

# **SLI Inverters** High-Efficiency, Low-Profile 1500 VA Inverters

#### Features

- N+1 parallelable operation for capacity or redundancy without additional hardware
- Ultra compact 1U module size
- Microprocessor controlled status and monitoring ensures precise operation of all inverter functions
- True sine wave output
- 24 or 48 VDC input options
- 120 or 240 VAC 50 / 60 Hz outputs
- Integrated static bypass switch option
- High efficiency (93%) making it ideal for alternative energy applications
- LCD and LED status display
- Serial or CANBUS communications
- Accommodates harsh environments in excess of 40°C
- DC noise filtering eliminates noise on DC bus (<2mV psophometric)
- On-line or off-line mode selectable
- Meets UL, cUL, and CE requirements

**The SLI Family** of "Slim Line" inverters represents an ideal solution for telecom and industrial applications. Thanks to innovative technology solutions like the patented "Compact coil" these inverters pack 1500 VA of power into a small and light package 19" or 23" rack mountable and just 1 rack unit high. The efficiency peaks 93%.

The family includes 4 models for different inputs (24Vdc and 48Vdc) and output (115Vac and 230Vac) voltage combinations. Several options are available for internal Static Transfer Switch

(STS), parallel hot-swap operation to realize flexible and scalable systems, grid connectivity for Distributed Generation systems with control of the power exchanged with the grid, and extended communication features.

The inverter carries on-board a powerful DSP (Digital Signal Processor) and allows easy programmability of the main parameters by means of an LCD display and keypad on the front panel. The unit can be interfaced with RS485 or optional CAN bus to an external controller.



# Specifications

| Electrical                           |  |  |  |  |
|--------------------------------------|--|--|--|--|
| Input Voltage                        | 48 VDC (40-72 VDC) or 24 VDC (20-36 VDC)   |  |  |  |
| Output Voltage                       | 115 VAC (100-120 VAC) or 230 VAC (200-240 VAC) - select 115 or 230 VAC model                         |  |  |  |
| Output Power                         | 1500 W   |  |  |  |
| Output Waveform                      | True sine wave   |  |  |  |
| Frequency                            | 50/60 Hz (47-63 Hz) - select 50 or 60 Hz model   |  |  |  |
| Frequency (Stability)                | ±0.02% maximum   |  |  |  |
| Inverter Technology                  | Pulse Width Modulation /High Frequency Switching   |  |  |  |
| Dielectric Strength                  | 2,500 VAC minimum  |  |  |  |
| Inrush Current                       | <10 A  |  |  |  |
| Operating Modes                      | On-line (standard); Standby (selectable)   |  |  |  |
| Efficiency                           | peak efficiency 93%  |  |  |  |
| Output Power Factor                  | 0.33 lagging or leading  |  |  |  |
| Total Harmonic Distortion            | 2% maximum for linear loads /<3% for non-linear loads  |  |  |  |
| DC Noise Feedback                    | < 30 dBrnc   |  |  |  |
| Transient Response                   | <3% voltage change on instantaneous 0 to 100% load change  |  |  |  |
| Transfer Time (With Static Switch)   | < 2 msec   |  |  |  |
| Overload Capacity                    | up to 125% continuous; 125% to 150% - 1800 cycles, 150% to 220% - 24 cycles, 220% to 300% - 4 cycles |  |  |  |
| Load Voltage Regulation              | +3%/-1%  |  |  |  |
| Communications                       | RS-485 or CANBUS communications interface and photo alarm relay                                      |  |  |  |
| Display                              | 2 x 20 LCD display (optional) with LED status bar  |  |  |  |
| Input Overvoltage Protection         | 48 Vdc models: 74V; 24 Vdc Models: 37V   |  |  |  |
| Input Undervoltage Protection        | 48 Vdc models: 36V; 24 Vdc Models: 18V   |  |  |  |
| Input Overcurrent Protection         | 48 Vdc models: 70A; 24 Vdc models: 140A  |  |  |  |
| Overload                             | 230 Vac models: 1800 VA; 115 Vac Models: 1650 VA   |  |  |  |
| Surge Capacity                       | 230 Vac models: 2300 VA for 200 ms; 115 Vac Models: 1750 VA for 200 ms                               |  |  |  |
| Electronic Overcurrent Protection    | 230 Vac Models: 1A to 8A (selectable); 115 VAC Models: 2A to 15A (selectable)                        |  |  |  |
| AC Circuit Breaker                   | 230 Vac Models: 10A; 115 Vac Models: 15A   |  |  |  |
| Electronic Short-circuit Protection: | 230 Vac Models: 30A; 115 Vac Models: 60A   |  |  |  |
| Protection Mode                      | Progammable for "latch" or "auto restart" after incident   |  |  |  |
| Isolation                            | PRI-SEC: 3000 Vrms PRI-GND: 1000 Vrms SEC-GND: 1500 Vrms Signal-GND: 0 Vrms                          |  |  |  |
| MTBF                                 | 200,000 hours at 40°C  |  |  |  |

## Specifications (continued)

| Mechanical                  |                      |
|-----------------------------|----------------------|
| Dimensions (H x W x D)      | 1.7" x 19.0" x 15.0" |
| Weight (lb / kg)            | 12.5 / 5.6           |
| Environmental               |                      |
| Operating Temperature Range | -25 to 55 °C         |
| Storage Temperature         | -40 to 85 °C         |
| Safety / Standards          |                      |
| Safety                      | UL. CE               |

### **Ordering Information**

| Item                                | Input  | Nominal Output | Output Range  | Comcode     |
|-------------------------------------|--------|----------------|---------------|-------------|
| 48V Inverter                        | 48 Vdc | 230 Vac        | 200 - 240 Vac | 408560585   |
| 48V Inverter                        | 48 Vdc | 115 Vac        | 100 - 120 Vac | 408557870   |
| 24V Inverter                        | 24 Vdc | 230 Vac        | 200 - 240 Vac | CC408609357 |
| 24V Inverter                        | 24 Vdc | 115 Vac        | 100 - 120 Vac | 408557862   |
| Sync Cable for parallel connections |        |                |               | 408557887   |

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