



Information Required for Surge Protection Specification

Technical White Paper
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POWER PROTECTION

- 1) PANEL VOLTAGE AND WIRING CONFIGURATION (i.e. 277/480 3 phase 4 wire)
- 2) MAIN SERVICE OR SUB-PANEL?
- 3) IS PANEL SURFACE OR FLUSH?
- 4) OPTIONS WANTED (i.e. Integral Disconnect, Surge Counter, Alarm, etc.)
- 5) PANEL LOCATION (Inside or Outside)
- 6) AVAILABLE BREAKER, OR SPACE, IN PANEL?
- 7) TYPE OF EQUIPMENT TO PROTECT
- 8) HOW IS EQUIPMENT CONNECTED (Hardwired or Plug-In)?
- 9) VOLTAGE AND WIRING CONFIGURATION OF EQUIPMENT

LOW VOLTAGE PROTECTION

- 1) TYPE OF SYSTEM (i.e. Telephone, CCTV, Nurse Call, Computer Network)
- 2) MAXIMUM OPERATING VOLTAGE
- 3) MAXIMUM OPERATING AMPERAGE
- 4) NUMBER AND SIZE OF WIRES
- 5) METHOD OF CONNECTION (i.e. 66 Block, Amphenol, Terminal Strip, etc.)
- 6) DATA SPEED
- 7) LENGTH OF WIRE RUN
- 8) WILL ADDING 9 – 18 OHMS AFFECT THE SYSTEM?

WHAT TO PROTECT – IN ORDER OF IMPORTANCE

- 1) ALL WIRES ENTERING OR LEAVING A BUILDING
- 2) ALL WIRES CONNECTED TO A PIECE OF EQUIPMENT OR SYSTEM
- 3) ANY WIRES THAT RUN UNDERGROUND
- 4) WIRES ATTACHED TO STEEL BUILDING FRAME
- 5) LOW VOLTAGE WIRES ADJACENT TO POWER CABLE
- 6) LOW VOLTAGE WIRES OVER 100' LONG
- 7) LOW VOLTAGE WIRES LAYING ON DROP CEILING / FLUORESCENT LIGHTING

HOW MUCH SURGE PROTECTION TO USE

- 1) EVERYTHING – ONE STAGE
- 2) ELECTRONICS – TWO STAGES
- 3) MISSION CRITICAL / LIFE CRITICAL EQUIPMENT – THREE STAGES

