

BRAVO SURE/FIRE MULTI-PORT HUB PROTECTORS

BULLET-PROOF ARMOR FOR YOUR TELECOM, DATACOM, & LAN NETWORKS

DESCRIPTION

Bravo Sure/Fire Hub Protectors provide versatile multi-port surge and lightning protection in a compact package that may be stacked vertically or horizontally like building blocks, wall-mounted, table-mounted, or rack-mounted, with single point network earth grounding for all hub ports. A wide selection of Bravo Hubs is available to allow the network designer to mix and match the appropriate protection scheme for the types of Telecom, Datacom and LAN circuits within the network universe.

The basic hub is a 4-port module (some models come in a 3-port module) that is expandable by interconnecting with incremental hub protector modules as the network changes or grows. The network designer can use the standard fire-proof plastic injection molded hub for most applications or select the heavier duty brushed metal enclosure for more ruggedized application environments. Color coding options are available to the designer for easy circuit identification. Most models normally include LED protection status indicators but may be ordered with or without this feature.

Standard models provide Secondary Protection up to 5KA per signal line and the Plus "+" models include added protection for up to 25KA per signal line to meet both Primary and Secondary Protection requirements.

INSTALLATION INSTRUCTIONS

1. The Telecom Secondary Models may be installed within a building at distributed equipment locations. The Primary "+" models may be installed anywhere at demising walls, building entrance punch-down blocks or anywhere you wish due to the fact of having extra protection, allowing them to handle primary or secondary lightning/surge transients.

All LAN Hub Models automatically may be used for primary or secondary requirements due to their high-energy multi-stage circuitry.

All DATACOM Hub Models are secondary protectors unless they come in a "+" version which would then allow primary or secondary usage.

2. Install your Hub module/building block so that the unprotected "TO NETWORK" connectors accept the network cables or wires that you wish to protect. You simply plug-in, snap-in or screw down the wires depending on the connector style of your Hub protector. Note: You will need a micro tip style screwdriver in order to tighten bare stripped wire ends to any Hub models using terminal blocks. Simply slide your micro tip screwdriver thru the small hole openings on the topside of the Hub protector to reach the tightening screws.

3. Likewise, connect the "TO PROTECTED EQUIPMENT" connectors of the Hub to the cables and wires running toward the equipment you wish to protect.

4. There are four convenient Hub grounding screws for establishing an earth ground for all Hub ports/signals. There are two on the bottom and two on the sides of the Hub. The Hub also comes with two grounding/fastening bars, a 12 gauge ground wire, and 4 rubber feet accessories. You can use these accessories as best suits your specific application. Important: You must establish an earth ground to at least one of the four grounding screws in order for the Hub to protect your equipment installation.

You can use the grounding bars to fasten the Hub to a grounding plate located at a demising wall for example that serves the dual purpose of holding the hub in place as well as establishing earth ground to your building's electrical system. Or, you can simply run the enclosed ground wire to a convenient building earth ground. There are 4 rubber feet locations on the bottomside of the Hub to install the rubber feet if desired.

Incremental Hubs can be attached together vertically or horizontally by connecting the grounding bars between adjacent HUB ground screw locations.

If you have any questions regarding proper Hub installation, just give us a call at (408) 297-8700 or you can email us at bravobravo@pipeline.com.