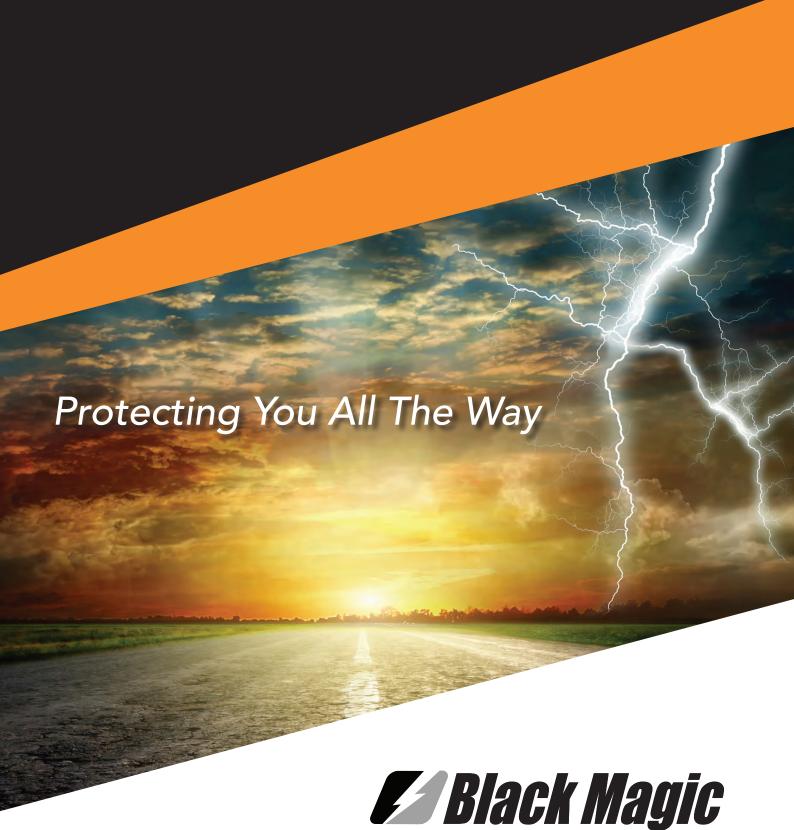
LIGHTNING AND EARTHING SOLUTIONS



Black Magic Solutions

Who we are:

Black Magic has a team of qualified installers and designers with a combined knowledge and experience over a decade in the industry ensuring you a professional and smooth project assessment. We are specialists in protection of properties, places and safety of people.

Black Magic is a solely owned and operated Australian company. We provide solutions for all your types of lightning and earthing requirements.

We have developed relationships with our exclusive suppliers world wide from leading industry manufactures.

Black Magic is an Australian owned company supplying and installing the industry the best quality of lightning and earthing solutions across Australia.

Services we provide:

- 1. Data Centre underfloor earthing
- 3. Lightning Protection
- 5. Certifying Agent

- 2. Earthing Solutions
- 4. Consultation Services
- 6. Repairs and Maintenance

Why Choose Us?

- ✓ Tailored systems to meet budget
- ✓ Market leading components
- ✓ Dedicated project management team
- ✓ Specialising in tight access areas with specific custom tools
- ✓ High quality tested & approved systems
- ✓ Personalised service & solutions
- ✓ Manufacture site specific components for heritage listed upgrades
- ✓ We offer a 24 hour emergency repair service

Quick & Easy Quoting:



We are registered and use Bidcontender. Alternatively you can email us on: **quotes@blackmagicsolutions.com.au**

Leading Suppliers we work closely with:











Lightning Protection Systems

Lightning Protection –

Lightning strikes have become more frequent and destructive. School playgrounds and open fields are just vulnerable as the worlds tallest structures. Lightning can strike anywhere. Many homes and buildings have caused major damage where no lightning protection was present.

The city of Hong Kong has had record breaking storms since 2007 and in 2015. Lightning is a force which is hard to analyze and why its extremely important to safeguard our buildings and people.

We offer lightning protection design systems and all testing and consultancy advice. Black Magic lightning protection systems comply with all Australian Standards. NZ/AS1768/2007.



A lightning protection solution is to control and prevent the lightning from striking and prevent any damage. Variety of materials for air termination, stainless steel and galvanised steel. Each project is evaluated and provided with a most cost effective solution.

Early Streamer Emission Systems (E.S.E)

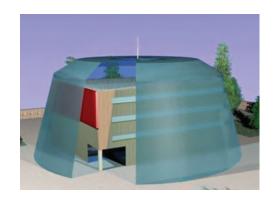
The Early Streamer Emission Systems (ESE) provides a better coverage of protection than standard lightning rods. It captures the discharge and increases the radius of protected coverage of a building. It is adaptable to all types of buildings.

- Provides high protection
- Adaptable to all structures
- Guaranteed to function in any atmosphere condition
- Constructed of Stainless Steel AISI 316
- Certification issued by entity Bureau Veritas International

Lightning Protection

Sample of protection boundary created when the lightning strikes the rod. Lightning rods have been tested and accredited by for operation, strength and durability tests of lightning rods with triggering system and components. Lightning rods produced and imported by **INGESCO**®.





Ph: 1300 90 18 16



Earthing Solutions

Earthing Solutions –

An earthing system is a critical requirement in order to safely protect and ground lightning currents. Earthing is used to conduct lightning strikes minimally to the earth instead of causing fires and damaging equipment. It is also used to control noise in audio, video and computers. This has implications for the safety and electromagnetic compatibility of the power supply.

