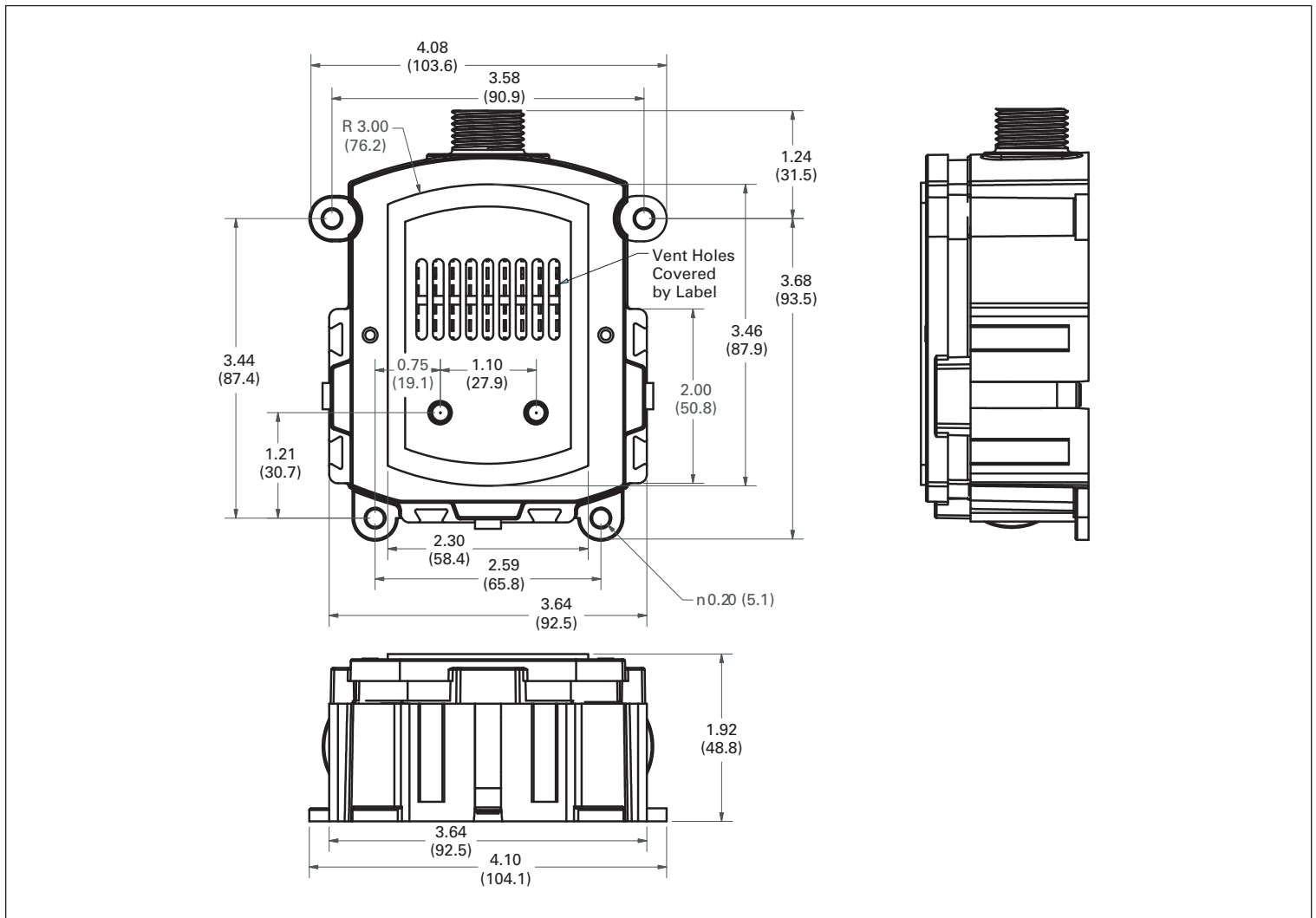
- Application: protects telephone, DSL, fax and modem lines
- Connection: RJ45 female plug connectors (4 telephone lines)
- Surge current capacity: 80,000 amperes
- Protection modes: tip-ring, tip-ground and ring-ground
- Data rate: up to 200 kbps
- Warranty: lifetime
- Connected equipment coverage: \$10,000

### Coaxial Module Features

- Application: protects cable TV, satellite and cable modem inputs
- Connection: Male F Type
- Surge current capacity: 20,000 amperes
- Protection modes: Line-G, Shield-G
- Frequency range: dc – 1.5 GHz
- Impedance: 75 ohms

### Model Selection Table

Description	Model
ac	ITRSPMIC ITRSPMAX ITRSPULT
Data/Telco	ITRSPTEL
Coaxial/Cable	ITRSPCAB
Flushmount Kit	ITRSPFMK



**ITRSP Dimensions in Inches (mm)**

**Table 1. ITRSP System Specifications**

Model	Peak Surge Current Per Phase (Amperes) kA	Energy Handling (Joules)	System Configuration	Nominal System Voltage	ANSI/IEEE C62.41-1991 Measured Limiting Voltage ①			UL® SVR		
					B3/C1 Impulse 6 kV, 3 kA 90° Phase Angle			UL 1449-2 Suppressed Voltage Ratings		
					L-L	L-N	L-G	L-L	L-N	L-G
ITRSPMIC	20	750	Split-Phase 3-Wire and Ground	120/240	950	550	550	800	400	400
ITRSPMAX	50	1500		120/240	950	550	550	800	400	400
ITRSPULT	75	3500		120/240	950	550	550	800	400	400

① Test environment: all modes tested dynamic positive polarity. Time base = 1 ms. All voltages are peak (±10%), time base = 1 ms./div., voltages are measured from zero crossing. All tests performed with 6-inch (152.4 mm) lead length, simulating actual installation.

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**Eaton Corporation**  
**Innovative Technology TVSS Products**  
 1000 Cherrington Parkway  
 Moon Township, PA 15108-4312  
 USA  
 Phone: 1-800-525-2000  
 Web: www.itvss.com

