



LP-DOE, POE & PAE Data Line Over Voltage Protection

- Tested to RFC2544 extended methods
- Meets Network Equipment Building System (NEBS) Level 3
- Excellent data integrity
- Lowest surge and energy throughput
- Lowest error rate
- Shielded enclosure
- IP67 weatherized version available



Lightning and Surge Protection for The 21st Century™

The Times-Protect® Data Line protector family utilizes a unique leading edge technology to provide surge protection at a level not previously available for twisted pair Cat 5e and Cat 6 cables. The LP-DOE-1-G, LP-POE-1G and LP-PAE-100 have been tested to RFC2544 extended test methods as illustrated in Figure 1. The surge protection performance of this product family surpasses the performance of other available competitive products by a wide margin. The maximum surge rating for these products is only limited by the RJ-45 connector surge voltage and current handling capability.

LP-DOE-1G 1000 BASE-T ETHERNET DATA

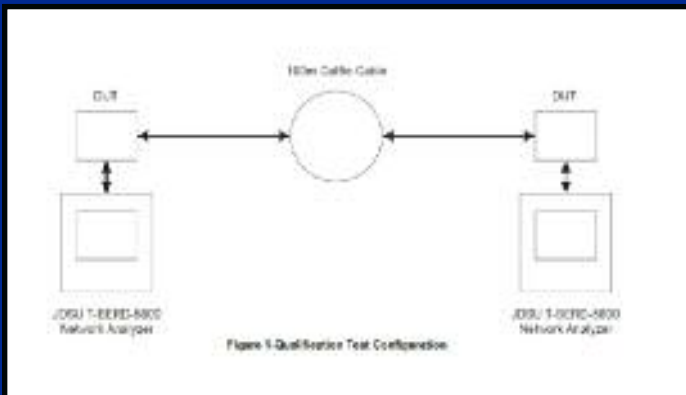
- 1GB performance per RFC2544 test methods at 100m
- Data protection on all pins, common and differential modes
- Surge Let-through voltage on data lines limited to 20V peak @ 3kA 8x20uS surge test current
- Metallic enclosure with chassis to ground
- Designed for indoor telecom and network applications

LP-POE-1G 1000 BASE-T POWER OVER ETHERNET

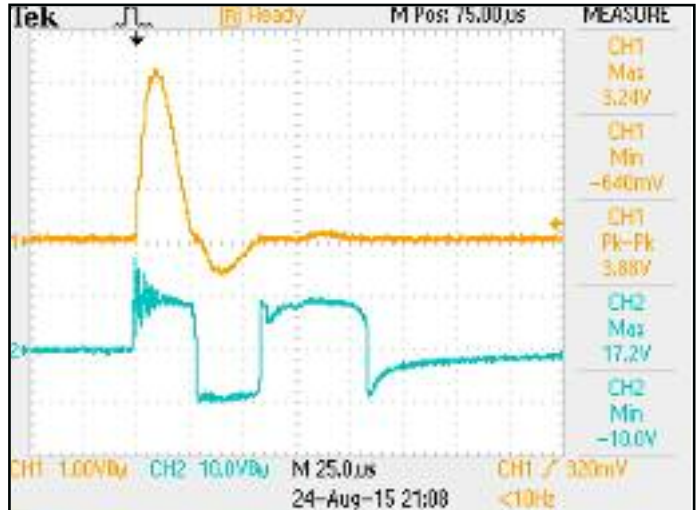
- 1GB performance per RFC2544 test methods at 100m
- Data protection on all pins, common and differential modes
- Surge Let-through voltage on data lines limited to 20V peak @ 3kA 8x20uS surge test current
- 60VDC protection on DC pins
- Metallic enclosure with chassis to ground

LP-PAE-100 100 BASE-T POWER AND ETHERNET

- 10/100 Base-T performance per RFC2544 test methods at 100m
- Data protection on all pins, common and differential modes
- Surge Let-through voltage on data lines limited to 20V peak @ 3kA 8x20uS surge test current
- 60VDC protection on DC pins
- Metallic enclosure with chassis to ground

