

# INV-LAVA-4000

## 8 - 48kVA INVERTER SYSTEM



POSITIVE PROBLEM SOLVING **+ =**

**The INV-LAVA 4000 series of inverters is designed to be part of a system incorporating both a controller and an optional automatic bypass.**

This arrangement provides a very flexible system that can be easily expanded or reconfigured as power needs dictate. Up to 12 inverters can be connected via CAT5 cables to the controller module to provide up to 48kVA of output power. Two different bypasses are available capable of either 120A or 200A. Separate summaries are available for these units. The inverters themselves produce a true micro-processor controlled sinewave. LED indication on the front panel shows the power taken from each inverter.

**The system is comprised of:-**

- + INV-LAVA Controller Module**
- + Optional INV-LAVA Bypass Module**
- + Up To 12 Parallel Inverter Modules**
- + Optional 19" Cabinet**

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## FURTHER DETAILS

To identify a particular inverter within the system the address is displayed digitally on the front panel of each inverter. The system allows for true n+1 redundancy. Should an inverter fail redundancy can be regained by installing a new unit in to the system while it is still operational. These robust inverters have excellent efficiencies typically over 88% at nominal load. A high peak capability and wide operating temperature range makes them ideal for many applications.

### SELECTION TABLE

Part Number	Number of Modules	Maximum Power <sup>1</sup>	Output Frequency <sup>2</sup>	Dimensions [W × H × D] <sup>3</sup>
INV-LAVA 40002	2	8kVA	50Hz	19" × 8U × 360mm
INV-LAVA 40003	3	12kVA	50Hz	19" × 11U × 360mm
INV-LAVA 40004	4	16kVA	50Hz	19" × 14U × 360mm
INV-LAVA 40005	5	20kVA	50Hz	19" × 17U × 360mm
INV-LAVA 40006	6	24kVA	50Hz	19" × 20U × 360mm
INV-LAVA 40007	7	28kVA	50Hz	19" × 23U × 360mm
INV-LAVA 40008	8	32kVA	50Hz	19" × 26U × 360mm
INV-LAVA 40009	9	36kVA	50Hz	19" × 29U × 360mm
INV-LAVA 400010	10	40kVA	50Hz	19" × 32U × 360mm
INV-LAVA 400011	11	44kVA	50Hz	19" × 35U × 360mm
INV-LAVA 400012	12	48kVA	50Hz	19" × 38U × 360mm

<sup>1</sup>This is the maximum continuous apparent power at max PF. <sup>2</sup>Different output voltage and frequencies are possible. Please contact ETPS to discuss your requirements.  
<sup>3</sup>Dimensions include the 19" × 2U × 201mm INV-LAVA controller module. Dimensions do not include optional bypass module.

### OPTIONS

CODE	DESCRIPTION
/BYP-120	Electronic bypass with a rated current of 120A
/BYP-200	Electronic bypass with a rated current of 200A
/1	Unit built with 115VAC, 60Hz output
/V24	System input voltage of 24VDC
/V48	System input voltage of 48/60VDC
/V110	System input voltage of 110VDC
/V220	System input voltage of 220VDC
/CAB	System is placed in a 19" cabinet
/LAN-LAV	Unit provided with external LAN interface

## TECHNICAL DATA

### GENERAL

Electrical Safety	EN 60950, VDE 0805 (overload & short circuit protected)
Efficiency	>88% at nominal load
Galvanic Isolation	3.75kVDC
EMC (Emission)	EN 50081-1, Curve EN 55022B
EMC (Immunity)	EN 50082-2
Operating Temperature	-5°C to +45°C (non condensing)

### INPUT DC

48/60VDC (option /V48)	38 - 72VDC
110VDC (option /V110)	88 - 132VDC
220VDC (option /V220)	178 - 264VDC

### OUTPUT AC

Voltage	230VAC, failure tolerance $\pm 5\%$ (option /1 for 115VAC, 60Hz)
Frequency	50Hz - Sinewave processor controlled (option /1 for 115VAC, 60Hz)
Maximum Continuous True Power	3200W (per module)
Permissible Power Factor	-0.8 to +0.8
Maximum Continuous Apparent Power	4kVA (per module)
Load Range	0 - 100%
Crest Factor	>2.5
Harmonic Distortion	<2%

### HOUSING

Casing	19" rack with mounting flanges (option /CAB for installation within a 19" cabinet)
Dimensions (per module)	19" x 3U x 360mm (W x H x D)
Weight (per module)	Approx. 15kg
Classification	IP 20
Ventilation	Internal fan

### ELECTRICAL CONNECTIONS

Connector Position	Front of unit - main AC input
Input DC	3 x high current terminal blocks 16mm
Output AC (parallel mains)	Phoenix Power Combicon 3-pole
Output AC (parallel signal)	2 x RJ45 S-UTP

### OTHER

Visual	LEDs for load display and PG/ON, two digit seven segment display of address
Operation	Push button for address setting, battery switch
Warranty	2 years

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.



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