

LPI[®] Product Summary Brochure

LIGHTNING PROTECTION INTERNATIONAL PTY LTD



POWERLINE PROTECTION

LPI offers a wide selection of technologies and products which are available for transient protection of the mains power supply at the point of entry to your facility. These products / technologies are represented in two categories - shunt protection and series protection.



- SPD in polycarbonate halogen free enclosures
- SPD based on isolating spark gap and gas filled spark gap
- Low follow-on current
- Low let through voltage



- Encapsulated Spark Gap Technology
- Low follow on current
- 35mm DIN rail mount



- SD Series SPD designed for 35mm DIN rail mount
- MOV based technology
- Low let through voltage
- Visual function indicators

Shunt Protection

- Ideal for robust equipment such as air conditioning, pumps and motors
- Point of entry protection
- Energy diversion only, voltage clamping devices installed between each phase and neutral or earth on mains switch board

DIN Mount Shunt Surge Protection Devices (Halogen Free Enclosures)

Ordering Code	Description
PowerPro-BCD-Tr/25kA	Din Mount, SPD, 1 Ph, 230/400V, 25kA 10/350µs (Protection Cat B, C & D)
PowerPro-B-Tr	Din Mount, SPD, 1 Ph, 230/400V, 50kA 10/350µs (Protection Cat B)
IsoPro230/400Tr-60kA	Din Mount, SPD, 1 Ph, 230/400V, 60kA 10/350µs (Protection Cat B)
EnerPro280Tr	Din Mount, SPD, 1 Ph, 2 Pole, 230/480V, 15kA 8/20µs (Protection Cat C)
EnerPro281Tr-S	Din Mount, SPD, 1 Ph, 275V, 15kA 8/20µs (Protection Cat C)

- Multiple surge handling capability with visual function indicators
- High over voltage withstand capability
- Protection categories B to D according to E DIN VDE 0675, IEC 61643-1 and other international standards
- Standard 35mm DIN mount for easy installation

Encapsulated Spark Gaps

Ordering Code	Description
SG45	Din mount, Spark Gap, L/N, L/PE Protection, 230/275V, 45kA 10/350µs
SG55	Din mount, Spark Gap, L/N, L/PE Protection, 230/275V, 55kA 10/350µs
SGT50-50	Din mount, Spark Gap, Ph-N, Ph-E, Ph-NE Protection, 230/255V, 50kA 10/350µs Follow Current Extinguishing Capability at Uc 50kA
SGT50-3	Din mount, Spark Gap, Ph-N, Ph-E, Ph-NE Protection, 230/255V, 50kA 10/350µs Follow Current Extinguishing Capability at Uc 3.5kA
NE-100	Din Mount, Spark Gap, N-E Protection, 230/275V, 120kA 10/350µs (EN 61643-11 Class B + C)

- Ideal for point of entry protection
- Intended installation within the lightning protection zone concept at the boundaries LPZ O a/b-1 according to IEC 1312-1