The purpose is to maximise the surface area contact with the surrounding soil. Increasing the surface area, the contact resistance of the earthing system is lowered and surge impedance of the earthing system is improved.

Our team can offer:

- design earthing systems for all your requirements
- equal potential bonding
- main earth points
- inspection and reporting on existing earthing systems
- soil resistivity testing and reporting

Data Centre Underfloor Earthing –

Black Magic specialises in data centre earthing and bonding.

Reference grids are installed using flat, bare or insulated copper to illuminate interference and minimise equipment failure and down time.

All components used in this system are specifically manufactured for durability and long term functionality.



Lightning Protection Earth



Signal Reference Grid

Other Services

Consultation Services –

Black Magic provides a consultation free service to new developments and existing refurbished heritage structures.

We offer a specialised service in:

- Design lightning protection
- AS1768 & ESE Systems
- Structures and human assessments to projects
- General earthing and ground testing



Certifying Agent –

All our technicians are highly trained and experienced in using our calibrated testers to provide accurate and current results.

Annual inspecting and testing of earth grids is an important service plan to have in place to maintain an optimal functioning system.

Our Service includes:

- Full Visual and test report
- Conductor continuity testing
- Earth Grid and isolated electrode earth resistance testing
- New installation soil resistivity testing
- Inspection detailed report and itemised costs of project works required

Repairs & Maintenance –

Black Magic offers a specific tailored service schedule designed for each unique project.

All Systems and components that are installed offer a long term functionality due to the quality and workmanship that we pride ourselves with.





Excellent Door

Fa Black Magic Ph: 1300 90 18 16

Surge Protection

Surge Protection parts we provide



SLS-B+C30/1+1 - Lightning & surge arrestor for single phase lines (F + N) 220 V Combined type 1 and 2 (Class B + C) protector, suitable for protection of low voltage lines against lightning strikes and surges of up to 25kA (10/350) in TT (TNS) networks. Recommended for industrial facilities, buildings with a risk of lightning strikes, or fed by overhead lines.



SLS-B+C30/3+1 - Lightning and surge arrester for three phase lines (3F+N)380 V. Combined type 1 and 2 (Class B + C) protector, suitable for protection of low voltage lines against lightning strikes and surges of up to 25kA (10/350) in TT (TNS) networks. Recommended for industrial facilities, buildings with a risk of lightning strikes, or fed by overhead lines.



SLS-B+C100/1+1 - Lightning and surge arrester for single phase lines (F + N) 220 V. Combined type 1 and 2 (Class B + C) protector, suitable for protection of low voltage lines against lightning strikes and surges of up to 50kA (10/350) in TT (TNS) networks. Recommended for industrial facilities, systems and buildings with external lightning protection.



SLS-B+C100/3+1 - Lightning and surge arrester for three phase lines (3F+N) 380 V. Combined type 1 and 2 (Class B + C) protector, suitable for protection of low voltage lines against lightning strikes and transitory surges of up to 100kA (10/350) in TT (TNS) networks. Recommended for industrial facilities, systems and buildings with external lightning protection.



SLS-C20/1+1 - Lightning and surge arrester for single lines (F+N) de 220 V. Type 2 (Class C) protector, suitable for protection of low voltage lines against lightning strikes and transitory surges of up to 20kA (8/20) in TT (TNS) networks. Recommended for industrial installations, distribution boards, buildings with low risk of receiving lightning



SLS-C20/3+1 - Lightning and surge arrester for three phase lines (3F+N) 220 V.

strikes or fed by underground power lines.

Type 2 (Class C) protector, suitable for protection of low voltage lines against lightning strikes and transitory surges of up to 40kA (8/20) in TT (TNS) networks. Recommended for industrial installations, distribution boards, buildings with low risk of receiving lightning strikes or fed by underground power lines. Recommended for industrial installations, distribution boards, buildings with low risk of receiving lightning strikes or fed by underground power lines.



SPARK GAP MODEL VX-1 - Spark gap for separation model VX-1 (with or without connection terminals).

The separation spark gap is developed to electrically separate the conductive systems that should not have electric contact in their normal state of function. Indicate for the TV scape connection, scape communication and cathodic protection.

Black Magic Projects

Some of our completed projects



Wollongong Hospital



Wollongong Central



Hurlstone Park - Church

- B1 Square Burwood
- Connect Corporate Centre
- Stocklands Wetherill Park
- St George Hospital
- Ponderosa
- Thirty 8 Project
- 8 Chifley Square Sydney
- Nepean Hospital Mental Health Unit
- Royal Randwick Racecourse Precinct
- Shoalhaven Cancer Clinic
- Westmead Millenium Institute
- NEXT DC
- Sydney International Airport Hotel
- Metronode Data Centre Silverwater
- Metronade Data Centre 4 Canberra
- MacTel Intelli Centre 4 Canberra
- Securus Data Hall 1 underfloor earthing
- Sofitel Sydney Olympic Park
- Audi Terminal Zetland
- Nexus Norwest
- ASX Data Hall
- Macquarie Intelli Centre 2 Data Centre
- Charlestown Square
- Australian Technology Park Channel 7 Building
- Narrabri District hospital
- ANSTO Opal Building
- Homemaker Supacenta Moorepark
- Media Hub Australia
- Balranald Hospital Redevelopment
- HMAS Albatross





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