SLI 15 Inverter Series Data Sheet
1500 Watt, 1U Compact Inverters



Applications

- Telecom
- IT
- Industrial

Safety in compliance with IEC60950:1999, 3rd edition; EN60950:2000; UL60950, 3rd edition; CSA Standard C22.2 No.60950-00, 3rd edition

Features

- New, compact design: 1U height x 19" width x 14.94" depth; 19" rack-mountable
- High efficiency: up to 93%
- True sine wave output
- Parallelable output with current share and synchronization of multiple inverters working in parallel
- Front panel LCD display to monitor and set the main parameters
- RS-485 serial link
- Constant input current sink from battery for extended life
- Optional hot-swappable configuration
- Optional internal Static Transfer Switch
- In the -STS version, ON line (primary source to the load) or OFF line mode (UPS like)
- Configurable for being used as Three Phase source, 3 units

Description

The SLI 15 Inverter Series provides an ideal solution for telecom, IT, and industrial applications. Due to innovative technology solutions like the patent-pending "Compact Coil", the SLI 15 inverters pack 1500 watts of power into a light (5.6 kg) and compact package that is mountable in 19" racks and is only one rack unit high. The SLI 15 Inverter Series offers four models for different input (24 and 48 VDC) and output (115 and 230 VAC) voltage combinations. An integrated controller, along with an optional internal Static Transfer Switch (STS) enable flexible and scalable systems which are truly "plug and play", and require no external subsystems. The inverters can be stacked up to the power level needed by each application and also have the capability to be configured for generating a 3-phase voltage source.

Electrical performance of the SLI 15 is exemplary of a top-of-the-market product with efficiency that peaks at 93% and a patent-pending control algorithm that compensates current harmonics on the DC side without using bulky and expensive filters. The SLI 15 includes a powerful on-board Digital Signal Processor (DSP) that allows easy programming of main parameters through use of its front-panel keypad and LCD display. In addition, the SLI 15 can be interfaced with an RS-485 serial communications link.

SLI Inverter Model Selection and Ordering Information

Model [1]	Input Voltage (VDC)	Output Voltage Nominal (VAC)	Overall Output Voltage Range (VAC)	Frequency Range (Hz)
SLI-24-115	24	115	100 to 120	47 to 63
SLI-24-230	24	230	200 to 240	47 to 63
SLI-48-115	48	115	100 to 120	47 to 63
SLI-48-230	48	230	200 to 240	47 to 63

[1] The following suffixes should be added to the model number to order options. For an internal Static Transfer Switch, please add the suffix "-STS". For AC terminal blocks, please add the suffix "-SC". For Hot Plug version, please add the suffix "-HP". For Neutral tied to Ground, please add the suffix "-GN".

ELECTRICAL SPECIFICATIONS

Input Specifications

Parameter	Conditions / Description	Min.	Nom.	Max.	Units
DC Input Voltage Range		20 40	24 48	36 72	VDC
Input Current	24 VDC Models @ 18 VDC: 48 VDC Models @ 36 VDC:			100 48	Amps
Inrush current				<10	Amps

Output Specifications

Parameter	Conditions / Description	Min.	Nom.	Max.	Units
Output Power				1500	Watts
Output AC Voltage Range	Standard is Vac floating from Ground; -GN version is available with Neutral connected to Ground (Grid Input shall be supplied by means of an isolation transformer)	110 200	115 230	120 240	VAC
Frequency	50Hz/230Vac, 60Hz/115Vac	50		60	Hz
Efficiency				93	%
Load Power Factor	lagging or leading	0,33		1	
Crest Factor	Ipk/Irms			4	
Regulation in single mode	Load: over full operating range. R-Load Line: over full operating range. R-Load	-3 -0,1		+1 +0,1	%
Regulation in parallel mode	Load: over full operating range. R-Load 230 115	-6 -8,5		0 0	%
Total Harmonic Distortion	On Resistive Load.			<2	%

