

Design Flexibility of Centralized Emergency Lighting Inverters

Engineering Design – Applications for today's customer

The eLITE & UltraLITE _____

- **Utilize Existing Fixtures for Emergency Lighting**

The eLITE and UltraLITE centralized inverters allow existing light fixtures to be used as emergency lighting for safe egress. Regardless of fixture type – fluorescent, HID or quartz, the no break uninterrupted output of the inverter allows full flexibility in design.

- **Combine “Always ON” circuits with “Normally OFF” circuits**

The eLITE and UltraLITE centralized inverters offer both an Always ON output bus for lighting fixtures serving the dual purpose of non-emergency controlled lighting & emergency lighting, as well as a Normally OFF output bus for emergency lighting fixtures that remain off until a power outage occurs or a remote input Command On signal is given.

- **Remote Input “Command On” control of “Normally OFF” Bus**

The eLITE and UltraLITE centralized inverters accommodate remote normally closed contacts which open in the case of any unacceptable condition or emergency event where the Normally OFF emergency lighting fixtures need to be illuminated (fire alarm, phase loss, circuit breaker trip).

- **Control Device Override**

Control device is defined as any light switch, dimmer, occupancy sensor or other lighting control device. Override is defined as the bypassing of these devices in the case of a power outage to ensure emergency lighting fixtures are energized and provide full illumination for safe egress.

An external device (Zone Saver) can be used to override two separate 1 pole, 20 amp control devices (120V or 277V). The override control is initiated when power is lost to the unit's sensing circuit, which can monitor any 120V or 277V source. The unit is UL924 listed and includes status indicator lights and a test switch.

More expensive UL1008 listed transfer switches can also be used externally to switch between two separate power sources (normal power and emergency power). As with any de-centralized approach, monthly and annual testing of each unit is required.

- **Zone Control**

Zone control is a unique way of monitoring individual zones of a building or space and controlling the use of normally off emergency lighting fixtures as required. Zone Saver is a remotely installed unit that can be configured for this application.

In the event that there is a loss of power, inadequate voltage or a main circuit breaker trip to a lighting panel in a specific zone, the Zone Saver assures that the emergency egress fixtures in that zone will

illuminate, without illuminating emergency egress fixtures in other zones. This approach saves money by eliminating emergency power use in unaffected areas.

- **Centralized Inverters used with Emergency Generator Back Up**

The eLITE and UltraLITE centralized inverters are UL924 listed for Emergency Lighting requiring 90 minutes back up; and also “**UL924a**” listed for Auxiliary Power Supplies allowing shorter battery back up times (i.e. 10 minutes). These shorter run times are ideal for use with generator back up to comply with emergency lighting requirements.

The no break output of the inverter allows for the use of HID fixtures for emergency egress and prevents the unwanted or unacceptable delay* of emergency power to certain areas of the building or public space.

***NEC allows up to 10 seconds of darkness before emergency generators are required to supply power.**