Introducing the CONNECT All
ATC Power Systems, Inc. The Ultimate Military Power Adapter

CONNECT

PowerBuss AC-250-28

ISOLATED 28Vout 250 Watt AC to DC MILITARY Bus Converter

Highlights of the PowerBuss AC-250 Series:

- 250 Watts of Isolated **5V***, 12V, or 28V out Low Noise, Tightly Regulated Power. **(*5V rated at 200W)**
- Complete solution with no NRE (non-recurring engineering).
- Complete Power System with no extra parts required.
- Power Factor Corrected (PFC) Input for MIL-STD-1399, MIL-STD-461 (CE101) compliance.
- Active Inrush Current Limit.
- Multiple Cooling Options:
  1) Conduction through Baseplate
  2) Convection through optional Finned Heat-sink
  3) Convection/Fan Plenum
- Additional Option: MIL-STD-461 EMI Filter in Extended case version (consult factory)
- Droop & Precision Current Share Options

Features

High Efficiency: Up to 87%
Conduction Cooled: -40ºC to 100ºC
Inrush Current Limited
Overload/Short Circuit Protection
Overvoltage Protection
Parallel Capable
Over Temperature Protection
AC Power Fail, BIT, & Converter Enable

Environmental

Temperature	-40ºC to +100ºC *
Storage temperature	-55ºC to +125ºC
Weight	TBD

* Baseplate Temperature

Standards

MIL-STD- 704
MIL-STD-1399
MIL-STD-461

Electrical Specifications

Input

Voltage	85-265 VAC
Input Voltage Transient (Line-Neut)	180Vac MIL-STD-704F
Input Frequency Range	47 to 440 Hz
Efficiency	85% (typ)
Power Factor	0.99 (typ)

Output

Voltage	28 VDC ± 1%
Output Power	250 Watts
Output Voltage Trim Range	+/- 10%
Over Voltage	115% (typ)
Over Current	120% (typ)

Isolation

Input/Output	1000 VDC
Output/Chassis	200 VDC
Input/Chassis	1000 VDC
Isolation Resistance	10 MegOhm Min

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Specification Table

	Min	Typ	Max	Units
INPUT				
Input Voltage Range	85	115/220	265	Vac
Input Frequency Range	47	N/A	440	Hz.
Power Factor at Full Load Out	0.98	0.99	1.0	N/A
Efficiency @ 115 Vin	80.0	85.0	N/A	%
Efficiency @ 220 Vac	83.0	87.5	N/A	%
Isolation: Input to Chassis	1000	N/A	N/A	Vdc
Output				
Voltage Setpoint – No Load	27.72	28.00	28.28	VDC
Load Regulation	N/A	0.5	1.0	%
Line Regulation	N/A	0.2	0.5	%
Ripple (20 Mhz Bandwidth)	N/A	50	280	millivolts Pk-PK
Transient Response: % Voltage Overshoot/Undershoot for 50% load Changes	0	3	5	%
Transient Response: Settling time for output voltage to settle within 1% with 50% load changes	N/A	100	250	usecs
Over-Current Protection	110	120	150	% Iout Rated
Over-Voltage Protection	110	N/A	140	% Vout Rated
Isolation: Output to Chassis	200	N/A	N/A	Vdc
Isolation: Input to Output	1000	N/A	N/A	Vdc
Signals				
Sense Voltage (Total of output and return)	N/A	N/A	0.5	Volts
On/Off Control	(Option) Consult Factory			
Output Power Good (On/ Off)	5 / 0	N/A	11 / 0.8	Volts
AC Power OK (On-Open Collector/ Off-Closed Collector – 5 ma)	N/A	N/A	10 / 0.1	Volts
Downstream Converter Enable (On-Open Collector/ Off-Closed Collector – 5 ma)	N/A	N/A	10 / 0.1	Volts
Sense Voltage (Total of output and return)	N/A	N/A	0.5	Volts

MODEL NUMBER

PBAC - 250 - 28.0 - (cooling options see below)

PowerBuss **Output Watts** **Output Voltage**

Options:

Add suffix F = Finned Heat-sink (consult factory for operating temp.)

