

# ACT Six-Point Protection Strategy

- ▶ ACT Communications recommends using a Six Point Protection Strategy that, when used, will allow its customer to plan and implement one of the most effective protection strategies for their facility. ACT is an engineering-driven company and strongly believes that there are no one-box solutions for proper facility protection. Instead, ACT recommends that a facility be evaluated for rooftop lightning risks, grounding, transient surge problems and power quality risks such as harmonics.

ACT agrees with Institute of Electrical and Electronic Engineers (IEEE) that the best protection strategy should be cascaded. Whereas, the strongest protectors (primary) should be at the highest risk areas with secondary protection at downstream distribution branch panels and point of use equipment.

Protecting low voltage data, alarm and telecom circuits is also a key requirement in any facility wanting to reduce their electrical maintenance by up to 70%.

\*See ACT white paper.

## Strategic Protection Plan for Any Facility

- 1 Capture the lightning strike**  
Capture the lightning strike to a known and preferred attachment point using a purpose-designed air terminal system.
- 2 Convey this energy to ground**  
Conduct the energy to the ground via a purpose-designed downconductor.
- 3 Dissipate the energy into the grounding system**  
Dissipate the energy into a low-impedance grounding system.
- 4 Bond all ground points together**  
Bond all ground points to eliminate ground loops and create an equipotential plane.
- 5 Protect incoming AC power feeders**  
Protect equipment from surges and transients on incoming power lines to prevent equipment damage and costly operational downtime.
- 6 Protect low-voltage data/telecommunications circuits**  
Protect equipment from surges and transients on incoming telecommunications and signal lines to prevent equipment damage and costly operational downtime.

*See detailed diagram on other side >*

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## Six Key Products for Six Key Locations