SD Range of Surge Protection Devices

Ordering Code	Description
SD115-S	Din Mount, SPD, Standard Type, 1 Ph, 220 – 275V, 15kA 8/20µs, 40kA Aggregate per phase
SD125-S	Din Mount, SPD, Standard Type, 1 Ph, 220 – 275V, 25kA 8/20µs, 40kA Aggregate per phase
SD150-S	Din Mount, SPD, Standard Type, 1 Ph, 220 – 275V, 50kA 8/20µs, 80kA Aggregate per phase
SD1100-S	Din Mount, SPD, Standard Type, 1 Ph, 220 – 275V, 100kA 8/20µs, 160kA Aggregate per phase
SD115-S 110V	Din Mount, SPD, Standard Type, 1 Ph, 110V, 15kA 8/20µs, 40kA Aggregate per phase
SD125-S 110V	Din Mount, SPD, Standard Type, 1 Ph, 110V, 25kA 8/20µs, 40kA Aggregate per phase
SD150-S 110V	Din Mount, SPD, Standard Type, 1 Ph, 110V, 50kA 8/20µs, 80kA Aggregate per phase
SD1100-S 110V	Din Mount, SPD, Standard Type, 1 Ph, 110V, 100kA 8/20µs, 160kA Aggregate per phase
SD125	Din Mount, SPD, SSD, 1 Ph, 220 – 480V, 25kA 8/20µs, 40kA Aggregate per phase
SD150	Din Mount, SPD, SSD, 1 Ph, 220 – 480V, 50kA 8/20µs, 80kA Aggregate per phase
SD1100	Din Mount, SPD, SSD, 1 Ph, 220 – 480V, 100kA 8/20µs, 160kA Aggregate per phase
SD425	Din Mount, SPD, SSD, 3 Ph, 4 Pole, 220 – 480V, 100kA 8/20µs, 160kA Aggregate per phase
SD-VF-AR	Voltage Free Alarm Relay - driven by opto-coupler output of SD. Requires independent 12V DC supply
CT-1	Din Mount Surge Counter

- Meets E DIN VDE 0675-6, IEC 61643-1, UL 1449
- Multiple surge handling capability
- Designed for power distribution systems (TT, TN-C, TN-S, TN-C-S & IT)
- Built-in remote contact alarms (opto coupler output)
- For voltage free contacts see above ordering code

POWERLINE PROTECTION



SD Range of Point of Entry Shunt Protection in Enclosures

Ordering Code	Description
1PPM50kA-NE	1 Ph Power Protection Module, Shunt, 50kA 8/20 μ s, 100kA 10/350 μ s N-E & Visual Indication
1PPM100kA-NE	1 Ph Power Protection Module, Shunt, 100kA 8/20 μ s, 100kA 10/350 μ s N-E & Visual Indication
3PPM50kA-NE	3 Ph Power Protection Module, Shunt, 50kA 8/20 μ s, 100kA 10/350 μ s N-E & Visual Indication
3PPM100kA-NE	3 Ph Power Protection Module, Shunt, 100kA 8/20 μ s, 100kA 10/350 μ s N-E & Visual Indication

* To include surge counter in the above products add "C" to the end of the product ordering code.
 * Contact LPI or an authorised distributor for PPM ordering codes for 110 VAC versions or models utilizing standard type with 275 VAC RMS.
 * LPI offers customised specials at request.

- Convenient method of protecting 1 or 3 phase power supply when insufficient room is available in an electrical distribution board
- High surge protection between Ph-N
- Robust protection between N-E
- Visual status indication
- Enclosure mount



Low Current Single Phase Filters

Ord. Code	Description
PLSF-6A	Power line surge filter, 6A, 1 Ph, Din Mount, 240V AC, 3 Mode L-N, L-E, & N-E protection, 10kA 8/20 μ s Primary Protection per mode, 5kA 8/20 μ s Secondary Protection per mode, 15kA N-E Protection
PLSF-10A	Power line surge filter, 10A, 1 Ph, Din Mount, 240V AC, 3 Mode L-N, L-E, & N-E protection, 10kA 8/20 μ s Primary Protection per mode, 5kA 8/20 μ s Secondary Protection per mode, 15kA N-E Protection
PLSF-16A	Power line surge filter, 16A, 1 Ph, Din Mount, 240V AC, 3 Mode L-N, L-E, & N-E protection, 10kA 8/20 μ s Primary Protection per mode, 5kA 8/20 μ s Secondary Protection per mode, 15kA N-E Protection

- High performance low current power filters - 6A, 10A & 16A rating
- High kA rating providing longer operating life
- Multi mode protection for sensitive loads
- 35mm DIN rail mount
- Power and status indicator



