DATASHEET

- **19 " Rack format**
- **Pure sine wave**
- **Low harmonic content (THDi ≤ 1%)**
- **Redundant operation**
- **LOM Series - Single-Phase, LOT - Three-Phase**
- **Extensible 2 year warranty**

LOM-110/230-05.0BL-01

General description

Inverters developed by SUPSONIK, S.L. are compact and reliable, designed to generate a stable and clean sine wave voltage to critical power loads:

- Telecommunications
- Computer systems
- Naval sector
- Industrial sector
- Electrical substations
- Hospitals

The function of a DC / AC Inverter is to convert direct current voltage from a group of batteries or a rectifier system into an alternating voltage of constant frequency and amplitude.

The equipment is designed in 19 "rack format available in several models differentiated by their rated power, frequency and input and output voltages. Due to the modular structure, different configurations are obtained for the complete equipments:

- Wide range of input voltages - 24, 48, 110, 220 Vdc
- Single-phase output voltage of 115, 127, 230, 254 Vac
- Three-phase output voltage 200, 220, 400, 440 Vac
- Output Frequency 50, 60, 400 Hz

Other advantages of modular equipment are the ease of maintenance and replacement of modules, availability of the reserve module for N + 1 configuration, distribution of output currents for parallel operation.

The modular structure allows high MTBF and low MTTR values to be achieved.

General Characteristics of DC / AC Inverters:

- 19 '' Rack format 19 (other formats available)
- Sine wave with low harmonic distortion
- Wide range of input and output voltages (single-phase / three-phase)
- Availability of output frequencies 50, 60, 400 Hz
- Signalling and alarms in visual and sound form
- Redundant operation
- Static by-pass
- RS-232 + monitoring software
- Electronic protections with automatic re-establishment

Optional:

- Manual by-pass
- Parallel operation
- MODBUS / PROFIBUS RS-485 Communications

Supsonik S.L. Offer customized development with special features and adapted to your needs.
For further information please contact the manufacturer.

AC INPUT	
DC rated input voltage AC	110 V
Input DC voltage variation	90 ÷ 135 V
Maximum input current	65 A
AC OUTPUT	
Rated power	5 kVA
AC output current voltage	230 V ~1N ± 1%
AC Output Frequency	50 Hz ± 0.05%
Waveform	Sine-wave
THDv (output voltage distortion)	≤ 1% (for linear load)
	≤ 3% (for non-linear load)
Peak factor	3:1
Voltage static voltage (load variation 10 ÷ 90%)	± 1%
Voltage dynamic stability (load variation 10 ÷ 90%)	± 2% (re-establishment time 20ms)
Galvanic isolation	Yes
Overload	120% / 70 s
	150% / 10 s
Static by-pass	
Rated power	20 kVA [x2 units]
Input / Output Voltage	400 V ~2 / 230 V ~1N
Input / Output Frequency	45 ÷ 55 Hz
Overload	1,5 x Inom / 30 min
	10 x Inom / 0,1 s
Transfer time	0 s for overload
	1m s for internal breakdown
Manual by-pass**	No
PERFORMANCE	
Performance (100% -load @ Vinput-nom)	≥ 91%
ENVIRONMENTAL CHARACTERISTICS	
Protection degree	IP20
Working temperature	0ºC a 40ºC
Storage temperature	-15ºC to 55ºC
Relative humidity	15% to 95% with no condensation
WEIGHT	
Dimensions (Width x Depth x Height)*	445 x 570 x 177 mm [19'' rack – 4U]
Weight	25 Kg
PROTECTIONS	
Protections	• Input Overvoltage / Undervoltage • Output Overvoltage / Undervoltage • Output Overload / Short Circuit • Internal overtemperature
USER INTERFACE	
• LED and acoustic visual signaling • Remote Start / Stop Control	• Potential-free contact alarms: DC Input OK / Inverter OK / Lock / By-Pass / Overload
AVAILABLE OPTIONS	
• Graphical display with measurements and event history • Remote signaling in 4 ÷ 20 mA form • Analog meters on the front panel	• RS-485 communications, MODBUS / PROFIBUS protocol • Output Current Leakage Detector • Input Current Leakage Detector
CERTIFICATES AND STANDARDS	
EC Marking UNE-EN ISO 9001:2008	Directive EMC 61000-6-2, 61000-6-4 Low Voltage Directive EN 50178

* Equipment indicated weight - Standard
** optional