LPI Lightning Warning System

Comprehensive Lightning, Surge Protection & Earthing Solutions
Lightning Protection International Pty Ltd is a fully owned Australian manufacturer and supplier of direct strike lightning, surge and transient protection equipment and earthing products to a wide range of industries throughout the world.

**LPI Product Offering**

Lightning Protection International Pty Ltd offers a comprehensive range of products and services as part of its complete solution to your lightning problems. These products cover Direct strike protection, surge and transient protection and earthing solutions.

- Stormaster range of ESE Air terminals, compliant to NF C 17-102 2011
- Guardian Lightning Protection System 5, tested to IEC 60-1:1989
- Lightning Warning System
- Conventional lightning protection
- Surge and Transient protection products for power lines
- Surge and Transient protection products for data, communications signal lines
- Earth rods and accessories
- Earth Enhancing Compounds for the lowering of soil resistivity

**How the LWS works**

- **Established storm front**
  - LWS activates alarm when lightning is within 8 - 10 km
  - Storm 10 - 15 minutes away
  - External alarm (siren) sounds warning of impending danger

- **Corona point**
  - LPI Sensor Assembly
  - LWS activates warning when lightning is within 10 - 25 km
  - Typically 20 - 30 minutes warning
  - External siren can be sounded if required

**Warning Status**

- **Storm Cell**
  - Whip antenna detects electric discharges due to lightning activity
  - Corona point detects increase in electric field strength as a result of:
    - approaching storm
    - storm cell overhead

**Alarm Status**

- **Established storm front**
  - LWS activates alarm when lightning is within 8 - 10 km
  - Storm 10 - 15 minutes away
  - External alarm (siren) sounds warning of impending danger
LPI LIGHTNING WARNING SYSTEM

- Mast
- System Interface
- Wireless Antenna
- Sensing Antenna
- Computer
- Cross-over Ethernet Cable
- Sensor Assembly
- Storm Cell
- 1 km Wireless Communications Range
- Siren
- Sensor
- Range Extender
- Monitoring Via Intranet

*Range Extender is optional extra and is not part of a standard system.
Lightning Warning System:
LPI offers two alternative packages for the LWS MKIII.

- **Package A.** 1 x Sensor [with mains power supply], console [with mains power supply] and siren.
- **Package B.** 1 x Sensor [with 12V solar panel power supply], console [with mains power supply] and siren.

Customized systems using multiple range extenders, to extend wireless range and siren coverage can be configured to suit the customers requirements.

Mains Power Protection:

- Main or Sub Distribution Boards
  - 1 phase supply 220-240V = 1 x SST150 and 1 x NE100
  - 3 phase supply 400V LL \( \leq 125A \) = 3 x SST150 and 1 x NE100
  - 3 phase supply 400V LL \( > 125A \) = 3 x SGT50-25 and 1 x NE100
- Sensitive electronics, consider the use of LPI Surge Filters.

Telecom Protection:

- Digital lines [ISDN, PCM, ADSL] = VHS-K10-70 / VHS-K10-230
- Analogue lines = TLP-K10
- Data Lines = DD Range
- RF Feeder / Coax Protection = RF Range

Earthing:

Comprehensive range of earthing materials and earthing improvement compounds including RESLO and GRIP.

### LPI proudly services customers from the following countries:

- Afghanistan
- Australia
- Bahrain
- Bangladesh
- Bhutan
- Brunei
- Cambodia
- Chile
- China (PRC)
- Colombia
- Dominican Republic
- Ecuador
- El Salvador
- Fiji
- Gabon
- Guatemala
- Haiti
- Hong Kong
- India
- Indonesia
- Iran
- Iraq
- Japan
- Jordan
- Kenya
- Kuwait
- Laos
- Macau
- Madagascar
- Malaysia
- Maldives
- Mauritius
- Mexico
- Myanmar
- Nepal
- New Zealand
- Nicaragua
- Nigeria
- Oman
- Papua New Guinea
- Peru
- Philippines
- Qatar
- Rwanda
- Samoa
- Saudi Arabia
- Seychelles
- Singapore
- South Africa
- South Korea
- Spain
- Sri Lanka
- Sudan
- Taiwan
- Thailand
- Tonga
- UAE
- United Kingdom
- USA
- Vanuatu
- Venezuela
- Vietnam
- Yemen

### 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 for direct strike lightning, lightning detection and surge and transient protection equipment is not possible and cannot be provided due to the lightning discharge process being a natural atmospheric event.