

# LIGHTNING ELIMINATORS

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## DLP

### Data Line Protectors

Surge protection for ALL types of data lines, instrument lines, phone lines, current loops, and DC circuits.



DLP Type MHB & LMHB



DLP Type MPB



DLP Type MSB, LMSB, & L2MSB

### What is the Hazard?

Electrical storms pose a special threat to equipment attached to telephone lines, data lines, process control lines, etc. The hazard exists whether the lines are above or below ground.

Lightning can induce electrical surges and transients of incredible destructive force, having thousands of volts and hundreds of joules, in a span of a few microseconds. Other harmful transients are man-made: utility switching, in-house switching, motors and

machinery. All of these transients can degrade and damage unprotected equipment. The Data Line Protector guards against both fast-rising transients and slower high energy surges.

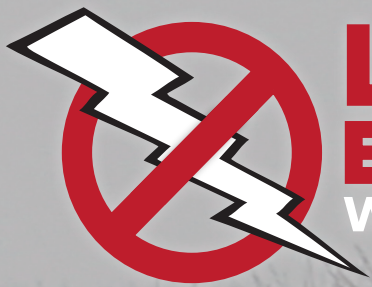
### What is the Solution?

Data Line Protectors are placed in a series between the line and the equipment to be protected. The DLP intercepts any form of electrical transient above a preset clamping voltage level.

Each DLP circuit has series and parallel components. The first parallel component handles the high-energy surges, dissipating some energy internally but shunting most to the ground. The second parallel component is the voltage limiter. This fast-reacting component maintains a tight clamping voltage, preventing any overshoot or fast-rising spikes above the clamp level. The series component is normally passive in the circuit. When a transient hits, the series component attenuates the transient and stabilizes the clamping voltage.

### Performance Ratings

- Maximum Surge Current - 10,000 Amps
- Maximum Energy Handling - 500 Joules
- Response Time - 1 Nanosecond
- Clamping Voltage - Selected by Customer
- Operating Altitude - Up to 10,000 Feet
- Operating Humidity - 5% to 95%
- Operating Temperature - 40C to 85C



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## DLP Application Guide

DLP Model Type	No. Protected Wires	Max Operating Current	Application
MSB	1	270 mA	High data rate circuits
LMSB	1	500 mA	Current loop, Analog, Low frequency, DC circuits
L2MSB	1	2 Amps	Current loop, Analog, Low frequency, DC circuits
MPB	2	130 mA	Telephone & Communications circuits
MHB	2	270 mA	High data rate circuits
LMHB	2	500 mA	Current loop, Analog, Low frequency, DC circuits

Qty. of DLPs	Part No.	Bracket Length
Up to 2	0010428	2.70 in.
Up to 4	0010429	3.46 in.
Up to 5	0010435	3.85 in.
Up to 10	0010434	5.75 in.
Up to 15	0010430	7.85 in.
Up to 25	0010433	12.00 in.
Up to 50	0010432	22.125 in.
Up to 75	0010431	32.66 in.

Operating Voltage	Clamping Voltage
≤ 6V	7.5
≤ 10V	12
≤ 15V	18
≤ 25V	30
≤ 42V	51
≤ 62V	75
≤ 83V	100
≤ 125V	150
≤ 175V	200

## Mounting Information

The DLP mounting bracket is the ground reference point for DLP modules. Each DLP is independently mounted and provides a positive connection point for grounding modules, with up to 75 modules per bracket for applications in multiple circuit configurations. Should a module fail it can be removed and quickly replaced.

The DLP can be pre-mounted in a weather-tight NEMA 4X enclosure for field applications. The weather-tight enclosures are available to hold up to 15 DLPs.

## DLP Model Number

How to determine you number:

DLP - \*V - DLP Model Type - #

\*V = Clamping Voltage

# = No. of modules per bracket