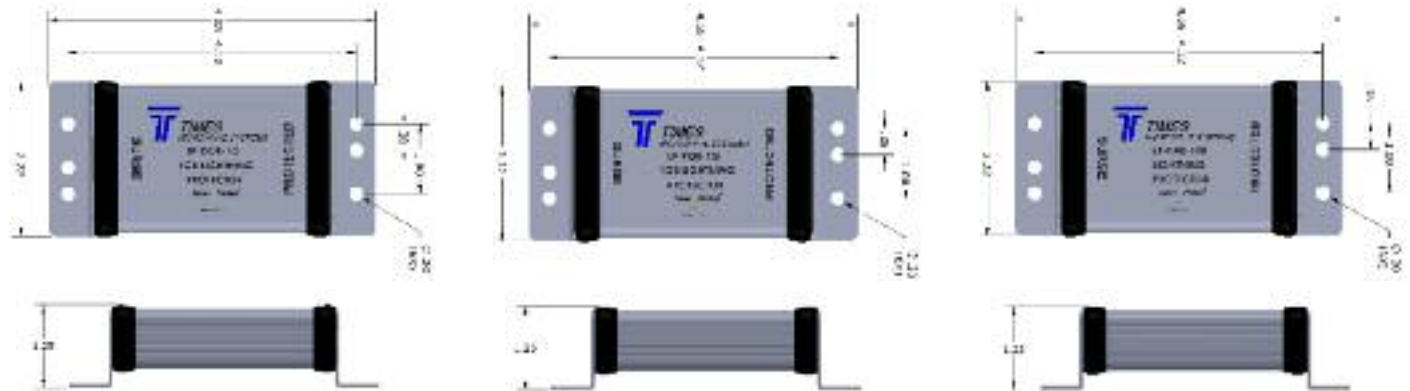


Data Test Method: Extended RFC2544 Test	
Protected pins to chassis:	All pins
Maximum discharge current:	300A, 10/1000uS. per Bellcore 1089 5kA 8 10uS per IEC 61000-4-5
Repetitive discharge: (10 cycles max)	100A, 10/1000uS, per Bellcore 1089 3kA 8/uS per IEC 61000-4-5
Impedance:	100 Ohms nominal
Mechanical	
Dimensions:	4.68" x 2.22" x 1.25"
Weight:	3.7 oz.
Mounting:	Chassis or panel
Environmental	
Operating Temperature:	-40° - +65° C
Relative humidity:	0 to 90% non-condensing



Surge Performance Data for the LP-DOE-1G

- Channel 1 (yellow trace); Test input surge current 3.24kA 8x20uS wave shape
- Channel 2 (blue trace); Let through voltage 17.2Vpk



LP-DOE-1G

Application:

1000 BASE-T, panel mount, indoor

Electrical:

Connector: RJ45 jack, shielded

Data Rate: 1000 Mbps, 1000 BASE-T per IEEE 802.3ab

Data Test Method: Extended RFC2544 tests

Protected Pin Pairs: (1-2), (3-6), (4-5), (7-8)

Surge Let Through Voltage: 20V peak @300A, 10/1000uS, 20V peak @ 5kA, 8/20uS

LP-POE-1G

Application:

1000 BASE-T, panel mount, indoor

Electrical:

Connector: RJ45 jack, shielded

DC: OST EDSTLZ1550/2

Data Rate: 1000 Mbps, 1000 BASE-T per IEEE 802.3ab

Protected Pin Pairs: (1-2), (3-6), (4-5), (7-8)

DC Pin Pairs: (1-2), (3-6), (4-5), (7-8)

DC Line Voltage: +48VDC nominal, +60VDC max

DC Line Current: 250mA operating per line-rtn pair
500mA nominal fault per line-rtn pair

Surge Let Through Voltage:

Data: 20V peak @300A, 10/1000uS

20V peak @ 5kA, 8/20uS

DC: 90V peak @ 300A, 10/1000uS, 90V peak @5kA, 8/20uS

LP-PAE-100

Application:

100 BASE-T, panel mount, indoor

Electrical:

Connector: RJ45 jack, shielded

Data Rate: 100 Mbps, 100 BASE-T per IEEE 802.3ab

Protected Pin Pairs: (1-2), (3-6), (4-5), (7-8)

Data Pin Pairs: (1-2), (3-6)

DC Pin Pairs: Line (4-5), RTN (7-8)

DC Line Voltage: +48VDC nominal, +60VDC max

DC Line Current: 500mA operating per line-rtn pair
1100mA nominal fault

Surge Let Through Voltage:

Data: 20V peak @300A, 10/1000uS

20V peak @ 5kA, 8/20uS

DC: 90V peak @ 300A, 10/1000uS, 90V peak @5kA, 8/20uS



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