VITA 62 Compliant Holdup Module (Compatible with Dawn’s 3U PSC-6234 Power Supply)

Features
- Designed for 28VDC power applications.
- 50 mSec hold-up time complies with MIL-STD 704A 400W min
- Soft start charge circuit limits in rush current on system power up
- The holdup module monitors +28VDC directly to ensure any power dropout is correctly addressed.
- VITA48.2 Compliant Inject / Eject levers for easy installation

Overview
Dawn’s HLD-6724 Holdup Module works in conjunction with our PSC-6234 3U power supplies to overcome ‘gaps’ (sometimes known as ‘glitches’) in the normal input power source of up to 400W (800W would require 2 modules) for 50mSec, as specified by MIL-STD 704F. One such example of a ‘gap’ would be the cutover of aircraft instrumentation power from a ground based APU to the aircraft’s own generators.

A soft-start charge circuit limits in-rush current at system power up; an LED indicator is used to indicate charge status.

The holdup module monitors +28VDC directly to ensure any power dropout is correctly addressed.

(Note this device will not work with AC input power supplies but we do have an AC version it is the HLD6726)

Specifications

Mechanical
Form factor: VITA 48.2 (3u) 1 inch pitch.
VITA 47 Class V3 Random Vibration per MIL-STD-810, Method 514, Procedure I
VITA 47 Shock per MIL-STD-810, Method 516, Procedure I
VITA 47 Fungus Resistance: Conformal coating per IPC-CC-830 Class B
VITA 47 Humidity: 95% relative humidity
Card Guide style and Mounting: VITA 48.2 Wedgelocks
Connector: 6450849-7
Dimensions: Standard 1” 3U conduction cooled form factor
Weight: 1.5 Lbs.
Inject & Eject: VITA 48.2 compliant inject and eject features
Covers: ESD protected inputs and robust covers on both sides of the board, accommodates military two-level maintenance

Electrical
This holdup module is keyed for compatibility with an DC input VITA 62 slot and is intended to be used in conjunction with the Dawn PSC-6234 DC power supplies.

MIL-STD-704A: 50mSec Hold up provided when used with PSC-6234

Environmental
VITA 47 Non-operating Temperature (C2 or C3/C4): -55oC to +100oC
VITA 47 CC4 Operating Temperature: -40C to +85C (at the Wedgelock edge)
VITA 47 C4 Temperature Cycling per MIL-STD-202, Method 107 as modified in VITA 47
(Designed to meet VITA 47)
VITA 62 Compliant Holdup Module (Compatible with Dawn’s 3U PSC-6236 Power Supply)

Features

- Designed for 85VAC-265VAC power applications.
- 50mSec hold-up time complies with MIL-STD 704A 400W min
- Soft start charge circuit limits in rush current on system power up
- The holdup module monitors AC input directly to ensure any power dropout is correctly addressed.
- VITA48.2 Compliant Inject / Eject levers for easy installation

Overview

Dawn’s HLD-6726 Holdup Module works in conjunction with our PSC-6236 3U power supplies to overcome ‘gaps’ (sometimes known as ‘glitches’) in the normal input power source of up to 400W (800W would require 2 modules) for 50mSec, as specified by MIL-STD 704F. One such example of a ‘gap’ would be the cutover of aircraft instrumentation power from a ground based APU to the aircraft’s own generators.

A soft-start charge circuit limits in-rush current at system power up; an LED indicator is used to indicate charge status.

The holdup module monitors AC input directly to ensure any power dropout is correctly addressed.

(Note this device will not work with DC input power supplies but we do have a DC version it is the HLD-6724)

Specifications

Mechanical

Form factor: VITA 48.2 (3u) 1 inch pitch.
VITA 47 Class V3 Random Vibration per MIL-STD-810, Method 514, Procedure I
VITA 47 Shock per MIL-STD-810, Method 516, Procedure I
VITA 47 Fungus Resistance: Conformal coating per IPC-CC-830 Class B
VITA 47 Humidity: 95% relative humidity
Card Guide style and Mounting: VITA 48.2 Wedgelocks
Connector: 6450849-7
Dimensions: Standard 1” 3U conduction cooled form factor
Weight: 1.5 Lbs.
Inject & Eject: VITA 48.2 compliant inject and eject features
Covers: ESD protected inputs and robust covers on both sides of the board, accommodates military two-level maintenance

Electrical

This holdup module is keyed for compatibility with an AC input VITA 62 slot and is intended to be used in conjunction with the Dawn PSC-6236 DC power supplies.

MIL-STD-704A: 50mSec Hold up provided when used with PSC-6236

Environmental

VITA 47 Non-operating Temperature (C2 or C3/C4): -55oC to +100oC
VITA 47 CC4 Operating Temperature: -40C to +85C (at the Wedgelock edge)
VITA 47 C4 Temperature Cycling per MIL-STD-202, Method 107 as modified in VITA 47
(Designed to meet VITA 47)
Ordering Information

P/N 06-1016726-HLD-6726

(Holdup compatible Power Supply: 400W = P/N 06-1016236-6313)

Other Products from Dawn:

Card cages and enclosures for commercial, aerospace and military applications

Enclosure 3D solid model design, manufacturing and production from commercial to full-rugged conduction cooled military

Custom and Standard product PCB design, layout, production

**RuSH™** Rugged system health monitor,

Backplanes for cPCI 2.1, cPCI 2.16, VME, VME64x, VXI, VXS, VPX, CUSTOM, Build to Print Powered Enclosures for Development, Prototype, Production, Deployment Prototype Boards, Extender Boards, Form Factor Extenders, Front Panels, Filler Panels, Custom Panels, Build to Print Panels, Build to print machining, fabrication and assembly
Ordering Information

P/N 06-1016724= HLD-6724

(Holdup compatible Power Supply: 400W = P/N 06-1016234-2313)

HLD-6724

HOLD UP MODULE CONNECTION DIAGRAM

The Listed signals shown must be connected between the Hold up module (06-1016724) and the DC Power supply units.

Use the same pins on both modules for connection.

Note: The following pins must have a 5 AMP capable Electrical connection between the Hold up module and the power supply unit.
Pins B1,D1,C1, P1, P2

Warning: The Dawn 3u VITA62 Hold Up Module (06-1016724) is designed for use with the PSC-6234 and PSC-6238 Dawn DC power supply modules.

It is not compatible with VITA62 power supplies from other vendors due to proprietary circuit implementation.

Note: Customers must request the specific power supply part number with the Hold Up (Energy storage transfer) feature when ordering. The Dawn PSC-6234 (06-1016234-2313) or PSC-6238 (06-1016238-2313) power supply.

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