



Features

- GDT-TBU® High-Speed Protector technology
- Low impulse voltage let-through
- Low impulse current let-through
- High surge current rating
- 10/100/1000 Mbps data compatibility
- Transparent to Mode A or Mode B
- Compatible with Class 4 power levels
- UL Listed per E153537 Vol 2 Sec 2

Applications

- Data communications
- Highly exposed Ethernet
- Telecommunication and indoor industrial installations
- Surveillance cameras
- Remote power and communication

1530-1 Series PoE Ethernet Surge Protector

The Bourns® Model 1530-1 Series Commercial PoE Ethernet Surge Protectors incorporate state-of-the-art gas discharge tube and surge limiting technologies to provide the highest protection level offered by Bourns. The Model 1530-1 Series is designed to meet applicable Telcordia GR-1089 Level 1 and Level 2 Surge and AC Power Fault specifications on the data signal line while allowing operations up to 35 watts (employing both Mode A and B combination) at 57 volts. The Model 1530-1 Series enclosure is flame retardant and manufactured with a high impact resistant plastic.

Characteristics

Test methods per UL 497B, GR-1089, CSA C22.2, IEC 61000-4-5, and IEEE 802.3at.

| Parameter | Commercial Model 1530-1 |
|---|---|
| DC Breakdown on Data Lines | 150 V Typical Input / 7 V Typical Output |
| DC Breakdown - Power Lines | < 200 V Typ. |
| Power Rating | 35 W |
| Line Series Resistance (Loop) | ~ 6 Ω Typ. |
| Line Series Balance | 0.5 Ω Typ. / 1.0 Ω Max |
| Capacitance Line to Line @ 1 MHz | 10 pF Typ. |
| BER Performance Testing 10/100/1000 Mbps | > 100 meters |
| Surge Response Time | < 1 μs |
| Surge Limiting Performance Let-Through Voltage Let-Through Current | < 60 V < 1 A |
| First Level Surge 1 kV – 10/1000 μs, 100 A 2.5 kV – 2/10 μs, 500 A 800 V – 1.2/50 μs, 8/20 μs Combo Wave | > 10 operations > 10 operations > 10 operations |
| Second Level Surge 2.5 kV – 2/10 μs, 500 A, Inductive Kick ¹ 6 kV / 3 kA – 1.2/50 μs, 8/20 μs ¹ Combo – 10/1000 μs, 100 A | 1 operation 1 operation > 10 operations |
| First Level Power Fault 220 mA Below Protection Threshold 600 V / 1 A / 1 Second 1000 V / 1 A / 1 Second 425 V / 0.5 A / 4 Seconds | 15 minutes > 60 operations > 60 operations > 1 operation |
| Second Level Power Fault 120 V / 25 A ¹ 425 V / 40 A / 1.5 Second ¹ 425 V / 7 A / 5 Seconds ¹ 425 V / 2.2 A ¹ | 15 minutes 1 operation 1 operation 15 minutes |
| Storage and Effective Temperature | -40 to +65 °C |
| UL Flame Rating | 94 V0 |
| Ingress Protection Ratings | 20 |

Notes:

UL Listed component, UL File E153537

1) Fuse may fail open and disconnect from circuit.



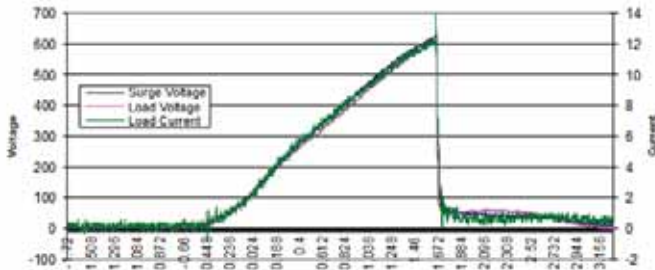
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf

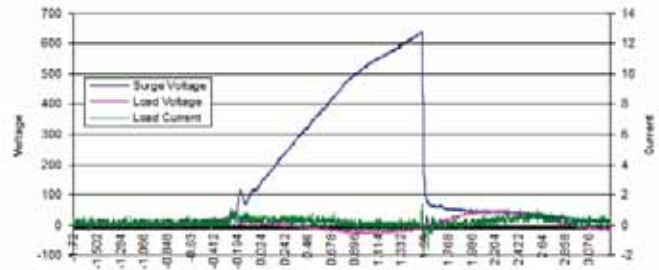
1530-1 Series PoE Ethernet Surge Protector



Performance Graphs



WITHOUT Bourns® Active Surge Limiting Technology



WITH Bourns® Active Surge Limiting Technology

* With impulse input @ 10/1000 μ s, 1.5 kV, 100 A.

