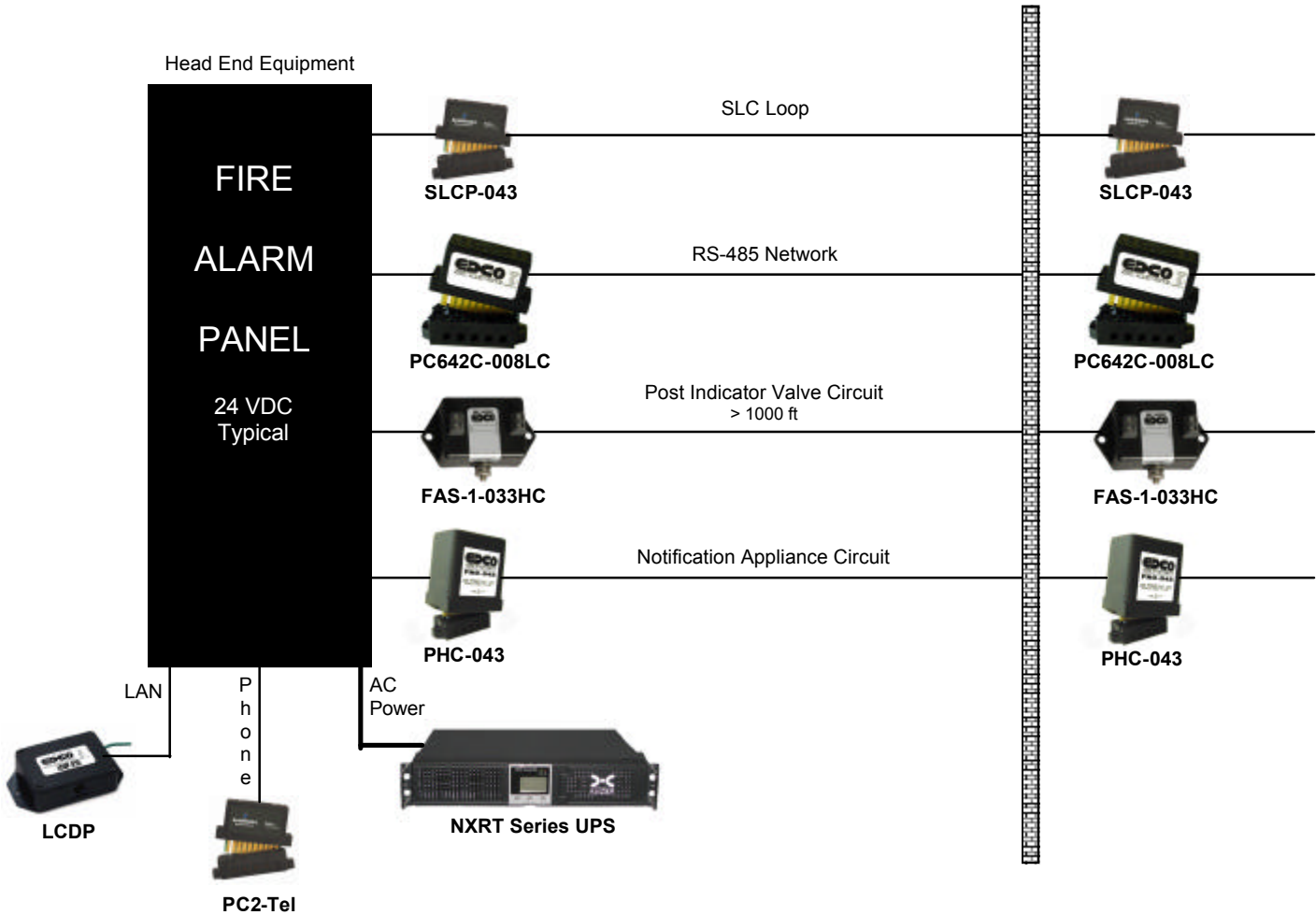


FIRE ALARM Surge Protection Monitoring, Control and Communications

Typical Installation Options
to Protect a Fire Alarm System



Security equipment intended to protect life and property can and should be protected from power surges that result from lightning or from any of several man made sources. The above illustration shows a variety of components that can be combined to provide full system protection for fire monitoring, alarm and communications.