Add suffix FP = Finned Heat-sink with Fan Plenum (consult factory for operating temp.)

Add suffix HU = Additional Hold-Up Time Capacitor Option (Consult Factory)

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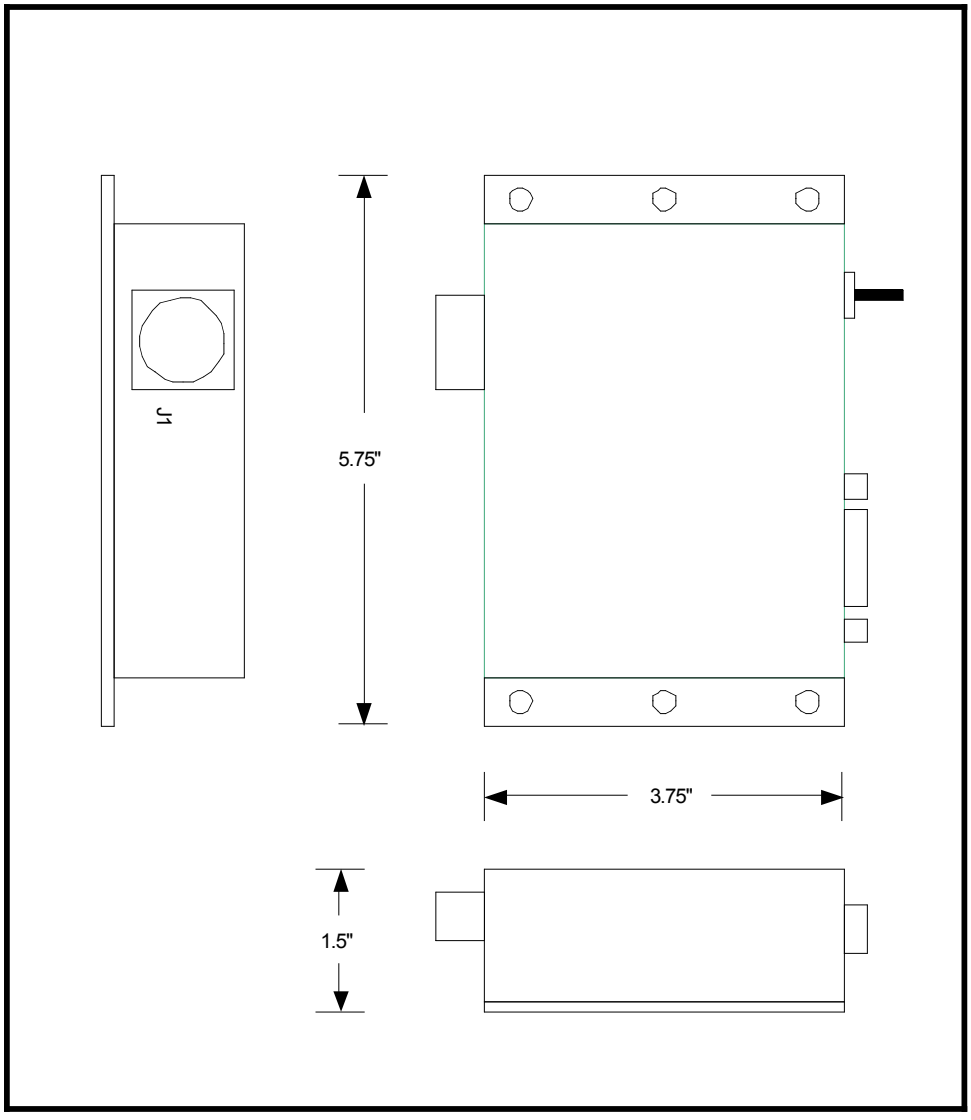

AC/DC POWER BUSS 250W