



LPI[®] TELCO ***Application Brochure***

LIGHTNING PROTECTION INTERNATIONAL PTY LTD





Lightning Protection International Pty Ltd

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 through-out the world.



The Need for Protection

Lightning and over-voltage transients are responsible for millions of dollars of damage each year affecting a wide cross section of industries.

Telecommunications sites are particularly vulnerable to the dangerous effects of lightning. Many telecommunication installations consist of tall slender towers situated in elevated areas such as hill and mountain tops in regional areas and throughout metropolitan areas such installations can be found at the tops of tall buildings.

There is no single solution which can eliminate the risks associated with lightning induced energy. It is through the use of an all encompassing approach such as the LPI 4 Step Approach to Lightning Protection which assists in significantly reducing the risks presented by the natural occurrence of lightning to a typical telecommunications site.

Our system design approach includes:

- 1 Definition and provision of area protection
- 2 Creation of a bonded earthing system
- 3 Protection of power lines
- 4 Protection of signal, data and communication lines

Risk Analysis

It is important that management responsible for the installation and maintenance of telecommunications sites consider the consequences of leaving their sites partially or totally unprotected. The risks involved in failing to comprehensively address the issue of lightning and over-voltage protection can be summarised by the following.

- Partial or complete loss of operations and system downtime resulting in lost revenue.
- Customer complaints in response to system downtime.
- Physical damage to equipment resulting in replacement costs.
- Danger to staff and other personnel from the effects of lightning discharges.

TELECOM PROTECTION



Additional information on the full range of LPI Telecoms protectors is available, please contact LPI offices.