Any devices installed outdoors, such as strobes, horns or other security related equipment can dramatically increase the chance of lightning damaging or destroying a security network. Without battery back up, loss of utility power renders fire alarm equipment useless. For that reason we recommend all security equipment be supported by surge and lightning protection as well as an on-line UPS.

In Line Surge Protection from EDCO

SLCP-043 is designed to provide line to ground protection for four-wire signaling line circuits (SLC) with zero ohms of resistance. Silicon avalanche diode (SAD) technology has a peak surge current of 250A with an operating current of 1A. The SLCP-043 has an operating voltage of 36VDC. This unit mounts in the PCB1B base, sold separately.

PC642C-008-LC is a dual pair (four wire) protection device which employs three component stages for protection: gas discharge tubes (GDT), silicon avalanche diodes (SAD) and automatically resetting over current protection (PTCs). The combination of these components significantly increases performance and the service life of the protection device. The PC642C-008LC is designed for RS-485 and RS-422 data lines with a low capacitance feature that clamps surges at 8 volts. It connects via a gold plated card edge with a base, PCB1B, which should be firmly mounted to a surface and hardwired to ground.

FAS-1-043HC provides multi stage protection to a single pair of wires. (For dual pair protection see the FAS-2.) The FAS Series is available in a variety of voltages. This particular version is recommended for applications up to 24 VAC. It is not recommended for continuous current loads greater than 2.5 amps.

PHC-043 provides surge protection to one or two pairs of wires for alarm or security systems where operating currents can be as high as 5 amps. The PHC design employs a hybrid circuit design using a staged compliment of varistors (MOV), silicon avalanche diodes (SAD) and copper wire wound inductors. The result is dependable protection with a low series resistance of only 0.02 ohms per pair of wires. The PHC-043 has a surge clamping point of 43 volts.

A gold plated card edge on the PHC mates with a PCB1B mounting base (sold separately). To provide additional protection this mounting base is to be wired to ground. During routine maintenance or following a strong surge event, the PHC can be replaced simply by removing it from the mounting base.

LCDP has two RJ-45 jacks and a ground lead. Its surge protection utilizes silicon avalanche diode (SAD) technology and exhibits very low capacitance (< 30pf) to accommodate high data rates. The LCDP Series is available for a number of voltage applications. The POE version begins protecting against power surges at levels above 75 VDC.

PC2-Tel is designed is specifically to protect both phone lines required by a commercial fire panel. It uses silicon avalanche diode (SAD) technology to protect against a peak surge current of 160A above a level of 270 VDC. With an insertion loss below 0.1 dB at 20 Mhz. The PC2-Tel mounts in the PCB1B base, sold separately.

Battery Support from Xtreme Power Conversion

NXRT Series consists of are four models of true on-line UPS. Connected equipment is powered off the UPS batteries 100% of the time. No power fluctuations, surges or line noise can reach connected equipment. NXRTs can be connected to an unlimited number of external battery modules, allowing for extremely long run times in the event of a power failure - just what's needed for security applications. There are four models in this series, ranging from 1,000 to 3,000 VA. Each can be rack, wall or tower mounted.

EDCO pioneered use of *Hybrid Series* surge protection in the mid 1970's. Originally designed to protect digital traffic light controllers, this multiple component approach has been successfully applied in a range of markets and applications including security, telecommunications and industrial controls. EDCO is a brand name of Emerson Network Power.

Xtreme Power Conversion is an innovative provider of high quality UPS products at innovative market prices. Juice Goose offers sixteen different models of UPS from 1,000 to 3,000 VA in on-line and line interactive designs.



Houston, Texas

For more information
713-772-1404
info@juicegoose.com
www.juicegoose.com