

INV-P

RACKMOUNTING DC-AC SINEWAVE INVERTER



POSITIVE PROBLEM SOLVING **+ =**

The INV-P range provides a true stabilised sinewave output controlled by a micro-processor. Up to five of these units can be operated in parallel.

The load current is automatically shared by each inverter. This ability to increase the output power ensures that the system can be expanded as needs dictate. Units in this range are robust and extremely light, weighing between 7 and 11kg. A variety of DC Inputs are available. The AC output is provided via both a standard IEC socket and Phoenix-style connectors on most models. The user can easily adjust the protection limits and a variety of other parameters through the front panel.

- + Up to 5 Units can be Paralleled**
- + Robust IGBT End Stage**
- + Optional 60Hz Frequency**
- + No 50Hz Transformer**
- + Efficiency Over 88%**

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FURTHER DETAILS

The wide operating temperature and excellent efficiency also help to ensure that this inverter range is ideal in numerous applications.

SELECTION TABLE

| Part Number | Maximum Power ¹ | Input Voltage | Output Voltage ² | Output Frequency ² |
|------------------|----------------------------|---------------|-----------------------------|-------------------------------|
| INV-P 500-24 | 500VA | 24VDC | 230VAC | 50Hz |
| INV-P 500-48-60 | 500VA | 48/60VDC | 230VAC | 50Hz |
| INV-P 500-110 | 500VA | 110VDC | 230VAC | 50Hz |
| INV-P 500-220 | 500VA | 220VDC | 230VAC | 50Hz |
| INV-P 1000-24 | 1000VA | 24VDC | 230VAC | 50Hz |
| INV-P 1000-48-60 | 1000VA | 48/60VDC | 230VAC | 50Hz |
| INV-P 1000-72 | 1000VA | 72VDC | 230VAC | 50Hz |
| INV-P 1000-110 | 1000VA | 110VDC | 230VAC | 50Hz |
| INV-P 1000-220 | 1000VA | 220VDC | 230VAC | 50Hz |
| INV-P 2000-24 | 2000VA | 24VDC | 230VAC | 50Hz |
| INV-P 2000-48-60 | 2000VA | 48/60VDC | 230VAC | 50Hz |
| INV-P 2000-110 | 2000VA | 110VDC | 230VAC | 50Hz |
| INV-P 2000-220 | 2000VA | 220VDC | 230VAC | 50Hz |
| INV-P 4000-48-60 | 4000VA | 48/60VDC | 230VAC | 50Hz |
| INV-P 4000-110 | 4000VA | 110VDC | 230VAC | 50Hz |
| INV-P 4000-220 | 4000VA | 220VDC | 230VAC | 50Hz |
| INV-P 4000-540 | 4000VA | 540VDC | 230VAC | 50Hz |

¹This is the maximum continuous apparent power at max PF. ²Different output voltage and frequencies are possible. Please contact ETPS to discuss your requirements.

OPTIONS

| CODE | DESCRIPTION |
|------|---|
| /1 | Unit built with 115VAC, 60Hz output (not available for INV-P 4000 units) |
| /2 | Unit built with connectors mounted on rear of unit (not possible with option /L*) |
| /3 | Unit built with 230VAC, 60Hz output |
| /L | LAN interface for remote setting and measurement (INV-P 2000 or INV-P 4000) |

*Due to necessary prototyping, at present only the INV-P 4000-100 is available with rear mounted LAN interface. Feasibility for other models will be considered upon request.

TECHNICAL DATA

| | INV-P 500 | INV-P 1000 | INV-P 2000 | INV-P 4000 |
|-----------------------------------|--|------------|------------|------------|
| Maximum Continuous True Power | 400W | 800W | 1600W | 3200W |
| Permissible Power Factor | -0.8 to +0.8 | | | |
| Maximum Continuous Apparent Power | 500VA | 1000VA | 2000VA | 4000VA |
| Voltage | 230VAC, failure tolerance $\pm 5\%$ [Option /1 for 115VAC, 60Hz] | | | |
| Frequency | 50Hz [Option /1 for 115VAC, 60Hz], sinewave processor controlled | | | |
| Load Range | 0 - 100% | | | |
| Crestfactor | >2.5 | | | |
| Harmonic Distortion | <2% | | | |

INPUT RANGE

| | |
|----------|--------------------------------|
| 24VDC | 19 - 31VDC |
| 48/60VDC | 38 - 72VDC |
| 72VDC | 60 - 90VDC |
| 110VDC | 88 - 132VDC |
| 220VDC | 178 - 264VDC |
| 540VDC | 350 - 750VDC [4kVA units only] |

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] | | -5°C to +55°C [non condensing] |
| Over-Temperature Derating | +45°C to +70°C [2%/°C derating] | | +55°C to +70°C [2%/°C derating] |

HOUSING

| | | | |
|----------------|--------------------------------|---------------|------------------------------|
| Casing | 19" rack with mounting flanges | | |
| Size | 19" x 3U x 240mm [W x H x D] | | 19" x 3U x 360mm [W x H x D] |
| Weight | Approx. 7kg | Approx. 7.5kg | Approx. 11kg |
| Classification | IP 20 | | |
| Ventilation | Internal fan | | |

ELECTRICAL CONNECTIONS

| | | | |
|--------------------------------|--|------------------------|---------------------------------------|
| Connector Position | Front of unit [option /2 for rear of unit] | | |
| DC Input [at 24, 48/60, 72VDC] | 3 x high current terminal blocks 16mm | | |
| DC Input [at 110, 220VDC] | 3 x high current terminal blocks 16mm | Phoenix Power Combicon | 3 x high current terminal blocks 16mm |
| AC Output [Parallel-Mains] | 2 x Phoenix Power Combicon plugs | | 1 x Phoenix Power Combicon |
| AC Output [Parallel-Signal] | 2 x RJ45 S-UTP, 1 x appliance outlet | | 2 x Phoenix Power Subcon |
| Alarm | Phoenix Power Combicon plugs | | Binder round connector |

OTHER

| | | |
|-----------------|---|------------------------------|
| Optical Signals | LCD dot matrix display | LEDs for load display, PG/ON |
| Signal Output | Voltage free alarm contact for loss of output | |
| Accessories | Push button for setup, main 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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ETPS engineer electronic power supply and testing systems. Our problem solving skills provide the spark of innovation to some of the world's leading technology brands.



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