SF Range of Surge Filters

Ordering Code	Description
SF1150kA-32A-NE	SF, 1 Ph, 32A, 220-480V, 100kA+50kA 8/20 μ s, N-E Protection 100kA 10/350 μ s
SF1150kA-63A-NE	SF, 1 Ph, 63A, 220-480V, 100kA+50kA 8/20 μ s, N-E Protection 100kA 10/350 μ s
SF3150kA-32A-NE	SF, 3 Ph, 32A, 220-480V, 100kA+50kA 8/20 μ s per phase, N-E Protection 100kA 10/350 μ s
SF3150kA-63A-NE	SF, 3 Ph, 63A, 220-480V, 100kA+50kA 8/20 μ s per phase, N-E Protection 100kA 10/350 μ s
SF3150kA-125A-NE	SF, 3 Ph, 125A, 220-480V, 100kA+50kA 8/20 μ s per phase, N-E Protection 100kA 10/350 μ s
3Ph 200A, 315A, 400A, 630A and 1250A LPI Surge Filters (SF) are based on Spark Gap technology. Kindly contact LPI for detailed specifications.	

* LPI can offer similar specials for the SF range of surge filters as detailed for the PPM range.

- 3 Stage protection provides premium protection for sensitive electronic equipment
- Multiple surge handling capability
- High over-voltage and fluctuation withstand capability
- Transient performance guaranteed even under large surge conditions
- High surge capacity per phase
- High energy protection between N-E
- Low let through voltage and low dv/dt

TELECOMMUNICATIONS PROTECTION



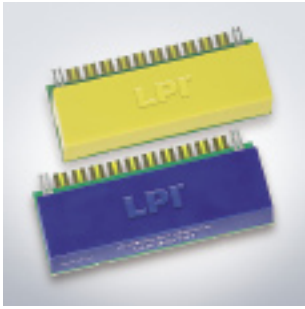
Din Mount Data and Telephone Line Protectors

Ordering Code	Description
D220-10	Signal & Data Protector, L-L 8V, L-G 8V, 20kA 8/20 μ s, 4 Ohms, 10MHz
D220-15	Signal & Data Protector, L-L 15V, L-G 15V, 20kA 8/20 μ s, 4 Ohms, 10MHz
D220-25	Signal & Data Protector, L-L 25V, L-G 25V, 20kA 8/20 μ s, 4 Ohms, 10MHz
D220-60	Signal & Data Protector, L-L 58V, L-G 58V, 20kA 8/20 μ s, 16 Ohms, 10MHz
D220-75	Signal & Data Protector, L-L 75V, L-G 75V, 20kA 8/20 μ s, 16 Ohms, 10MHz
D3TA	Telephone Line Protector, ISDN / ADSL / PCM Circuits, Operating Current 140mA, 20kA 8/20 μ s, Single Pair
D3T	Telephone Line Protector, Analogue Circuit, Operating Current 120mA, 20kA 8/20 μ s, Single Pair

*1.5A versions of the D2 series available upon request.

- D2 Series - DIN mount & suitable for protection of signal & data-lines for computer, data communication, instrumentation, broadcasting and industrial control interfaces
- D2 Series used directly with EIA Standard interfaces RS-232, RS-422, RS-423, RS-485 and with 20mA and 50mA instrumentation loops
- D3 TA - DIN mount telephone line protector, suitable for ISDN, ADSL and PCM circuits
- D3 T - DIN mount telephone protector suitable for analogue phone lines

TELECOMMUNICATIONS PROTECTION



Telephone and Data Line Protectors

Ordering Code	Description
TPP-K10	Telephone Pair Protector, 10 Pair, 1 MHz, 144kbits/s, 190V, a+b+e 20kA 8/20µs, Multistage, Krone LSA
VHS-K10-72	Very High Speed, 10 Pair, 12 MHz, 8Mbits/s, 72V, a+b+e 20kA 8/20µs, Multistage, Krone, LSA
VHS-K10-230	Very High Speed, 10 Pair, 12 MHz, 8Mbits/s, 230V, a+b+e 20kA 8/20µs, Multistage, Krone, LSA
TLP ISO-K01	Single Pair, Telephone Line Protection, ISO Series, 350mA, a+b+e 20kA 8/20µs, a-b 10kA 8/20µs, Multi Stage, Krone

