Datasheet

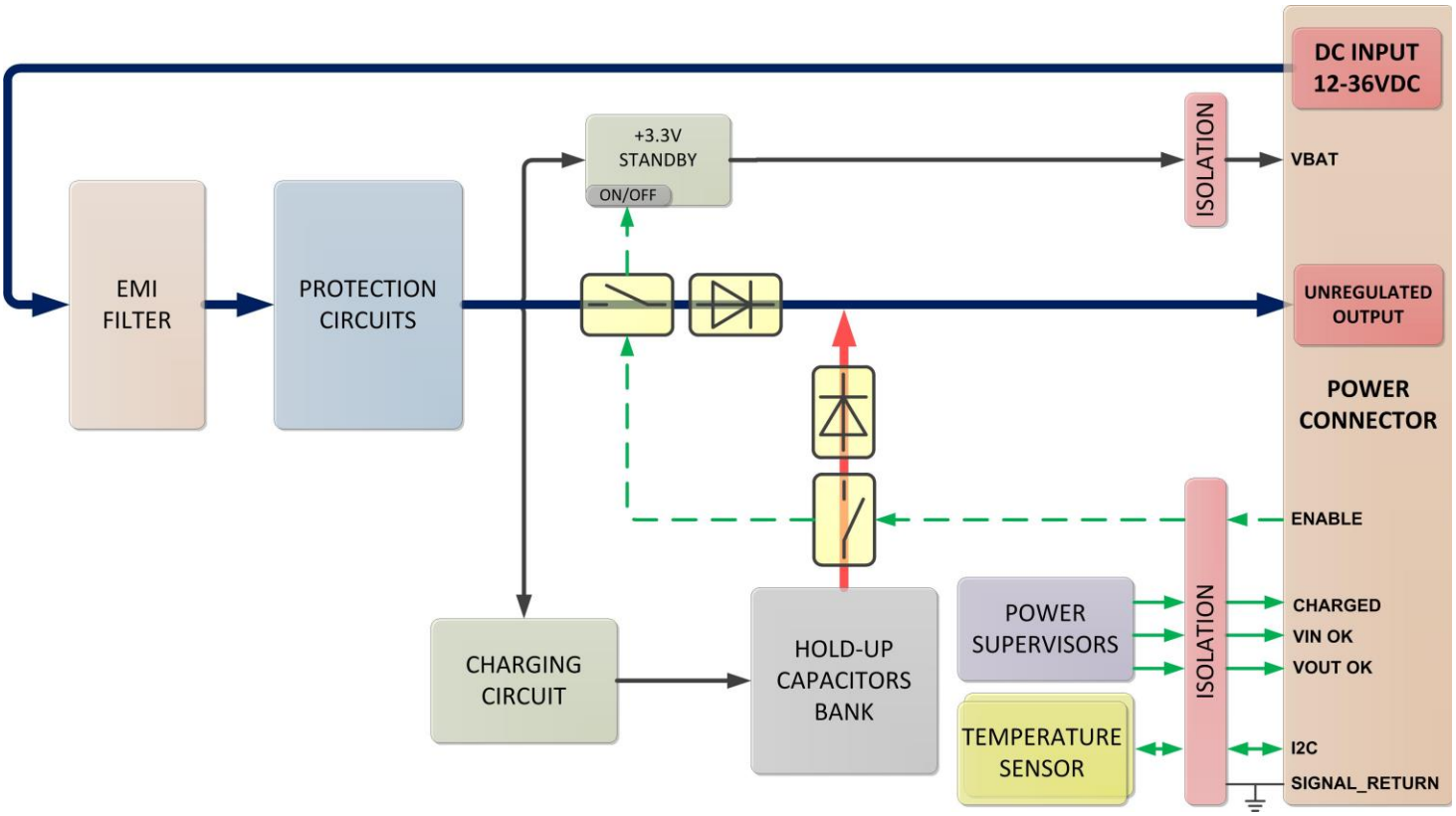
VITA 62 POWER SUPPLY LINE HoldUp Module PCI_800.410

Key Features:

- 12-36V Continuous Input Voltage
- 700 msec hold up time at 25deg C at 500W
- 200 msec hold up time at -40deg C at 500W
- NO Isolation Between Input /Output
- Active Input EMI Filtering
- Transient look ahead/cut-off technology
- 1000W 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 6U HoldUp frontend

This 6U 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 **1000 watts**. It is suitable for use in **mission critical rugged applications**.