- A. Applied to inputs Tip (A) or Ring (B) in reference to Ground (Earth) and measured at outputs Tip (A) or Ring (B) in reference to Ground (Earth) with 50 ohms load.
- B. Applied between inputs Tip (A) or Ring (B) and measured between outputs Tip (A) or Ring (B) with 50 ohms load.

Wiring / Pin-Out Information

(Default T568B Wiring Scheme Silkscreened on PCB.)

| Pin No. | T568A Wire Color | T568B Wire Color | Data Line Information | Power Line Information |
|---------|-----------------------|-----------------------|-----------------------|------------------------|
| Pin 1 | White / Green Stripe | White / Orange Stripe | TxRx A+ | DC + |
| Pin 2 | Green Solid | Orange Solid | TxRx A- | DC + |
| Pin 3 | White / Orange Stripe | White / Green Stripe | TxRx B+ | DC - |
| Pin 6 | Orange Solid | Green Solid | TxRx B- | DC - |
| Pin 4 | Blue Solid | Blue Solid | TxRx C+ | DC + |
| Pin 5 | White / Blue Stripe | White / Blue Stripe | TxRx C- | DC + |
| Pin 7 | White / Brown Stripe | White / Brown Stripe | TxRx D+ | DC - |
| Pin 8 | Brown Solid | Brown Solid | TxRx D- | DC - |

How to Order

Model Number

- 1530-1DDIN Rail Mount, No Ground Wire
- 1530-1D-WDIN Rail Mount, with Ground Wire
- 1530-1-WWall Mount, with Ground Wire

Specifications are subject to change without notice.

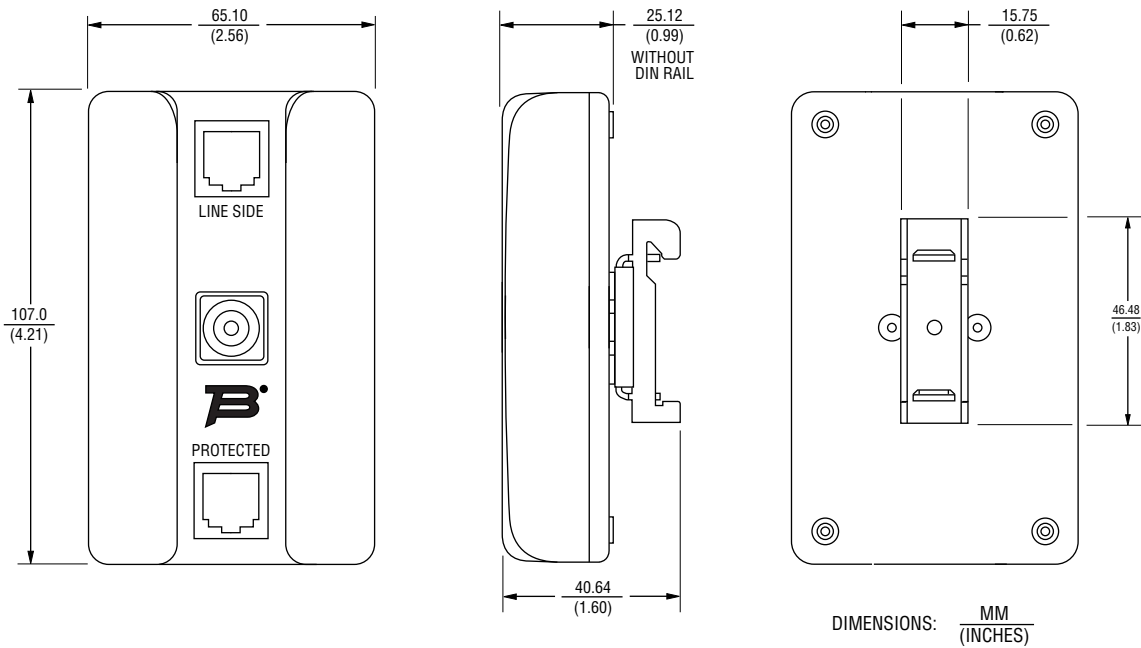
Users should verify actual device performance in their specific applications.

The products described herein and this document are subject to specific disclaimers as set forth on the last page of this document, and at www.bourns.com/legal/disclaimer.pdf.

1530-1 Series PoE Ethernet Surge Protector

BOURNS®

Product Dimensions



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

REV. B 10/19

"Bourns" is a registered trademark of Bourns, Inc. in the United States and other countries.

"TBU" is a registered trademark of Bourns, Inc. in the U.S. and other countries, except Japan.

All references to TBU® in this document for use in Japan shall be deemed to be replaced with Bourns® TBU™.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

The products described herein and this document are subject to specific disclaimers as set forth on the last page of this document, and at www.bourns.com/legal/disclaimer.pdf.

