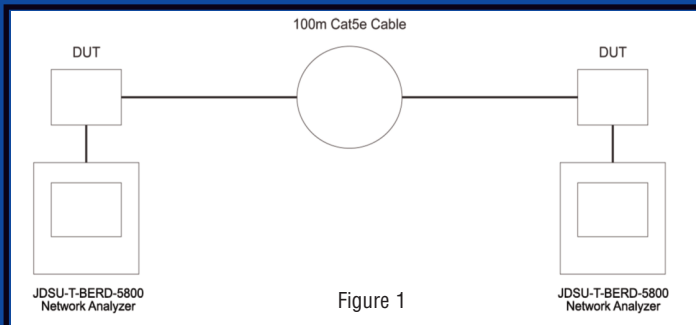




## LP-DOE, POE, POE-PT & PAE Data Line Over Voltage Protection

- 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-POE-PT-1G, POE-1G, DOE-1G and 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-POE-PT-1G GIGABIT POWER OVER ETHERNET (DC PASS-THROUGH)

- Protection for applications where DC is already present
- Surge Protection per IEEE 802.3at for Gigabit PoE, Modes A & B
- Pins protected to chassis ground: All pins

### LP-POE-1G GIGABIT POWER OVER ETHERNET (DC INJECTOR)

- Protection for applications requiring 48-60Vdc injection
- Surge Protection per IEEE 802.3at for Gigabit PoE, Modes A & B
- Pins protected to chassis ground: All pins

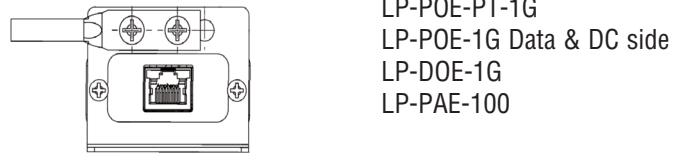
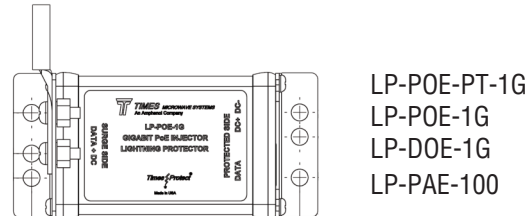
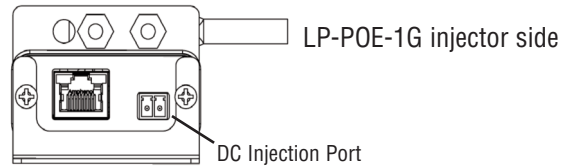
### LP-DOE-1G 1000 BASE-T ETHERNET DATA

- Protection for Gigabit Data applications
- Surge Protection per IEEE 802.3ab
- Pins Protected to chassis ground: All pins

### LP-PAE-100 100 BASE-T POWER Over ETHERNET

- Protection for 10/100 Base-T
- Surge Protection per IEEE 802.3at, Mode B
- Data Pin Pairs (1-2) (3-6) DC Pin Pairs (4-5) (7-8)

<b>Data Test Method:</b> Extended RFC2544 Test	
Protected pins to chassis:	All pins
Maximum discharge current: 300A, 10/1000uS, Telcordia GR-1089 5kA 8/20uS per IEC 61000-4-5	
Repetitive discharge: 100A, 10/1000uS, Telcordia GR-1089 (10 cycles max) 3kA 8/20uS per IEC 61000-4-5	
Impedance:	100 Ohms nominal
<b>Mechanical</b>	
Connector Type:	RJ45 jack shielded
Dimensions:	4.68" x 2.22" x 1.25"
Weight:	3.7 oz.
Mounting:	Chassis or panel
<b>Environmental</b>	
Operating Temperature:	-40° - +65° C
Relative humidity:	0 to 90% non-condensing
RoHS:	Compliant



Performance Specifications	LP-POE-PT-1G	LP-POE-1G	LP-DOE-1G	LP-PAE-100
Application:	PoE IEEE 802.3at Modes A&B, 1Gb (DC PASS-THROUGH)	PoE IEEE 802.3at Modes A&B, 1Gb (INJECTOR)	Gigabit Ethernet IEEE 802.3ab, 1Gb	10/100 Base-T PoE IEEE 802.3at Mode B
DC Connector Type:	N/A	OST EDSTLZ 1150/2	N/A	N/A
Data Rate:	1000 Mbps	1000 Mbps	1000 Mbps	100 Mbps
Protected Pin Pairs:	(1-2) (3-6) (4-5) (7-8)	(1-2) (3-6) (4-5) (7-8)	(1-2) (3-6) (4-5) (7-8)	(1-2) (3-6)
DC Pin Pairs Line:	(1-2) (4-5)	(1-2) (4-5)	N/A	(4-5)
DC Pin Pairs Return:	(3-6) (7-8)	(3-6) (7-8)	N/A	(7-8)
DC Voltage:	+/-48VDC nominal +/-60VDC max	+/-48VDC nominal +/-60VDC max	N/A	+/-48VDC nominal +/-60VDC max
Maximum DC Current	600mA	600mA	N/A	600mA
Surge Let Through Voltage 100A 10/1000us Input Current Wave Shape	<150V L-L <80V L-G	<30V L-L (Data) <15V L-G (Data) <100V L-R (DC) <50V L-G (DC)	<30V L-L <15V L-G	<30V L-L (Data) <15V L-G (Data) <100V L-R (DC) <50V L-G (DC)



