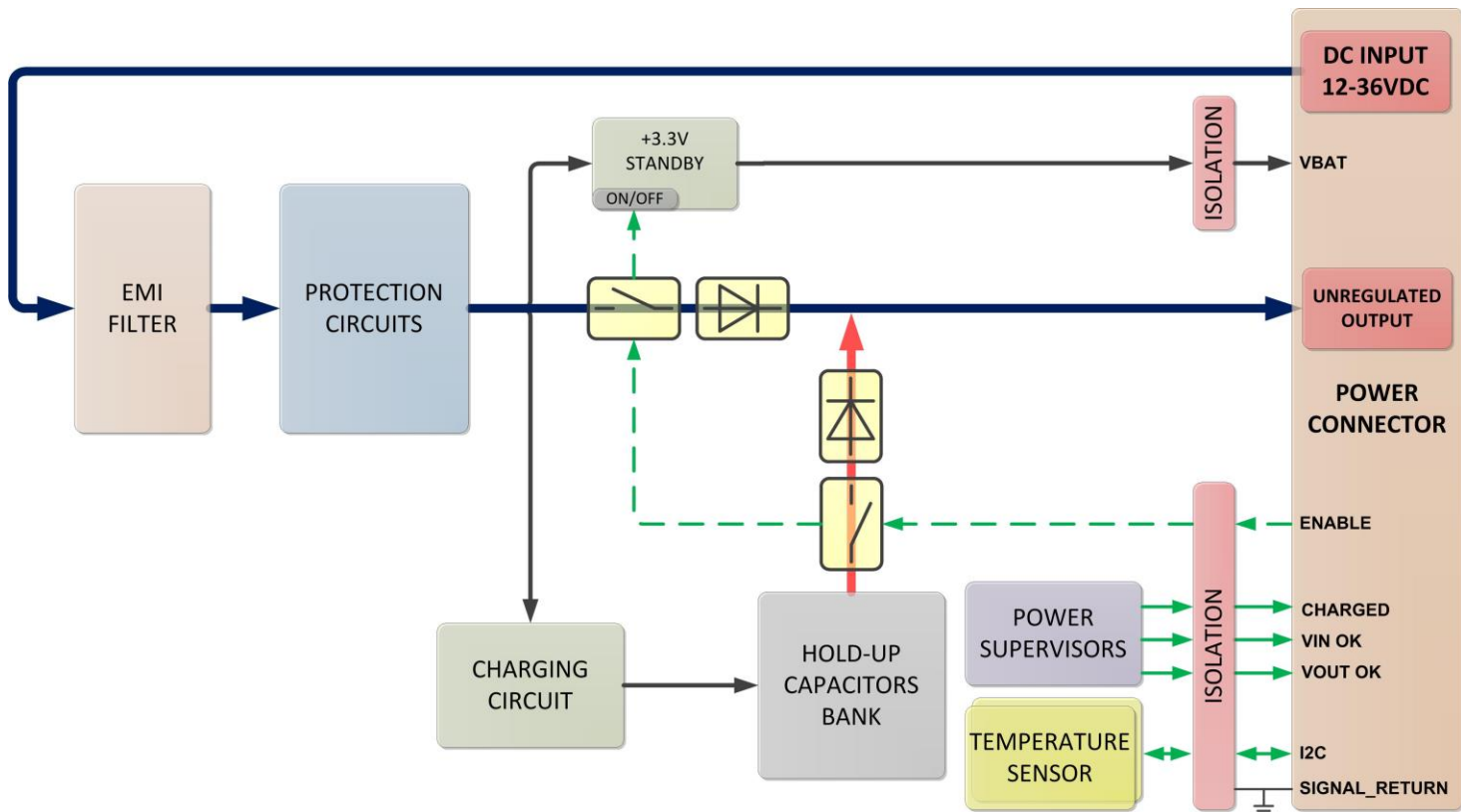


Key Features:

- 12-36V Continuous Input Voltage
- 250 msec hold up time at 25deg C at 500W
- 80 msec hold up time at -40deg C at 500W
- NO Isolation Between Input /Output
- Active Input EMI Filtering
- Transient look ahead/cut-off technology
- 500W Maximum Power
- 96% Typical Efficiency
- -40°C to 85°C Operating Temperature
- VITA 62 3U Form Factor
- Patent pending **FourRail** thermal interface
- Can be used for military or aviation purposes

VITA 62 3U HoldUp frontend

This 3U unit works with **12 to 36 VDC (28VDC nominal) input** voltage with SUPERCAP holdup feature. The module is **conduction cooled**, protects downstream DC-DC converters: transients, low voltage conditions and power interruptions, and can provide up to **500 watts**. It is suitable for use in **mission critical rugged applications**.



Overview	
P/N	PCI_800.408
VITA Compliant	VITA62
Size	3U
Temp. Range	-40 +85 C
Input (AC or DC)	DC
Input Range (VDC)	12-36
Active EMI Filtering	YES
Power (W, max.)	500
Efficiency (% , typ.)	96
# of outputs	1

FEATURES	
Over-current Protection	YES
Over-voltage Protection	YES
Over-temperature Protection	YES
Current Sharing	NO
Remote Sense	NO
Standard Control	YES, VITA62
Extended Control	NO

COMPLIANCE	
VITA62	YES
MIL-STD-704 (B-F)	YES
MIL-STD-461	YES
MIL-STD-810G	YES
* ESD Protection	YES
* Shock	YES
* Vibration	YES
* Rapid Decompression	YES
* Corrosion Resistance	YES
* Fungus Resistance	YES
* Altitude	YES
* Humidity	YES

