

## **Voltage/Frequency Converter**

## FA00219

All IntelliPower systems utilize circuit boards, chassis, components and construction techniques that are specifically designed for extreme environments rugged, challenging thermal and/or shock and vibration applications. Our digital, double conversion on-line UPS, power conditioner and frequency/voltage converter solutions utilize high-efficiency power switching and galvanic isolation, which provides ideal electrical output performance. Our standard build practices have enabled certified compliance to a number of performance standards for select models and product families. IntelliPower systems have proven performance in a wide range of key rugged military programs within the Army, Air Force, Navy and Marines. IntelliPower products are designed and manufactured in the USA, which means shorter lead times from design to shipping, as well as a level of personalized service unequaled in the marketplace.





Voltage/Frequency Converter			
Part #:	FA00219	102121	
Model #:	IHTC3000RM-M-2.4kw-270VDC-Isol-FC60-115v-2U24		
Unit Description:  3000VA, 2400W, 270VDC Input and 115VAC, 60Hz Output, Isolated Rugged Extreme High Temperature Rack Mounted Frequency Converter in an aluminum enclosure.			

INPUT RATINGS	
Input AC Voltage (AC Voltage, tolerance):	N/A
Input DC Voltage (DC Voltage, tolerance):	180 to 270 VDC
Input Frequency (Hz, tolerance):	47.5 to 63 Hz
Input Max Current with Inverter Output (Amps):	20 Amps
PFC Feature:	Yes
Breaker & Switch Input (type, location):	DC Toggle Switch, Front Panel, 20A 300 VDC
OUTPUT RATINGS	
Power Rating (VA, Watts):	3000 VA, 2400 W
Output AC Voltage (AC Voltage, tolerance):	115 VAC, (±2%)
Output DC Voltage (DC Voltage, tolerance):	N/A
Output Frequency (Hz, follower/changer):	60 Hz, (+/-3 Hz), changer

(continued)









Isolation (galvanic isolation/non-isolated):	N/A	
Neutral Bonded to Ground (bonded/un-bonded/switch):	Bonded	
Breaker & Switch AC Output (type, location):	DC Toggle Switch, Front Panel, 20A 300 VDC	
Overload – Shutdown or Bypass (shutdown/bypass, %):	Shutdown at 105 to 110%	
MECHANICAL		
Enclosure Type & Size (type/rack unit, dimensions):	Rack Mountable, 2U, 3.5"H x 17" W x 24" D	
Enclosure Material & Finish (aluminum/steel, finish):	Aluminum, powder coated charcoal gray	
Enclosure Airflow (front to rear/front to side/other):	Front-to-rear	
Enclosure – Special (IP65/Zone 1):	N/A	
Weight:	TBD	
Fan Filters (EMI/dust/combination/grill):	EMI	
Conformal Coated PCBAs (yes/no):	Yes	
INTERFACE COMMUNICATIONS		
Communications (\$NMP2/\$NMP3/R\$232, type):	SNMP Ethernet Jack, Front Panel, RS232 factory use only	
Discrete (Relay/Opto, Description):	N/A	
ADDITIONAL ELECTRICAL FEATURES AND CONTROLS/INTERFACE		
Auto Start (manual start/auto start):	Auto Start	
Cold Start Switch (yes/no):	No	
CONNECTORS		
Connector(s) AC Input (type, location):	N/A	
Connector(s) DC Input (type, location):	1 each circular mil MS3452L16-10P, Front Panel	
Connector(s) AC Output 1 (type, location):	3 each circular mil MS3452L16-10S, Front Panel	
Connector(s) DC Output 1 (type, location):	N/A	
Connector(s) EBP/Charger (type, location):	N/A	
BATTERIES		
Battery Type (rating, PbAcid/Pure PbAcid/Lithium Iron):	No	
Battery Total Quantity:	No	
Battery String Voltage:	No	
Battery String (number of strings, quantity per string)	No	
Battery Minimum Run Time (approx. run time at #watts):	No	
Battery Mounting (hot swap/fixed):	No	
EMI and ENVIRONMENTAL		
Application (shipboard/airborne/ground/all):	Ground	
Operating Temperature:	-10°C to +50°C	
Humidity:	0-95%, non-condensing	

 ${\bf Specifications\ subject\ to\ change\ without\ notice.}$