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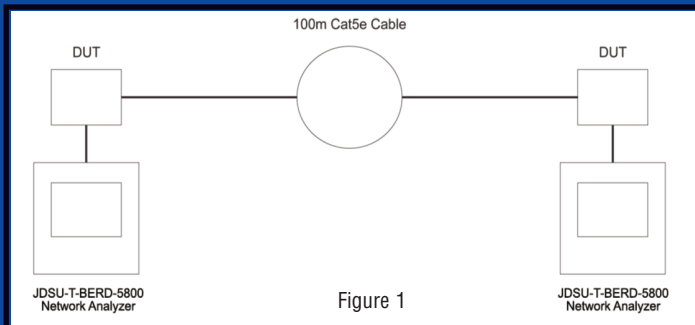
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LP-DOE 02/17



## LP-POE-PT-1G-W, POE-W, DOE-W & PAE-W Data Line Over Voltage Protection

- IP67 Weatherized for outdoor use
- Tested to RFC2544 extended methods
- Meets Network Equipment Building System (NEBS) Level 3
- Excellent data integrity
- Lowest surge and energy throughput
- Lowest error rate
- Indoor 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-POE-PT-1G-W, POE-1G-W, DOE-1G-W and PAE-100-W 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-POE-PT-1G-W GIGABIT POWER OVER ETHERNET (DC PASS-THROUGH)

- Protection for applications where DC is already present
- Surge Protection per IEEE 802.3at for Gigabit PoE, Modes A & B
- Pins protected to chassis ground: All pins

### LP-POE-1G-W GIGABIT POWER OVER ETHERNET (DC INJECTOR)

- Protection for applications requiring 48-60Vdc injection
- Surge Protection per IEEE 802.3at for Gigabit PoE, Modes A & B
- Pins protected to chassis ground: All pins

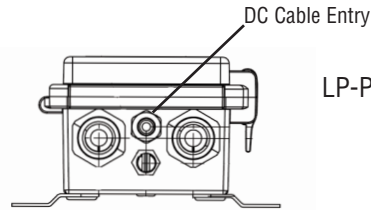
### LP-DOE-1G-W 1000 BASE-T ETHERNET DATA

- Protection for Gigabit Data applications
- Surge Protection per IEEE 802.3ab
- Pins Protected to chassis ground: All pins

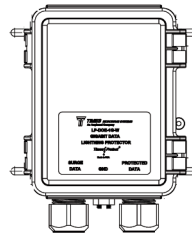
### LP-PAE-100-W 100 BASE-T POWER OVER ETHERNET

- Protection for 10/100 Base-T
- Surge Protection per IEEE 802.3at, Mode B
- Data Pin Pairs (1-2) (3-6) DC Pin Pairs (4-5) (7-8)

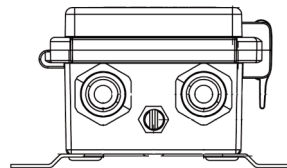
<b>Data Test Method:</b> Extended RFC2544 Test	
Protected pins to chassis:	All pins
Maximum discharge current: 300A, 10/1000uS, Telcordia GR-1089 5kA 8/20uS per IEC 61000-4-5	
Repetitive discharge: 100A, 10/1000uS, Telcordia GR-1089 (10 cycles max) 3kA 8/20uS per IEC 61000-4-5	
Impedance:	100 Ohms nominal
<b>Mechanical</b>	
Connector Type:	RJ45 jack shielded
Dimensions With Mounting HDWR:	6.1" x 5.4" x 3.1"
Weight:	11 oz.
Mounting:	pole or panel
<b>Environmental</b>	
Operating Temperature:	-40° - +65° C
Relative humidity:	0 to 90% non-condensing
RoHS:	Compliant
Weatherization:	IP-65



LP-POE-1G-W



LP-POE-PT-1G-W  
LP-POE-1G-W  
LP-DOE-1G-W  
LP-PAE-100-W



LP-POE-PT-1G-W  
LP-DOE-1G-W  
LP-PAE-100-W

Performance Specifications	LP-POE-PT-1G-W	LP-POE-1G-W	LP-DOE-1G-W	LP-PAE-100-W
Application:	PoE IEEE 802.3at Modes A&B, 1Gb (DC PASS-THROUGH)	PoE IEEE 802.3at Modes A&B, 1Gb (INJECTOR)	Gigabit Ethernet IEEE 802.3ab, 1Gb	10/100 Base-T PoE IEEE 802.3at Mode B
DC Connector Type:	N/A	OST EDSTLZ 1150/2	N/A	N/A
Data Rate:	1000 Mbps	1000 Mbps	1000 Mbps	100 Mbps
Protected Pin Pairs:	(1-2) (3-6) (4-5) (7-8)	(1-2) (3-6) (4-5) (7-8)	(1-2) (3-6) (4-5) (7-8)	(1-2) (3-6)
DC Pin Pairs Line:	(1-2) (4-5)	(1-2) (4-5)	N/A	(4-5)
DC Pin Pairs Return:	(3-6) (7-8)	(3-6) (7-8)	N/A	(7-8)
DC Voltage:	+/-48VDC nominal +/-60VDC max	+/-48VDC nominal +/-60VDC max	N/A	+/-48VDC nominal +/-60VDC max
Maximum DC Current	600mA	600mA	N/A	600mA
Surge Let Through Voltage 100A 10/1000us Input Current Wave Shape	<150V L-L <80V L-G	<30V L-L (Data) <15V L-G (Data) <100V L-R (DC) <50V L-G (DC)	<30V L-L <15V L-G	<30V L-L (Data) <15V L-G (Data) <100V L-R (DC) <50V L-G (DC)