INPUT CHARACTERISTICS					
Parameter	Min.	Typ.	Max.	Units	Notes
Absolute Maximum Ratings					
Input Voltage					
- Non-Operating	-60		60	V	Continuous
- Operating	-40		40	V	Continuous- Reverse input Protection
- Operating Transient Protection			50	V	100ms transient, square wave
Operating Temperature	-40		85	C	
Storage Temperature	-55		105	C	
Electrical Characteristics					
Input Voltage					
- Continuous	12	28	36	V	
- Transient	10		50	V	50V Transient for 100 ms
Under-Voltage Lockout					
- Turn-On Input Voltage Threshold		12		V	

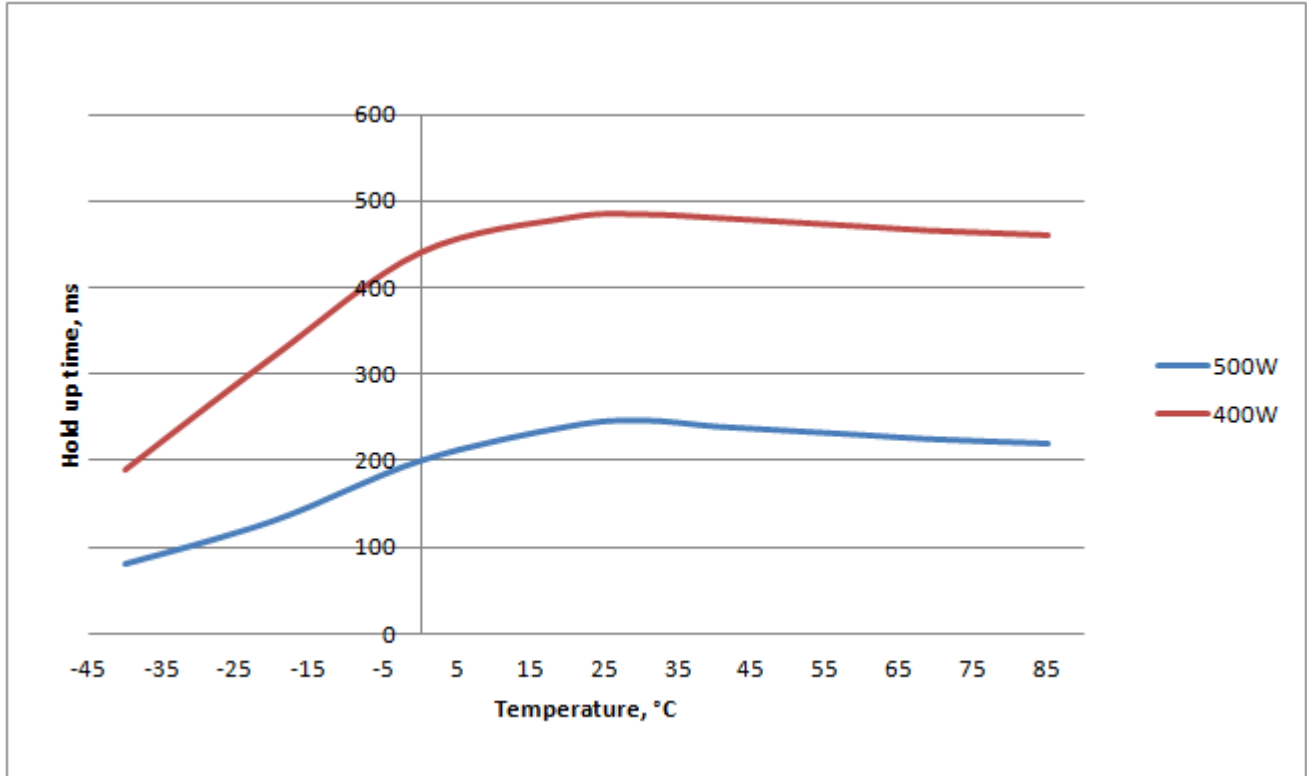
INPUT VOLTAGE SPIKES SUPPRESSION (Vin Centered)	
+/- 250V, 100 us	MIL-STD-1275D
+/- 200V, 10 us	MIL-STD-461C (CS06); DEF-STAN 61-5
+/- 400V, 5 us	MIL-STD-461C (CS06)
+/- 600V, 10 us	RTCA/DO-160E

OUTPUT CHARACTERISTICS					
Parameter	Min.	Typ.	Max.	Units	Notes
Output Power			500	W	
Holdup Time	180			ms	400W of primary power (-40° to +65°C)
	80			ms	500W of primary power (-40° to +65°C)
Holdup caps charge time			8	s	

MODULE QUALIFICATION	
Test Name	Method
Random Vibration	MIL-STD-810, 514.6 - Procedure I, Class V3
Shock	MIL-STD-810, 516.6 - Procedure I, VI, Class OS2
Altitude	MIL-STD-810, 500.5 - Procedure I, II, III
Fungus Resistance	MIL-STD-810, 508.6
Corrosion Resistance	ASTM G85, Annex A4
Humidity	MIL-STD-810, 507.5 - Procedure II
High Temperature	MIL-STD-810, 501.5 - Procedure I, II
Low Temperature	MIL-STD-810, 502.5 - Procedure I, II
Temperature Cycling	MIL-STD-202, 107 - Class C4
ESD	EN61000-4-2, Level 4; 15kV Air Discharge

Pinout: As per VITA 62 specification

Mechanical Dimensions: As per VITA 62 specification (1" pitch)



ORDERING INFORMATION:

PCI_800.408

3U VITA 62 28V/12VDC 500W Isolated Rugged Hold Up

PCI_800.408_C

3U VITA 62 28V/12VDC 500W Isolated Rugged Hold Up, conformal coated

Release_March_09_2021