IEEE 802.3at modes A & B Power-Over-Ethernet (PoE) Lightning Protection Device

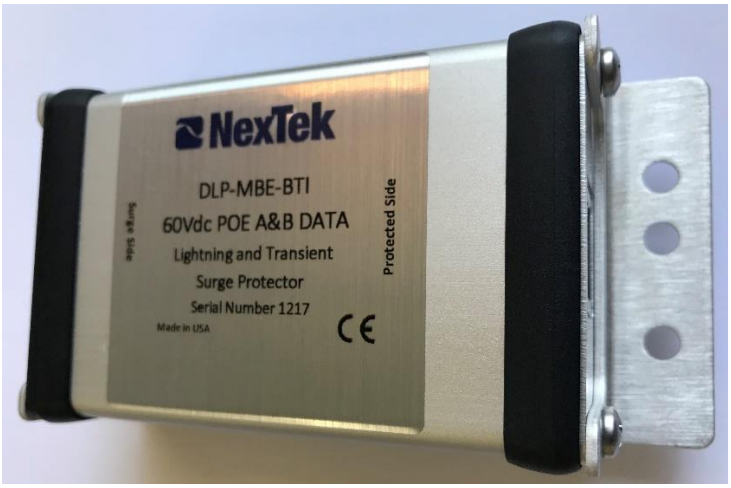
The NexTek IEEE 802.3at device is designed to protect sensitive PoE end points from lightning damage that may couple onto the CAT5/6 data cables typically used in many wireless applications. Lightning energy that is coupled onto the cable lines whether in common or differential modes is safely diverted to ground by using transient protection circuitry within the protection device. The device is normally a passive device and only becomes operational under excessive transient conditions. For additional information please contact NexTek directly or your local sales representative.

Key Features

- Multiple Strike Capability
- Rugged and Lightweight Design
- Surge Protection on All Lines
- RoHS Compliant

Applications

- Remote Radio Heads, RRH
- PoE Equipment
- Telco Backhaul
- Wireless IP Security Cameras Networks
- Internet Service providers, ISPs
- Point to Point Radios
- Enterprise Networks
- Wireless LAN Access Points and Bridges



Electrical Specifications

Connectors:	RJ45 Jack, Shielded
Impedance	100 Ohms nominal
DC Resistance	8 Ohms
Operating DC Voltage, Nominal	±48VDC (±60VDC MAX)
DC Current	600mA Max per mode
Surge Test Method	IEC 61000-4-5, Telcordia GR-1089
Max Surge Current:	
One Time Discharge:	300A, 10/1000µS Waveform per Telcordia GR-1089
	5kA, 8/20µ Waveform per IEC-61000-4-5
Multi Strike: (10X)	100A, 10/1000µS Waveform per Telcordia GR-1089
	3kA, 8/20µ Waveform per IEC-61000-4-5
Surge Let-Through Voltage	
@100A, 10/1000µS	Line-Line <100V Peak
	Line-Ground <50V Peak
@3kA, 8/20µS	Line-Line <10V Peak
	Line-Ground <50V Peak
Data Rate	100 Mbps, 100 Base-T PER IEEE 802.3at, MODES A & B.
Data Test Method:	Extended RFC2544 Tests
Protected Pin Pairs:	(1-2), (3-6), (4-5), (7-8)
Protected Pins to Chassis Ground:	All Pins
Data Pin Pairs:	(1-2), (3-6), (4-5), (7-8)
DC Pin Pairs:	Line (1-2), (4-5), Return (3-6), (7-8)

Environmental Specifications

Temperature Range	-40°C to +85°C
Relative Humidity	0 to 90% noncondensing

Mechanical Specifications

Dimensions	
Weight	
Grounding Nut Torque	25-30 lbs.-in
Mounting	Panel

Regulatory Compliance:

RoHS	Compliant
NEBS	Level 3 Compliant

Mechanical Outline