LIGHTNING PROTECTION INTERNATIONAL PTY LTD



TECHNICAL DATA SHEET

LPI® Bluetooth Range of Surge Filters Features



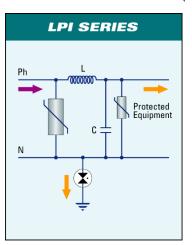
- High performance surge protector for an operating voltage of 220-277
 Vac
- SSTB150 technology for primary and secondary protection 32 A- 125 A (1 Ph & 3 Ph)
- Encapsulated spark gap and SSTB150 technology capable of operation under fault/overvoltage conditions up to 480 Vrms for 200 A filter and above
- Three stage protection provides highest level of protection for sensitive electronic equipment

Product Description

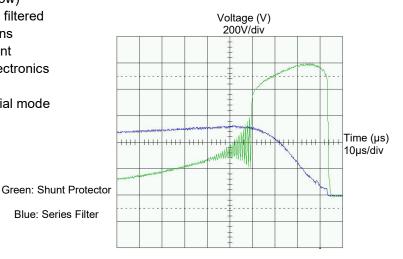
- Designed to suit TT, TN-C, TN-S & TN-C-S distribution systems
- Inductors dv/dt and di/dt of the incoming surge will be reduced by 1000 times
- 32 125 A filters primary (150 kA 8/20 μs) and secondary (50 kA 8/20 μs)
- 200 630 A filters primary (50 kA 10/350 μs, 135 kA 8/20 μs) and secondary (50 kA 8/20 μs) surge protection. (NOTE: For 800 A and above, primary protection is 110 kA 10/350 μs.)
- High N-E protection rating
 – 100 kA 10/350 μs, 150 kA 8/20 μs
- LED Indication, remote alarm contacts, MOV status indication.

Electronic equipment is highly susceptible to damage from lightning and other transient pulses (including man made switching transients), which arrive via the powerlines through direct strike, or inductive and capacitive coupling.

The LPI Bluetooth series surge filter provides multiple stage protection against incoming surges & transients. Shunt-only clamping alone is not sufficient, as it does not limit the excessive wavefront characteristic of the pre-clamped waveform. The LPI surge filter will reduce the rate of rise of voltage (dv/dt) to below 15 V/ μ s as per AS1768 Cat B 3 kA (8/20 μ s) applied impulse and to below 30 V/ μ s for AS 1768 Cat C 20 kA (8/20 μ s) applied impulse.



- Low let-through voltage
- Wavefront slowed (low)
- Energy diverted and filtered
- Poor power conditions
- · Based on load current
- Vital for sensitive electronics
- Fine protection
- Common & differential mode



Comprehensive Lightning, Surge Protection & Earthing Solutions

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LPI® Bluetooth Range of Surge Filters 32-125 A (Single and Three Phase)

Technical Specifications

Description	LPI® Bluetooth Range of Surge Filters 32-125 A (Single and Three Phase)		
Nominal Operating Voltage Un:	220 – 240	V AC P-N @ 50/60 Hz	220 - 277
Max Continuous Operating Voltages Uc:	385 Vrms	385 Vrms	480 Vrms
Operating Time:	< 1 ns		
Power Distribution Systems:	TT, TN-S, TN-C, TN-C-S (MEN)		
Primary Surge Protection Rating P-N:	Configurable 100 kA 8/20 µs single-shot rating replaceable modules*1		
Secondary Surge Protection Rating P-N:	Configurable 50 kA 8/20 µs single-shot rating replaceable modules*2		
N-E Protection:	100 kA 10/350 μs I_{imp} Class 1 to IEC 61643-11 255 V rms or 150 $$ kA 8/20 μs $$ I_{max}		
Protection Modes:	Transverse and common mode		
Inductor:	Non-saturating, low pass, power and noise filtering		
Capacitor Type:	Separately-fused, self-healing, X-grade rating at high voltage ratings		
Surge Counter :	Build-in memory retained surge counter displayed via LPI SPD App		
Efficiency:	99 %		
Overload / Short Circuit Protection:	In-line circuit breaker, for 32 A, 40 A and 63 A only		
Performance:	Typical let-through voltage < 700 V		
Filter 3 dB Point:	Approximately 4000 Hz		
Standards (Primary and Secondary) :	Meets requirements of IEC 61643-11 and UL1449 Ed 3		
Standards (N-E):	Meets requirements of IEC 61643-11		
Surge Withstand:	ANSI/IEEE C62.41, AS/NZS 1768 Cat. A, B and C surge tests		
Protection Status Indication:	Bluetooth connectivity on status of MOV, surge counts, voltage and temperature. LED Status and voltage-free change-over contact output		
Environmental Rating:	IP 66		
Enclosure:	Metal enclosure with durable powder coat finish		
Colour:	Grey		
Mounting:	Wall mount		
Operating Temperatures:	-20 to +40 °C, 0 – 95 % humidity		
Conductor Size:	Accepts up to 35 mm² (M8 Studs)		
Warranty:	5 years manufacturer's warranty		

 $^{^{*1}}$ Configurable 50, 100, 150 or 200 kA 8/20 μs

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 $^{^{*2}}$ Configurable 50 or 100 kA 8/20 μs