Fault Protection

Parameter	Conditions / Description	Min.	Nom.	Max.	Units
Input Overcurrent Protection	24 VDC Models; Internal Fuse. 48 VDC Models; Internal Fuse.	140 70			Amps
Input Overvoltage Protection	24 VDC Models: 48 VDC Models:	37,5 74			VDC
Input Undervoltage Protection	24 VDC Models: 48 VDC Models:	18 36			VDC
Output Overload	115 VAC Models: 230 VAC Models:	1610 1840			W
Surge	115 VAC Models for 200 ms: 230 VAC Models for 200 ms:	1750 2300			VA
Overvoltage Protection	All outputs are set at 115%, ±2 % of nominal.				
Undervoltage Protection	All outputs are set at 85%, ±2 % of nominal.				
Overcurrent Protection	115 VAC Models: 1 A to 14 A selectable. 230 VAC Models: 1 A to 8 A selectable.				
Safety Overcurrent Protection	By safety circuit breaker: 115 VAC Models: 15 A. 230 VAC Models: 10 A.				
Short-Circuit Protection	Peak Current type protection: 115 VAC Models: 60 A. 230 VAC Models: 30 A.				
Overtemperature Protection	Visual and acoustic indication 5 °C before shutdown at T_{amb} > 65 °C and at T_{int} > 100 °C.				
Protection Restore Modes	The restore mode of each protection can be individually selected to "latch" or "auto-restart".				

Environmental Specifications

Parameter	Conditions / Description	Min.	Nom.	Max.	Units
Operating Temp at Full Load	Power Derating: 75W/ºC: +55 ºC to +65 ºC.	-25		55	ºC
Altitude	Operating. Non-Operating.			13K 40K	ASL ft ASL ft
Storage Temp		-40		85	ºC
Humidity	90% relative humidity @ 40 ºC, non-condensing.				
Output Voltage Temperature Coefficient	0.02% per ºC within rated load.				

Interface Signals/Controls

Parameter	Conditions / Description	Min.	Nom.	Max.	Units
LCD Panel	2-line LCD panel with keypad for menu navigation.				
LED Indicators	4 LED indicators: Front panel GREEN LED indicates inverter is ON. Front panel RED LED indicates a generic fault categorized as: a. Overtemperature (OT), b. Fan fail, c. Input OV, UV, OC, or Output OV, UV, or OC.				
General Alarm Signal	Activated by an open photo-relay if in fault mode, available at rear signal connector				
Serial link	RS485 port, 500Vdc isolated, available at rear signal connector				

Regulatory & Safety

Parameter	Conditions / Description	Min.	Nom.	Max.	Units
cCSAus	Approved.				
Kema	Approved.				
CB Report Approval	Approved.				
CE Mark for LVD	Approved.				
RoHS	Compliant.				
Isolation	Primary-to-Secondary: 3000 Vrms. Primary-to-Ground: 1000 Vrms. Secondary-to-Ground: 1500 Vrms. Signal-to-Ground: 0 Vrms.				

