PROCESSOR SWITCH MODULE

PROVEN, MILITARY-GRADE SOLUTION AND INDEPENDENT

Powering the most demanding mission applications

Today's missions require fast and reliable processing power. Collins Aerospace processor switch module offers a single host for demanding mission applications such as moving maps, Ethernet switching and power control. Collins processor switch modules have been proven effective in U.S. military and Coast Guard helicopters.

Our processor switch module contains three major functions: video graphics, Ethernet switch and power converter. Military forces, as well as civil agencies, can depend on Collins RT-2036(C).

- Video graphics function: Processor/ node assembly of a cPCI 3U form factor and video graphics assembly with a double buffered SMPTE-292M digital video output
- Ethernet switch function: An Ethernet switch card designed to the PICMG 2.16 packet switching backplane specification. The slot supports a 10/100 Base-T 23 port switch.
- Power converter function: A functional block which rectifies the 115 VAC input power to a regulated 24 VDC, 400 watt power output



KEY FEATURES & BENEFITS

- Off-the-shelf, rugged military solution
- High-integrity Ethernet switching
- MIL-STD-1472 human factor compliant
- POSIX[™]-compliant operating system
- Power PC system processor (7448 processor)
- Dual SMPTE 292M: Supports 1080i (59.94Hz)



ELECTRICAL INTERFACES

- Commercial 8 ports: 10/100 Base-T
- High integrity 15 ports: 10/100 Base-T
- Processor 2 ports: 10/100 Base-T
- SMPTE 292M: 2x 1080i outputs
- Power supply output 24 V, 400 W
- RS-232: 1 output (debug)
- Discrete I/O: 14 input, 0 output (strapping not general purpose)
- Input power: 115 VAC, 400Hz 3 Phase, 350 W (maximum)
- Operation through 100 msec power transient

RELIABILITY

- Predicted MTBF of 6,200 hours
- 20-minute MTTR
- Built-in test (BIT)
 95% probability of fault detection

PHYSICAL DESCRIPTION

Model	PSM-8600A
Size	7.80 H x 4.280 W x 12.620 D in. (19.8 x 0.8 x 32 cm)
Size with connector	7.80 H x 4.280 W x 14.620 D in. (D 37.1 cm)
Weight	17.2 lbs (7.2 Kg) maximum
Cooling	Forced air cooling MT8600B
ENVIRONMENTAL CAPABILITIES	
Temperature	-40° C to 55° C (-104° F to 131° F) operating, 71° C (106° F operation)
Vibration	MIL-STD-810F, Method 514.5 (Helicopter)
Shock	MIL-STD-810F, Method 516.5, 20 g/11 ms
Sand/dust	MIL-STD-810F, Method 510.4
Fungus	MIL-STD-810F, Method 508.5
Salt atmosphere	MIL-STD-810F, Method 509.4
Explosion proof	MIL-STD-810F, Method 511.4
Rain	MIL-STD-810F, Method 506.4
Humidity	MIL-STD-810F, Method 507.4
Temperature shock	MIL-STD-810F, Method 503.4
EMI	MIL-STD-461E (ADS-37A-PRF)
Lightning	DO-160D

Specifications subject to change without notice.



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