

# CSI4K SERIES

DC / AC Sine Wave Inverters: 4000 VA



3U7:  
3U(5.2")x.17"x.16"  
chassis.mount



3.x.3U3:  
6U.x19"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
- ◆ 4000VA 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	±15% of input, other options on request
Input Protection	Inrush current limiting Internal safety fuse, Reverse Polarity Protection
Isolation	For input > 60vdc : Input – Output: 2250vdc For input <60vdc : Input – 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: ±6% 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	0°C to +50°C 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 45°C
LED Indicator	Optional
Connector	Input: Terminal block or threaded studs Output: Terminal bloc- other options on request
Dimensions	Package size varies from 3U x 17" x 16" to a 6U x 19" x 16" modular configuration, depending on input/output combination required. Chassis - mount and 19" rack - mount available
Weight	15-25kg

## Description

The CSI4K is rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 4000VA output power with pure sine 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:  
CSI4 K-4E-xxxx ( 48VDC / 230VAC 50Hz )

CSI	Power	Input Vdc	Output	3U4 / 19in
CSI	4K	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.