

# LPS® PM80 Series

## SURGE PROTECTIVE DEVICES



**Protect electronic and electrical equipment  
against lightning induced surges**



The LPS® PM80 Series devices are reliable surge protectors designed to protect electronic and electrical equipment. They are ideal for sub-switchboards and distribution boards of commercial and industrial buildings, as well as main switchboards for homes and office units.

Following extensive R&D, these devices have been created to deploy state-of-the-art engineering technology to protect your equipment effectively even in the most lightning prone regions in the world.

LPS® PM80 Series devices provide 80,000 amps per phase of surge protection in common and differential modes with instantaneous response. Thus your equipment is protected from lightning surges caused by direct lightning strikes, electro-magnetic couplings, the switch of power networks as well as from inductive loads.

Metal Oxide Varistors (MOVs) are used to maximise performance and reliability. LPS® PM80 Series devices are specially designed with built-in thermal cut-out fuse that assist in avoiding fire hazards when dangerous thermal run-away occurs.

Each device is equipped with a LED indicator. LPS® PM80-220 and PM80-480 have additional audible alarm which provides users with audio monitoring on protection status. Furthermore, they are also armed with a NO/NC dry contact for remote monitoring on protection and power supply status with user-friendly RJ II connector.

### How they works

LPS® PM80 Series devices provide unsurpassed performances in lightning surge protection. When a transient surge occurs, the surge protective devices will switch to a fully conductive state to divert high current. They will then reset automatically to a non-conducting state when the voltage falls to normal operational voltage.

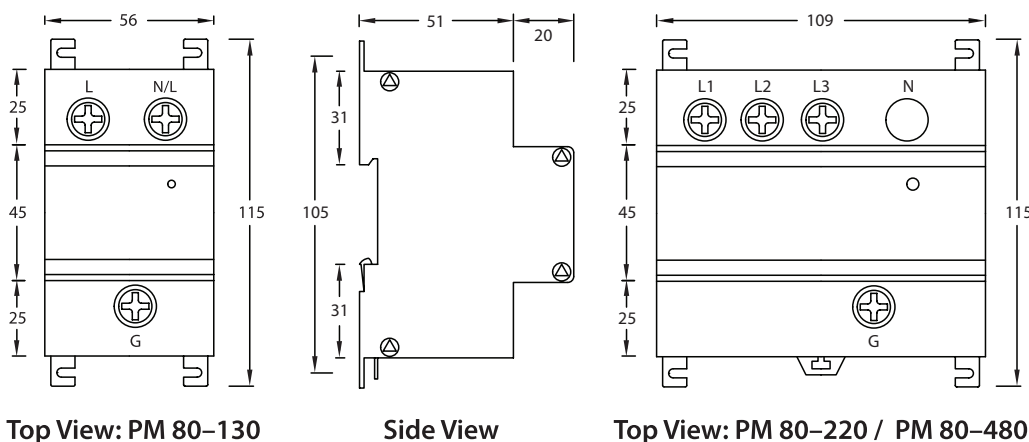
### HIGHLIGHTS

- ▶ **They protect Sub-Switchboards (SSB) receiving energy from Main Switchboards (MSB) located in the same building and Distribution Boards (DB) receiving energy from licensee or MSB/SSB located in other building**
- ▶ **They are designed with a built-in thermal cut-out fuse that assist in avoiding fire hazards when dangerous thermal run-away occurs**
- ▶ **They are housed in a fail-safe IP 20 metal enclosures for maximum safety**

## Technical Specifications

Technical Data	PM 80 – 130	PM 80 – 220	PM 80 – 480
Compiled Standard	IEC 61643-11, Class II		
Type of LV System	TN		
Location	Sub-Switchboard (SSB) receiving energy from Main Switchboard (MSB) located in the same building		
Number of Ports	1 (Parallel Connection)		
Mode of Protection	L – G, L – L	L – G	
Nominal Voltage $U_o$	130 VAC (L – G) 225 VAC (L – L)	120 VAC (L – G) 208 VAC (L – L)	277 VAC (L – G) 480 VAC (L – L)
Maximum Continuous Operating Voltage $U_c$	150 VAC (L – G) 260 VAC (L – L)	138 VAC (L – G) 239 VAC (L – L)	318 VAC (L – G) 552 VAC (L – L)
Voltage Protection Level $U_p$ T2	500 V (L – N)	500 V (L – G)	1.1 kV (L – G)
Nominal Discharge Current $I_n$	10 kA		
Maximum Discharge Current $I_{max}$ – Designed	80 kA / phase		
Temporary Overvoltage $U_T$ (L – N) – 5s	228 V		528V
Total Discharge Current $I_{TOTAL}$	80 kA	240 kA	
Residual Current $I_{PE}$	< 1 mA		
Short-circuit Current Rating $I_{SCCR}$	25 kA		
Frequency	50 / 60 Hz		
Status Indicator	Visual – LED	Visual – LED	
		Remote Monitoring – Dry Contact	
		Audible Alarm	
Degree of Protection	IP 20		
Max. Conductor Size	10 mm <sup>2</sup>		
Operating & Storage Temperatures	– 40 °C to 70 °C		
Method of Mounting	35 mm Din Rail / Panel Mount		
Rating for External Disconnecter	40 A HRC Fuse or Nuisance Tripping Protected RCCB		
Weight	380 g	580 g	620 g
Dimensions	56 mm x 115 mm x 71 mm	109 mm x 115 mm x 71 mm	
Warranty	5 years		

## Dimensions



All dimensions in millimetres

All the above specifications are subjected to changes without prior notice.

Customised products are available upon request.



Awarded the National Mark of Malaysian Brand 2015

## Lightning Protection System Sdn. Bhd. (362924-D)

No. 42-4, Jalan Kuchai Maju 10, Kuchai Entrepreneurs' Park, 58200 Kuala Lumpur, Malaysia  
T: +603-7980 5911 • F: + 603-7980 4862 • E: info@lpsystem.com • www.lpsystem.com

