

Pure Sine Wave | AC Inverter | Isolated

# XINV

XINV Model	
<b>700-48 V</b>	700 W ± 48 VDC input 115 V output
<b>1400-48 V</b>	1400 W ± 48 VDC input 115 V output

## DC - AC Inverter for 19" Rack Mounting

These heavy-duty XINV Series DC to AC inverters are housed in a 2U rack mountable enclosure. XINV PWM inverters feature a transformer-isolated sine wave output. They are designed for all applications requiring continuous pure sine wave power. They produce 115 volts AC from 48 volts DC.



Front view of unit

### Typical XINV applications

The XINV is ideal for cell sites, 48 VDC plant colocation and headend where stable power with low harmonic distortion is required.

### How the XINV works

Based on a 60 Hz transformer Topology to reduce component count, a digital control system with a 16-bit digital signal controller switches and monitors an H-bridge with MOSFETs sized for 150% of load current. It monitors the current on both sides of the transformer to prevent saturation and to provide protection against overload. The control system permits operation of loads containing induction motors.



Rear view of unit



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### Features and Benefits

- Pure sine wave output means increased reliability of connected equipment.
- Precise output current limiting permits start of induction motors and other difficult loads.
- Rack and wall mounting options provide for flexible mounting.
- Isolation between DC and AC circuits provides for safety and interference-free operation.

*Due to its high efficiency, the XINV runs quiet and cool.*

*Eight 5-15 R outlets permit easy connection of multiple loads.*

*Front panel LED array permits visual status monitoring.*

*Alarms available via N/C or N/O contacts permit remote monitoring.*

*The XINV is easy to repair because internal circuit board assemblies are connectorized.*

SPECIFICATION	XINV-700-48 VDC-115 V	XINV-1400-48 VDC-115 V
<b>INPUT</b>		
Nominal voltage	48 VDC	
Operating voltage	41 - 60 VDC	
Current @ 41 VDC @ full load	18.6 A	37.1 A
Circuit breaker	30 A	40 A
<b>OUTPUT</b>		
Output power	700 W	1400 W
Voltage	115 V $\pm$ 3% @ 60 Hz	
Overload	150 % for 1 second	
Crest factor	3 : 1	
Waveform and THD	Sine wave, < 5% THD with linear load	
Load compatibility	Most loads including induction motors	
Power factor	0.8 lead to 0.7 lag	
Power efficiency	92% at full load	
Power on/off switch	On / off rocker style power switch	
<b>INDICATORS AND ALARM</b>		
Status indicators	5 LED load level indicators: 0 to 100% of rated load; 5 LED battery level indicators for charge level from 0 to 100% of charge; 3 LED indicators for: inverter on / off, battery fault and overload.	
DB-9 port	1: Pins 6/7 2: Pins 8/9 1: Inverter on/off 2: Battery >44 V/<44 V	
<b>PHYSICAL</b>		
Dimensions	16" (406 mm) wide x 3.5" (89 mm) high x 15" (381 mm) deep	
Input / output connections	Three screw terminals	Eight 5-15R outlets
Weights lbs / kg	26 / 11.8	38 / 17.3
Mounting brackets	MK5000A for 19" front rack mount, MK5000C for wall mount.	
<b>ENVIRONMENTAL</b>		
Operating temperature	14° to +104° F (-10° to +40° C) ambient air temperature	
Cooling method	Thermostat controlled exhaust fan	
Relative humidity	95% non-condensing	
<b>SAFETY</b>		
Standards	Designed to conform to UL 60950-1	
<b>WARRANTY</b>		
Warranty	Two-year limited warranty, parts and labor.	

TSi Power's ongoing product improvement process makes specifications subject to change. Other companies product names herein are for identification purposes only and may be trademarks of their respective companies.



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## XINV-700/1400-48 V system architecture

