LPI® SPD Module (Single Module and Base)

The LPI SSTB150 is a single mode power line shunt surge protection device rated for 50 kA 8/20 µs single shot surge capacity (I_{max}). The unit is designed for mounting at main power switchboards and distribution boards in category C locations as per the IEC and other international standards.

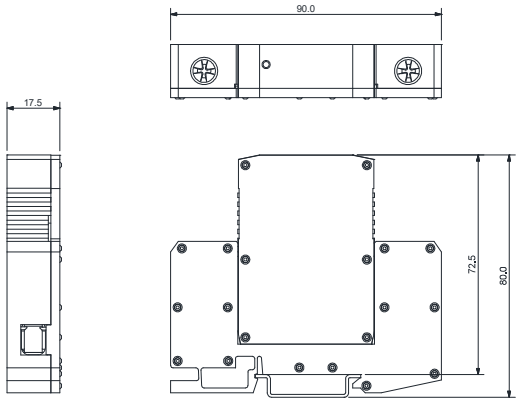
The LPI SSTB150 is designed to provide surge and transient protection in compliance with IEC 61643 international standards. The design allows it to be configured for Ph-N protection applications for single or multiple phases as required. It is also designed for easy mounting on standard 35 mm DIN rail.

The unit comes with fast, responsive Metal Oxide Varistors (MOV) to provide effective surge protection with low let-through voltage to protect sensitive electronics and electrical circuits.

The unit comes as a two-part item. The base is hardwired into the circuit to be protected, and the protection module is plugged into this base. This enables easy replacement of protection modules should they be degraded or damaged by excessive transient activity. The SSTB150 is supplied with Bluetooth connectivity as detailed in previous pages (refer to page 3).

Technical Specifications

Protection Modes:	Ph-N
Status Indication:	LED display: showing operational condition
Bluetooth Connectivity:	Status indication, operating voltage, Harmonic THD %, Internal temp & Surge Impulse Count
Mounting:	TS 35 mm – DIN43880 DIN rail
Weight:	Approx. 135 grams
IP Rating:	IP 20
Colour:	Blue
Conductor Size:	35 mm² (Max)
Operating Temperatures:	-20 to +40 °C, 0 – 95 % humidity
Designed to Conform to:	IEC 61643-11 & UL 1449 Ed4 where applicable
Surge Withstand:	ANSI C62.41 Cat A, Cat B, Cat C, AS/NZS 1768-2007 Cat A, Cat B, Cat C
Application:	Main and sub-distribution boards
Configuration:	Hardwired base and pluggable module
Warranty:	5 years



LPI® Bluetooth Surge Protection Range

Single Module and Base

Product Code:	Nominal Operating Voltage U_n: @ 50/60 Hz	Surge Rating (I_{max}): @ 8/20 µs	Nominal Discharge Current (I_n): @ 8/20 µs	Max. Continuous Operating Voltage (U_c):	Voltage Level at 20 kA 8/20 µs:	Response Time:	Power Distribution Systems:
SST150B-385	220-240 Vac	50 kA	20 kA	385 Vrms	<1.3 kV	<5 ns	TN, TT & for L-N mode
SST150B-480	220-277 Vac	50 kA	20 kA	480 Vrms	<1.7 kV	< 5 ns	TT & TN

Replaceable Surge Module

Product Code:	Nominal Operating Voltage U_n: @ 50/60 Hz	Surge Rating (I_{max}): @ 8/20 µs	Nominal Discharge Current (I_n): @8/20 µs	Max. Continuous Operating Voltage (U_c):
SST150B-385-Module	220-240 Vac	50 kA	20 kA	385 Vrms
SST150B-480-Module	220-277 Vac	50 kA	20 kA	480 Vrms

Installation Guide for SST150B

All installation work must be carried out by licensed electrical personnel.

Location:

The shunt protection device should be installed at the “point of entry” of the power mains, but after the power meter and main breaker in order to protect downstream power connected equipment.

Installation:

Refer to table for recommended fuse and cable sizes.

1. Ensure power is disconnected prior to commencing installation.

2. The unit is labelled showing the incoming (point of entry) and outgoing (load) terminals to be used for enclosure and backplane units only.

PHASE IN and PHASE OUT are at the top of the unit whilst the EARTH and NEUTRAL are at the bottom.

3. Ensure that the “V” or Kelvin connections as per figure 3a. are observed.

4. Incoming cabling should enter the enclosure or backplane from the bottom.

5. The earth terminal must be connected to a low impedance earth (<10 Ω) deploying a single point earthing system, which should be connected to an equipotential earth plane. Integral to this is the elimination of earth loops. It is common, but incorrect from the point of lightning protection to have separate earths for various services. The use of single or multi core copper earth cable of not less than 25 mm^2 (max. 35 mm^2) is recommended.

6. Once connections are completed apply power and observe correct operation, place the provided LPI APP sticker to the outside of the enclosure or cabinet as to indicate Bluetooth connection is available to the surge diverter.

LPI App Sticker