- Telephone and Data Line Protection
- Multistage / over voltage protection
- Plugs directly into a Krone disconnect block
- 10 Line and single line protected

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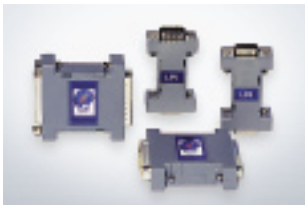
Protection of RF Feeder Cables & High Speed Coaxial Cable Data Lines



Ordering Code	Description
RF-NMF-90	RF Protector, 20kA, 72V – 108V, N Type M to F
RF-BNC-90	RF Protector, 20kA, 72V – 108V, BNC Type M to F
RF-NB-90	RF Protector, 20kA, 72V – 108V, N Type F to F (Bulkhead)
RF-NMF-350	RF Protector, 20kA, 280V – 420V, N Type M to F
RF-BNC-350	RF Protector, 20kA, 280V – 420V, BNC Type M to F
RF-NB-350	RF Protector, 20kA, 280V – 420V, N Type F to F (Bulkhead)
RF-NMF-600	RF Protector, 20kA, 480V – 720V, N Type M to F
RF-BNC-600	RF Protector, 20kA, 480V – 720V, BNC Type M to F
RF-NB-600	RF Protector, 20kA, 480V – 720V, N Type F to F (Bulkhead)
CF-90	RF / High Speed coaxial cable data line protector, 90V, 20kA, 75 Ohms
C75-BNC90	CCTV Circuit, 20kA, 90V, 75 Ohm, BNC Type
GSM 7/16F-7/16F	GSM Protector, 20kA, 50V, 50 Ohms, Frequency range 890 – 960 MHz, Female to Female*
GSM 7/16M-7/16F	GSM Protector, 20kA, 50V, 50 Ohms, Frequency range 890 – 960 MHz, Male to Female*

- For protection against transients on coaxial antenna RF feeder cables
- Simple plug in installation
- High impulse rating of 20kA 8/20µs
- Characteristic impedance: 50 Ohms and 75 Ohms where applicable

* 1800 & 1900 MHz versions available on request.



Computer & Data Equipment Protectors

Ordering Code	Description
RS232 9-9 Pin	RS232 9-9 Pin (9 Pin Protected), 50A 10/1000 Wave Shape
RS232 25-9 Pin	RS232 25-9 Pin (9 Pin Protected), 50A 10/1000 Wave Shape
RS232 25-25 Pin	RS232 25-25 Pin (25 Pin Protected), 50A 10/1000 Wave Shape
RS422 25-25 Pin	RS422 25-25 Pin (25 Pin Protected), 50A 10/1000 Wave Shape

- High performance surge protectors for computers, terminals and printers
- Moulded construction
- Low clamping voltage
- Standard RS-232C Male / Female 9 & 25 pin



Local Area Network Protector

Ordering Code	Description
LAN RJ45	LAN, RJ45, 100 Base T Protector

- Simple Plug in operation
- CAT 5 / 100Mbps application
- Low Attenuation
- Compact Design



Load Cell Protector

Ordering Code	Description
ILC36V	Load Cell Surge Protector, 4 or 6 wire application, 36V

- Designed for protection of sensitive strain gauge measuring equipment
- Protects against excitation overvoltage
- Low capacitance

Disclaimer

- LPI maintains a policy of on-going product development, specifications are subject to change without notice.
- Application detail, illustrations and schematic drawings are representative only and should be used as guides.
- It should be noted that 100% (100 percent) protection level for direct strike lightning and surge and transient protection equipment is not possible and cannot be provided due to the lightning discharge process being a natural atmospheric event.

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