This legal disclaimer applies to purchasers and users of Bourns® products manufactured by or on behalf of Bourns, Inc. and its affiliates (collectively, "Bourns").

Unless otherwise expressly indicated in writing, Bourns® products and data sheets relating thereto are subject to change without notice. Users should check for and obtain the latest relevant information and verify that such information is current and complete before placing orders for Bourns® products.

The characteristics and parameters of a Bourns® product set forth in its data sheet are based on laboratory conditions, and statements regarding the suitability of products for certain types of applications are based on Bourns' knowledge of typical requirements in generic applications. The characteristics and parameters of a Bourns® product in a user application may vary from the data sheet characteristics and parameters due to (i) the combination of the Bourns® product with other components in the user's application, or (ii) the environment of the user application itself. The characteristics and parameters of a Bourns® product also can and do vary in different applications and actual performance may vary over time. Users should always verify the actual performance of the Bourns® product in their specific devices and applications, and make their own independent judgments regarding the amount of additional test margin to design into their device or application to compensate for differences between laboratory and real world conditions.

Unless Bourns has explicitly designated an individual Bourns® product as meeting the requirements of a particular industry standard (e.g., ISO/TS 16949) or a particular qualification (e.g., UL listed or recognized), Bourns is not responsible for any failure of an individual Bourns® product to meet the requirements of such industry standard or particular qualification. Users of Bourns® products are responsible for ensuring compliance with safety-related requirements and standards applicable to their devices or applications.

Bourns® products are not recommended, authorized or intended for use in nuclear, lifesaving, life-critical or life-sustaining applications, nor in any other applications where failure or malfunction may result in personal injury, death, or severe property or environmental damage. Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any Bourns® products in such unauthorized applications might not be safe and thus is at the user's sole risk. Life-critical applications include devices identified by the U.S. Food and Drug Administration as Class III devices and generally equivalent classifications outside of the United States.

Bourns expressly identifies those Bourns® standard products that are suitable for use in automotive applications on such products' data sheets in the section entitled "Applications." Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any other Bourns® standard products in an automotive application might not be safe and thus is not recommended, authorized or intended and is at the user's sole risk. If Bourns expressly identifies a sub-category of automotive application in the data sheet for its standard products (such as infotainment or lighting), such identification means that Bourns has reviewed its standard product and has determined that if such Bourns® standard product is considered for potential use in automotive applications, it should only be used in such sub-category of automotive applications. Any reference to Bourns® standard product in the data sheet as compliant with the AEC-Q standard or "automotive grade" does not by itself mean that Bourns has approved such product for use in an automotive application.

Bourns® standard products are not tested to comply with United States Federal Aviation Administration standards generally or any other generally equivalent governmental organization standard applicable to products designed or manufactured for use in aircraft or space applications. Bourns expressly identifies Bourns® standard products that are suitable for use in aircraft or space applications on such products' data sheets in the section entitled "Applications." Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any other Bourns® standard product in an aircraft or space application might not be safe and thus is not recommended, authorized or intended and is at the user's sole risk.

The use and level of testing applicable to Bourns® custom products shall be negotiated on a case-by-case basis by Bourns and the user for which such Bourns® custom products are specially designed. Absent a written agreement between Bourns and the user regarding the use and level of such testing, the above provisions applicable to Bourns® standard products shall also apply to such Bourns® custom products.

Users shall not sell, transfer, export or re-export any Bourns® products or technology for use in activities which involve the design, development, production, use or stockpiling of nuclear, chemical or biological weapons or missiles, nor shall they use Bourns® products or technology in any facility which engages in activities relating to such devices. The foregoing restrictions apply to all uses and applications that violate national or international prohibitions, including embargos or international regulations. Further, Bourns® products and Bourns technology and technical data may not under any circumstance be exported or re-exported to countries subject to international sanctions or embargoes. Bourns® products may not, without prior authorization from Bourns and/or the U.S. Government, be resold, transferred, or re-exported to any party not eligible to receive U.S. commodities, software, and technical data.

To the maximum extent permitted by applicable law, Bourns disclaims (i) any and all liability for special, punitive, consequential, incidental or indirect damages or lost revenues or lost profits, and (ii) any and all implied warranties, including implied warranties of fitness for particular purpose, non-infringement and merchantability.

For your convenience, copies of this Legal Disclaimer Notice with German, Spanish, Japanese, Traditional Chinese and Simplified Chinese bilingual versions are available at:

Web Page: <http://www.bourns.com/legal/disclaimers-terms-and-policies>

PDF: <http://www.bourns.com/docs/Legal/disclaimer.pdf>

单击下面可查看定价，库存，交付和生命周期等信息

[>>Bourns\(伯恩斯\)](#)