



VPM-8600A VIDEO PROCESSING MODULE

HIGHLY RELIABLE

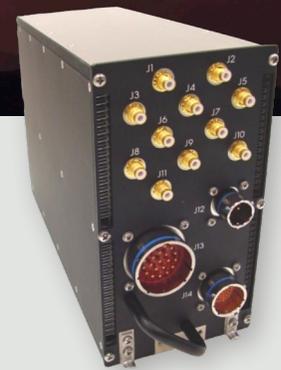
Supporting demanding mission applications

Today's environment requires reliable video processing that can host demanding applications in a single box. Collins Aerospace VPM-8600A video processing module is an off-the-shelf, proven military-grade solution featuring a video switch processor-based unit with 10 digital input channels and five digital video output channels.

Our VPM-8600A has a dual redundant MIL-STD-1553B terminal and 10/100 Base-T Ethernet interfaces with an I/O

and growth processor. VPM-8600A uses ThreadX™ OS runtime and features a compact PCI backplane which complements the 3U and 6U form-factor type circuit cards.

Using less than 120 W of 24 VDC input power, the highly reliable unit has an MTBF prediction of greater than 8,145 hours operating in natural convection cooling and mount-fan packaging.



KEY FEATURES & BENEFITS

- Ethernet and video for demanding applications
- Proven military grade solution
- MTBF prediction >8,145 hours
- Video switch processor



OTHER FEATURES

- Growth for PowerPC processor/Ethernet node slot* (750 or 7448 processor)
- Growth for PowerPC I/O processor slot*
- Growth for video graphics slot*
- Dual redundant MIL-STD-1553B terminal
- ThreadX runtime
- POSIX™-compliant operating system exists in the growth for Power PC processor
- Mix of 3U and 6U form-factor circuit cards
- Dual 10/100 Base-T Ethernet Interfaces with growth processor and I/O processor installed
- 5 Component/composite analog video inputs and 6 SMPTE-292M 1080i

*Not populated

ELECTRICAL INTERFACES

- Dual IEEE 802.3 Ethernet growth (10/100 Base-T) ports
- MIL-STD-1553B: dual redundant
- Input power: 24 VDC, 85 W (maximum)
- Digital Video (SMPTE-292M) : 5x 1080i inputs, 6x 1080i outputs
- Graphics card: 2 SMPTE 1080i outputs with cross-port connection option
- Analog Component Video: 5 inputs

RELIABILITY

- Predicted MTBF >8,145 hours
- 14-minute MTTR
- Built-in test (BIT)
 - 95% probability of fault detection
 - Power-on, continuous and commanded BIT

PHYSICAL DESCRIPTION

Model	VPM-8600A
Size	7.80 H x 4.30 W x 12.620 D in. (19.8 x 10.8 x 32 cm)
Size with connector	7.80 H x 4.30 W x 14.740 D in. (D 37.1 cm)
Weight	13.8 lbs (6.26 kg) maximum
Cooling	Natural convection cooling and mount with fan

ENVIRONMENTAL CAPABILITIES

Temperature	-40° C to 55° C (131° F) operating, 71° C (159.8° F) intermittent operation
Vibration	MIL-STD-810F, Method 514.5
Shock	MIL-STD-810F, Method 516.5
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 520.2
Temperature shock	MIL-STD-810, Method 503.6
EMI	MIL-STD-461E/ADS-37A-PRF
Lightning	DO-160D

Specifications subject to change without notice.



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avionicsmarketing@collins.com
collinsaerospace.com

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