EARTHING PRODUCTS

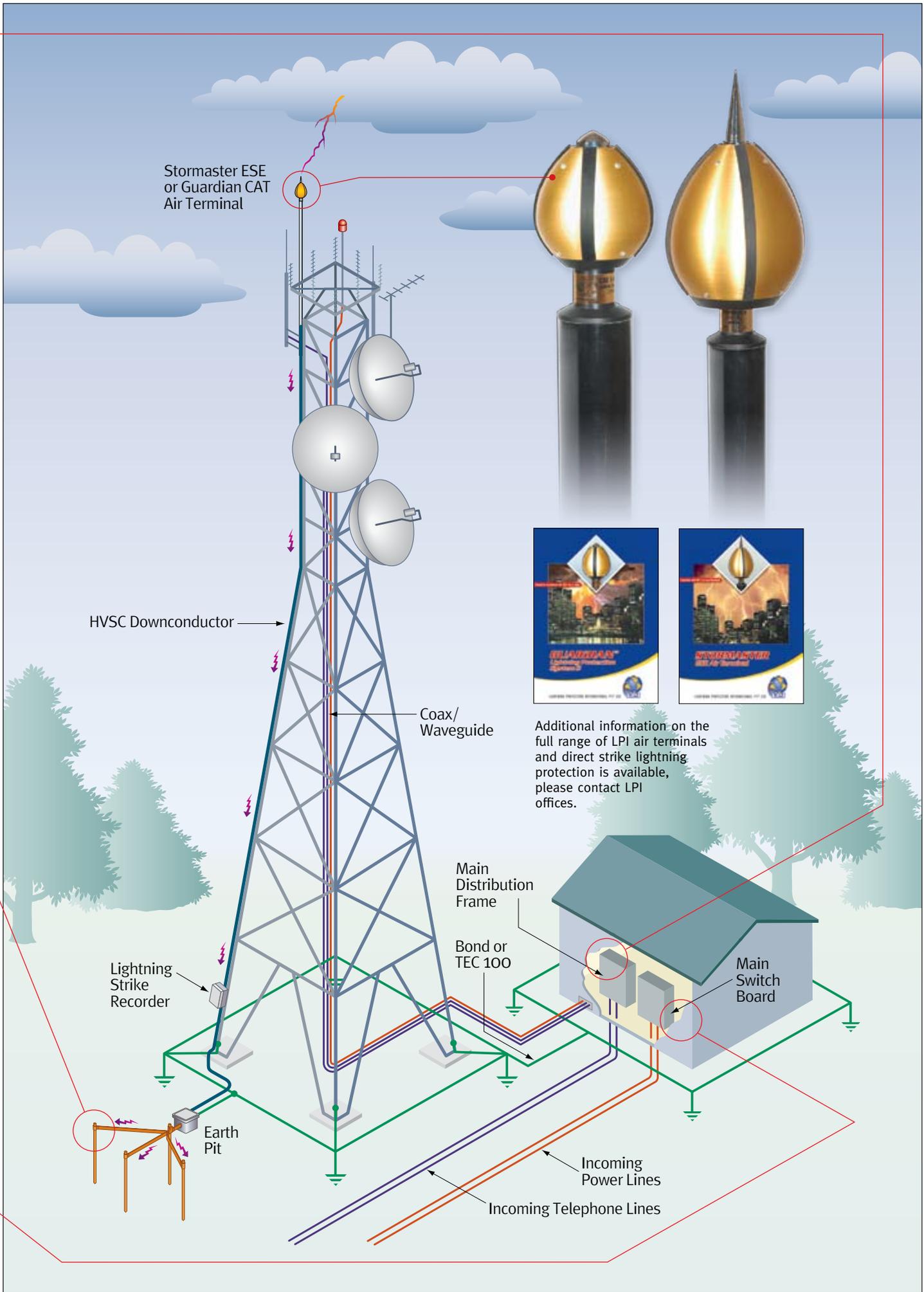


Additional information on the full range of LPI earthing systems is available, please contact LPI offices.

POWER PROTECTION



Additional information on the full range of LPI power protection products is available, please contact LPI offices.



Stormaster ESE
or Guardian CAT
Air Terminal

HVSC Downconductor

Coax/
Waveguide

Lightning
Strike
Recorder

Earth
Pit

Main
Distribution
Frame

Bond or
TEC 100

Main
Switch
Board

Incoming
Power Lines

Incoming
Telephone Lines



Additional information on the full range of LPI air terminals and direct strike lightning protection is available, please contact LPI offices.

TELECOMMUNICATIONS PROTECTION

Direct Strike Protection:

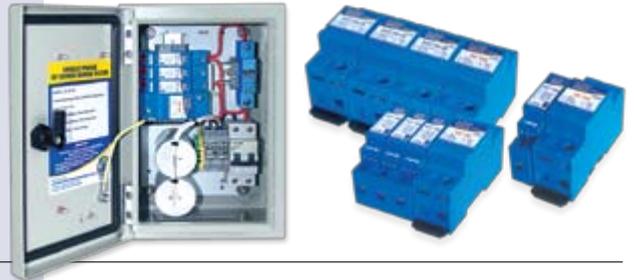
Stormaster ESE compliant to NF C 17-102 Standard for structures < 60m
Guardian System 5 with CAT air terminals, tested to IEC 60-1
HVSC downconductor for use internally or externally on structures.



Mains Power Protection:

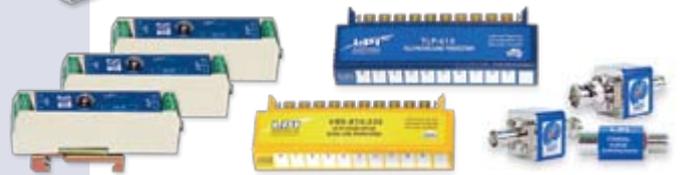
- For Protection of rectifiers and other sensitive equipment LPI recommend the use of Surge Filters.

Please contact LPI for selection of the most appropriate filter for your needs.



Telecom Protection:

- Digital lines (ISDN, PCM, ADSL) = VHS-K10-70 / VHS-K10-230
- Analogue lines = TLP-K10
- Single Pair Lines = D2 Range
- RF Feeder / Coax Protection = RF Range



Earthing:

Comprehensive range of earthing materials and earthing improvement compounds such as RESLO and GRIP.

A wide range of Exoweld exothermically welded joints for solid and reliable equipotential bonding, and jointing of earthing conductors, TEC where applicable.



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.

LPI proudly services customers from the following countries:

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|--------------|-------------|------------------|--------------------|------------------|
| • Australia | • Fiji | • Macau | • Oman | • Sri Lanka |
| • Bahrain | • Guatemala | • Mainland China | • Papua New Guinea | • Taiwan |
| • Bangladesh | • Haiti | • Malaysia | • Peru | • Thailand |
| • Brunei | • Hong Kong | • Maldives | • Philippines | • UAE |
| • Burundi | • India | • Mauritius | • Qatar | • United Kingdom |
| • Cambodia | • Indonesia | • Myanmar | • Saudi Arabia | • USA |
| • Chile | • Iran | • New Zealand | • Singapore | • Venezuela |
| • Colombia | • Japan | • Nigeria | • South Africa | • Vietnam |
| • Costa Rica | • Kuwait | | | |
| • Ecuador | • Laos | | | |

Distributed by:

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