Overview	
P/N	**PCI_800.410**
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.)	**1000**
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**

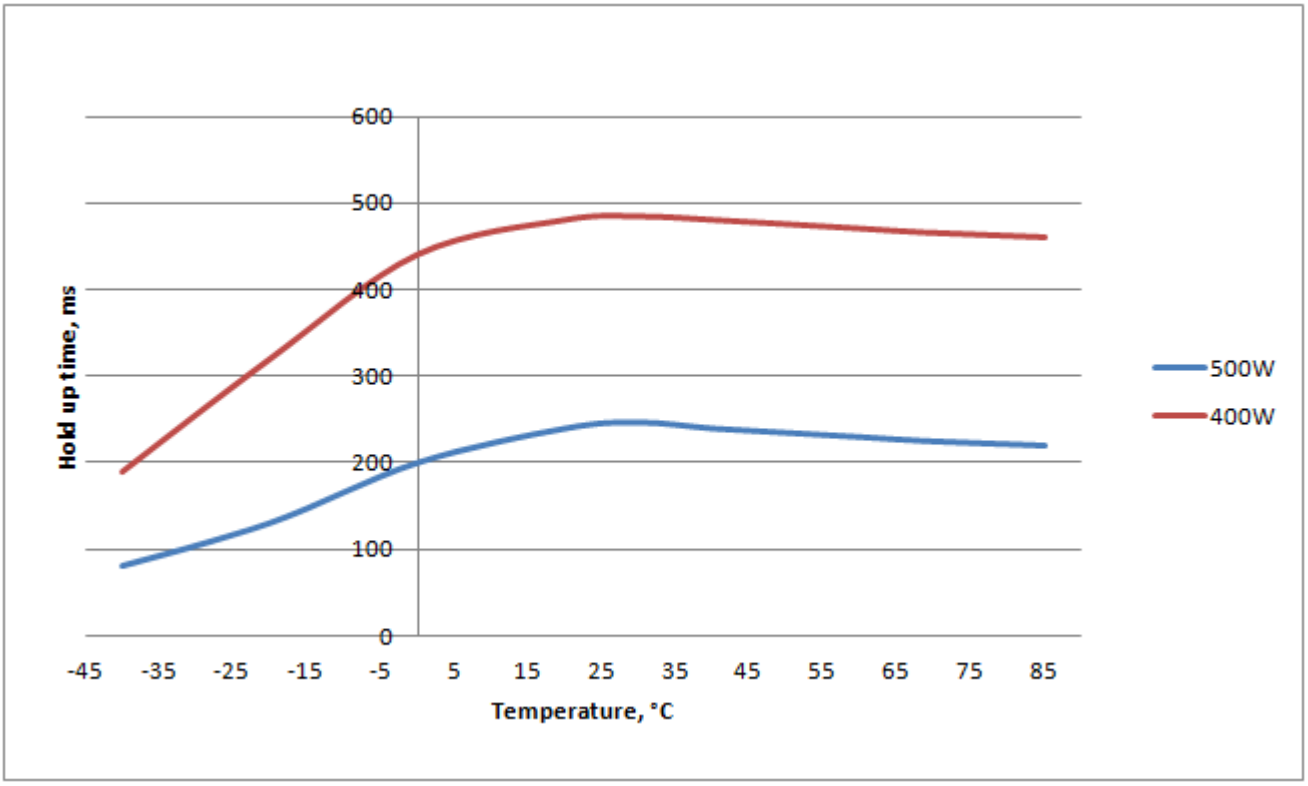
INPUT CHARACTERISTICS					
Parameter	*Min.*	*Typ.*	*Max.*	*Units*	*Notes*
Absolute Maximum Ratings					
Input Voltage					
- *Non-Operating*	**-60**		**60**	V	Continuous
- *Operating*	**-40**		**40**	V	Continuous- Reverse input Protection
- *Operating Transient Protection*			**50**	V	100ms transient, 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			**1000**	W	
Holdup Time	**XXX**			ms	400W of primary power (-40° to +65°C)
	XXX			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_800.410	3U VITA 62 28V/12VDC 500W Isolated Rugged Hold Up
PCI_800.410_C	3U VITA 62 28V/12VDC 500W Isolated Rugged Hold Up, conformal coated

Release_March_14_2021