

PI-500 Power Inverter

COBHAM

Data Sheet

The most important thing we build is trust

Designed Specifically for Aviation

The PI-500 Static Power Inverter is specifically designed and certified for aviation applications. Utilizing the latest circuitry, this DC to AC power supply is rated at a continuous 500W.

Converting 28VDC aircraft power inputs to 60Hz 115VAC output power, the PI-500 meets all 115VAC requirements for on board turbo-props, business jets and helicopters.

Reliable and Efficient

The PI-500 is a highly reliable inverter with exceptional protection and quick recovery times to meet the power demands of any device.

The unit can power portable electronics (MP3's, DVD, video games, etc.), laptop computers, coffee makers, audio and video equipment, medical equipment, and much more in airborne and ground applications.

Regulated Circuit Control

Control circuits ensure the output power is well regulated for voltage, current and frequency.

in addition, special circuits monitor temperature and input voltage to ensure the PI-500 provides output power under a wide range of environmental conditions.

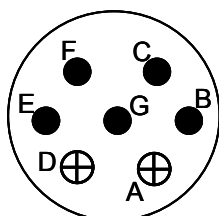


Technical Specifications:

Connection

Mating Connector: Amphenol
97-3106A18-9S
or Equivalent

Pin	Signal	Wire Size
A	+28VDC In	#12 AWG
B	115VAC, Hot	#16 AWG
C	AC Return	#16 AWG
D	DC Ground (Chassis)	#12 AWG
E	Remote On/Off	#20 AWG
F	Not used	
G	Remote On/Off Return	#20 AWG



Connector Pinout

Environmental

Humidity: 95% for 240 hours
Altitude: 55,000 feet
Operating: -55°C to +71°C
Storage: -55°C to +85°C
RF Emissions: RTCA DO-160F
Shock: Operational: 6G
Crash: 20G

Physical

Dimensions: 9.5"L x 6.34"W x 3.38"H
Weight: 4.9 lbs

Reliability

Fixed Wing MTBF: 6100 hrs (Airborne Uninhabited Cargo)
Fixed Wing MTBF: 9900 hrs (Airborne Inhabited Cargo)
Helicopter MTBF: 4100 hrs

Functional

Voltage Requirements: +28VDC Nominal (20VDC to +36.5VDC)
Voltage Output: 115VAC +/- 2% at 60Hz +/- Single Phase

Power Output: Operating: 500W nominal, 530W max
Power Output Ratings: 110% for 2 hours, 150% for 5 min.
Efficiency: 85% at 28VDC with 530W Output Power
Short Circuit: 11 Amp with <1msec Response Time
Total Harmonic Distortion: <5%

Certification:

TSO-C73
RTCA DO-160F

For further information please contact:

Cobham Avionics

6400 Wilkinson Drive
Prescott, AZ USA 86301
Tel: (928) 708-1550
Fax: (928) 541-7627
Email: sales.prescott@cobham.com