

# Light Support Power Systems Options

## INTEGRATED OUTPUT CIRCUIT BREAKERS:

-OCB	12	20			
<b>Trip Alarm</b> OCB - No Breaker Trip Alarm  OCA - With Breaker Trip Alarm	<b>Number of Circuit Breakers</b> Combination of 1 pole, 2 pole and 3 pole breakers available.  *For max. number of circuit breakers available please consult factory	<b>Breaker Rating (Amps)</b>  *Various ratings available	<b>Number of poles</b>  Blank - 1 pole -2P - 2 poles -3P - 3poles	<b>Breaker Voltage</b> Blank- matches system output voltage -120VAC -208VAC -240VAC -277VAC -480VAC	<b>Operation Mode</b> Blank: Normally-On -NOFF: Normally-Off

Distribution circuit breakers are for output load protection. Protection for the normally on and/or for the normally off loads. All circuit breakers are rated for 10,000 AIC. If ordered, an audible and visual alarm activates when an output distribution circuit breaker is open or has tripped.

### (-20YR) 20 Year Sealed Lead Calcium Batteries

Maintenance free battery requires no addition of water over the life of the battery. The battery cells are housed in protective, modular steel trays. Life expectancy is designed for 20-years at 77°F (25°C).

### (-12HR) 12 Hour Fast Recharge

Battery charger upgrade option which decreases the time required to return a fully discharged battery to the fully charged state. The normal 24 hour recharge cycle is reduced to a 12 hour period.

### (-MBYP) Internal Maintenance Bypass Switch

Internally mounted device permits maintenance personnel to easily bypass the protected equipment directly to the AC utility power. The manual make before break switch isolates the system to perform routine maintenance or servicing without interruption of utility power to the connected load.

### (-EMBP) External Maintenance Bypass Switch

The external maintenance bypass switch is mounted in a 20"H x 16"W x 9"D NEMA 1 separate enclosure, used to completely isolate the inverter system from the connected load and AC utility input. This option allows the system to be safely powered down for maintenance or service. The option may not be used on systems with more than one single pole output circuit breaker which must be sized for the total system output current.

### (-RMP) Remote Meter Panel

The panel allows monitoring of parameters and control from remote locations up to 150 feet away from the inverter system. Also, the remote panel provides a complete touch pad interface allowing the user to monitor, control and program the inverter system.

### (-RSAP) Remote Summary Alarm Panel

Wall mountable box provides visual and audible alarms with silent switch. The panel consists of LED indicators and built in audible alarm and may be located up to 1,000 feet away from the inverter system.

### (-DCS) Summary Alarm Dry Contacts

Form C dry contacts for remote monitoring purposes. Rated at 5 amps max. (250VAC/30VDC), the contacts will change state when any of the following alarms: High/Low Battery Charger Voltage, High/Low AC Input Voltage, Near Low Battery Voltage, Low Battery Voltage, Load Reduction Fault, High Ambient Temperature, Inverter Fault, Output Fault, Output Overload or Optional circuit breaker trip alarms, occurs.

### (-INVON) Inverter On Dry Contacts

Form C dry contacts that will change state when the system transfers to battery operation

### (-VTD) Variable Time Delay (for normally off circuits)

After a return of AC utility power, delays retransfer of the inverter for up to 15 min. and continues to supply emergency power to the normally off circuits.

### (-NOFF) Normally Off Output

This output circuit is dedicated for the emergency only equipment. Emergency only equipment operates during power outages and when the system is on battery back up. This option leaves the normally off load circuits off during normal utility power conditions. A 1-pole circuit breaker is provided. For 3 phase systems, 3 pole normally off circuits are available as well.

### (-MOD) External Modem

External modem device is designed to boost the signal level of the RS-232 diagnostic interface to remote monitoring locations located more than 100 feet away from the system.

### (-FAX) Internal Fax Modem

The internal fax modem enables the system to send a fax automatically to several pre-programmed numbers when one of the following conditions occurs: utility failure, output failure or any alarm. The Fax Modem option requires a user supplied dedicated phone line.

### (-BPR) Bypass Relays

Internal bypass relays will allow overriding circuits that can be switched on/off, so in case of a power failure the emergency circuits will be supplied from the inverter system whatever the position of the switching device. Please consult factory for more details.

### (-DIAL) Auto Dialer

The Auto Dialer modem option automatically dials up to four user-programmable phone numbers in the event of any system alarm condition. The option is designed to deliver a predetermined digital or audible message when activated. The Auto Dialer option requires a user supplied dedicated digital or analog phone line.

### (-SEIS) Seismic Mounting Kit

The seismic mounting kit option is designed to prevent system movement during seismic events. Heavy duty brackets are provided to secure system cabinetry to floor surfaces. Meets Zone 4 requirements.

### (-ZONEM) Zone Monitoring

Allows voltage monitoring of different circuits than the standard AC utility input. When the voltage of one of these circuits drops, the inverter system will go into battery back-up operation mode. Number and voltage of the monitored circuits to be specified.

### (-RS232) Diagnostic Interface

A microprocessor-based data acquisition system designed to monitor all the system parameters remotely. Monitors alarm log, event log and automatic test log. User can command the system to perform a battery test and review all system parameters. Access is through a DB9 connector and transmits at 9600 baud.

### (-BATM) Battery Cycle Warranty Monitor

Device providing battery monitoring at string level or cell level. Please consult factory for more details.