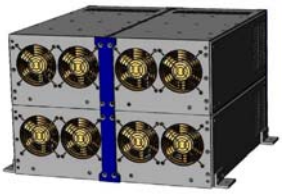
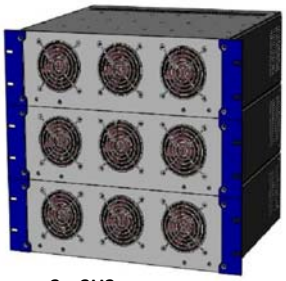
CSI5K SERIES

DC / AC Sine Wave Inverters: 5000 VA

HELIOS POWER SOLUTIONS
www.heliosps.com.au



4 x 3U3:
6U(10.5") x 17"x 16"
chassis mount



3 x 3U3:
9U x 19"x 16"
rack-mount

These photos show two of a range of package options available.
Mechanical size depends on input/output configuration.
Chassis-mount and 19" rack-mount versions available on most designs

Features

- Sinusoidal output waveform
- 5000VA output power
- Frequency options 50Hz / 60Hz / 400Hz
- Wide range of input options: 24 ~ 250VDC
- Optional output fail alarm on some models
- Rugged design for harsh environments
- Full electronic protection
- Non standard input voltage options
- Various mechanical solutions

General Specifications

Input Voltage	24VDC, 36VDC, 48VDC, 120VDC, 250VDC • Other input voltage options on request
Input Range	Ñ15% of input, other options on request
Input Protection	Inrush current limiting Internal safety fuse, Reverse Polarity Protection
Isolation	For input > 60vdc : Input ï Output: 2250vdc For input <60vdc: Input ï Output: 1500vdc • Other options on request
EMI	EN55011 Class A conducted
Immunity	EN 61000-4
Output Voltage	115VAC / 230VAC options Output neutral connected to chassis internally. Isolated / Floating output option.
Output Waveform	Sinusoidal
Harmonic Distortion	Less than 5% at 100% load.
Output Freq.	50Hz, 60Hz, 400Hz options
Load Crest Factor	Maximum 2.5% at 90% load
Output Power	4000VA
Regulation	Line / Load: Ñ6% from 10% to 100% load step.
Output Noise	High Frequency ripple is better than 500mVrms (20MHz BW)
Protection	Current limiting with short circuit protection Self re-setting thermostat for thermal protection
Output Over Voltage Protection	Output voltage is limited by internal supply voltage
Efficiency	Input voltage /model dependent typically 80% at 100% load
Operating Temp	0ÜC to +50ÜC at rated load. Other options on request
Cooling	On Board Fans
Shock & Vibration	Basic ruggedizing
Humidity	5-95% non-condensing
MTBF	>95,000 hrs at 45ÜC
LED Indicator	Optional
Connector	Input: Terminal block or threaded studs Output: Terminal bloc- other options on request
Dimensions	Package size varies from 6U x 17ò x 16ò to a 9U x 19ò x 16ò modular configuration, depending on input/output combination required.
Weight	20-25kg

Description

The **CSI5K** is rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 5000VA output power with pure sign wave output voltage.

It is a mature design with a track record in numerous applications. The DC/DC input stage boosts the input voltage to a higher DC voltage, which feeds the DC/AC inverter to generate the required AC output.
The use of high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. Cooling is via on board fans.

Options (may not be available on all combinations)

Alarms	Output Fail Alarm: voltage free relay contacts
Remote Inhibit	Remote ON / OFF
Ruggedized	Conformal coating and Ruggedization for use in harsh environments.
Slow Start	Slow start up option for powering fans
Connector	A variety of terminals / connectors available to suit special customer requirements

Model No Example:
CSI5K-4E-xxxx (48VDC / 230VAC 50Hz)

CSI	Power	Input Vdc	Output	6U / 9U
CSI	5K	**2** = 24V **3** = 36V **4** = 48V **7** = 72V **9** = 96V **108** = 108V **5** = 125V **6** = 250V	**A** = 115V/60Hz **E** = 230V/50Hz **M** = 115V/400Hz	Package

1. Standard input / Output combinations are illustrated.
2. Non standard combinations are available on request
3. Final Part no will be allocated at time of order to reflect customer specifications and options.

REV (21-06-12)