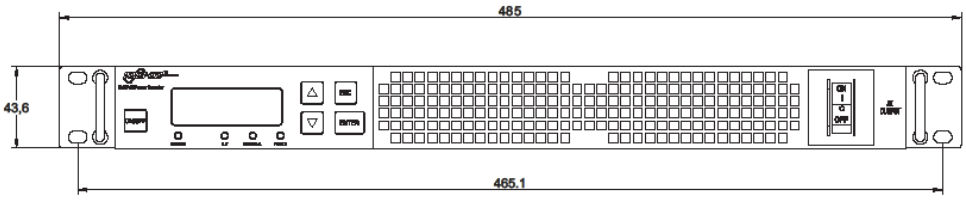
Mechanical Specifications

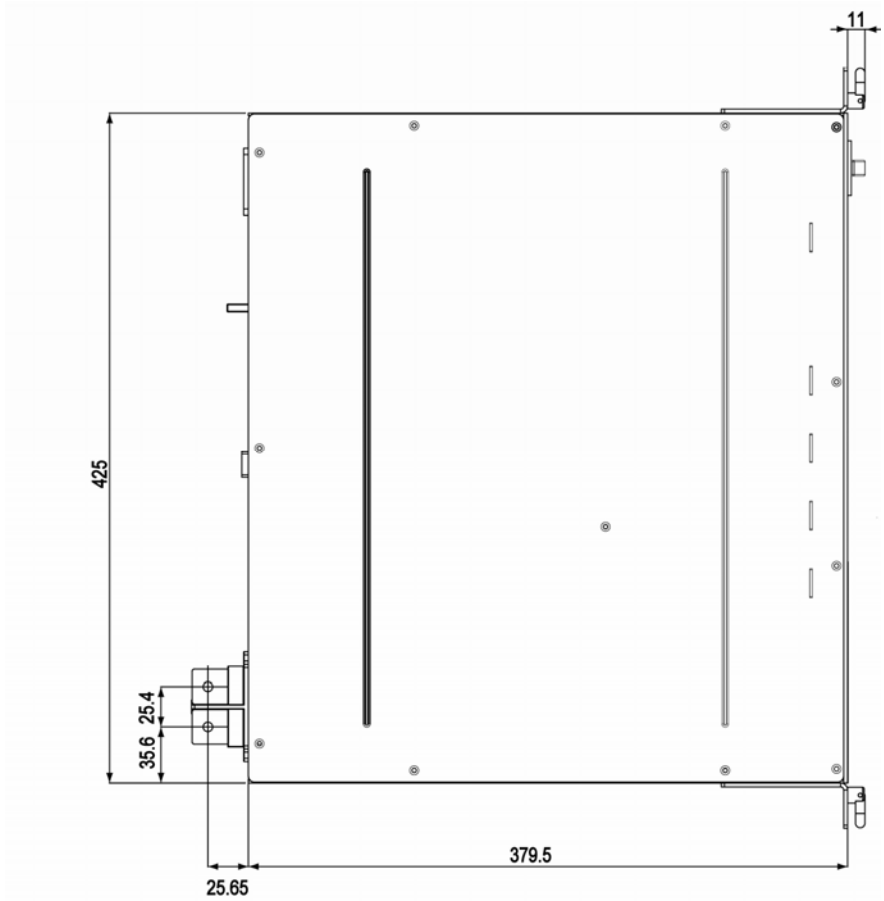
Parameter	Conditions / Description	Min.	Nom.	Max.	Units
Dimensions	Depth (inches)			14.94	in
	Depth (mm)			379.5	mm
	Width (inches)			19.00	in
	Width (mm)			482.6	mm
	Height (inches)			1.71	in
	Height (mm)			43.5	mm
Weight	Pounds			12.34	lb
	Kilograms			5.6	kg
Connections	DC input: back left, one 6mm diameter hole at each input bar; hot plug version has PCB bars with pre charging system; subrack for -HP version hosts one inverter, separate purchasing part; plastic DC input cover is available, separate purchasing part				
	AC output: back right, IEC320 plug is the standard; screw terminal blocks are with the option –SC; -STS version has IEC320 socket marked “Grid Input”				
	Signal: back centre, female Sub-D 15 poles connector, Molex 89263-6062 or equivalent; general failure alarm, serial port, synchronism for paralleling or three phase, remote on/off. For paralleling inverters, up to 6, ask for paralleling kit, one per inverter, separate purchasing part				
	Important: -STS and -GN options are compatible just supplying Grind Input by means of an isolation transformer, same indication if Neutral is tied to Ground at customer site.				

Reliability

Parameter	Conditions / Description	Min.	Nom.	Max.	Units
Calculated MTBF	At 40 °C excluding fan -STS version, at 40°C excluding fan	250,000 200,000			Hours

Mechanical Outline Drawing:





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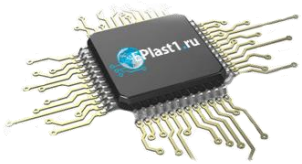
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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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