MILTECH™ 320G3UVPX - SOSA™ ALIGNED

Military Grade 32 Port 10 Gigabit Ethernet Switch L2/L3 3U VPX Form Factor

One of the most exciting advancement in technology over the last decade has been unmanned vehicles including:

- Unmanned aerial vehicles (UAVs) or Drones
- Land autonomous vehicles (UGVs)
- Robots
- Other unmanned support vehicles

These vehicles must be agile, compact and highly intelligent. In order to support this sophisticated intelligence, these platforms may have to carry and connect a variety of Ethernet-based devices including computers, sensors, and targeting systems - all in compact platforms that must operate in extreme environmental conditions.
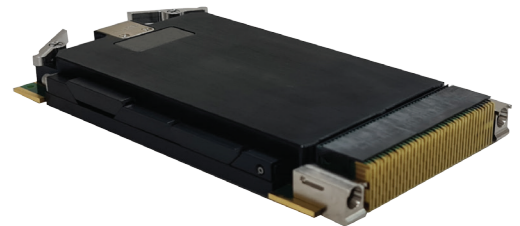
The MILTECH320G3UVPX is cost-effective, 3U VPX Ethernet switching solution. This VPX switch is ideal for integrating into system level solutions being developed with size, weight, power and cost (SWaP-C) at top of mind .

Advanced network features, including switching protocols, virtual LANS (VLANS), traffic prioritization (QoS), and bandwidth aggregation are standard.

The MILTECH320G3UVPX is instantly compatible with anyVPX platform.

SPECIFICATIONS

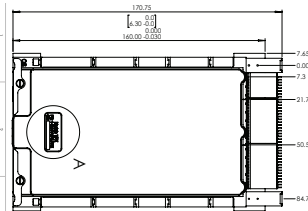|	

ETHERNET PORTS	- Slot Profiles (per SOSA™):
	1) SLT3SWH2F24U14.4.3
	   24 x 10GKR + 2 x 40GKR
	2) SLT3SWH6F1U7U14.4.14
	   SLT3SWH6F7U13.4.15
	   6 x 40GKR + 7/8 x 10GKR - Out-of-band management via backplane and front-panel USB type-C. - Out-of-band management via 1G RJ45 front-panel.

NETWORKING	- Quick boot time with enhanced Built-in-Test (PBIT, IBIT, CBIT) - Secure Boot via FPGA. - IPMI SOSA™ Aligned - Spanning Tree (802.1d), RSTP (802.1w) and multiple Spanning Tree (802.1S) for fast recovery rings - Security via Radius Authentication 802.1x, Port Security, Port Mirroring - Built-in-Zeroization for data declassification. - Multicasting (IGMP Snooping), GARP, GMRP, and GVRP Broadcasting and flooding Control up to 8K Groups. 802.1q Tagged based VLAN up to 4K VLAN groups. - QoS Multi-Layer Classifier, 802.1p, ToS/DSCP traffic classification. WFQ, Strict Queuing. - Bridge support for Q-in-Q. - Full L3: VRRP, OSPF V3, PIM, RIP V1/V2, ECMP - Link Aggregation 802.3AD. - WEB, CLI, Telnet Management.
STANDARDS	MIL-STD-461E, MIL-STD-810F/G, when installed in an appropriate chassis

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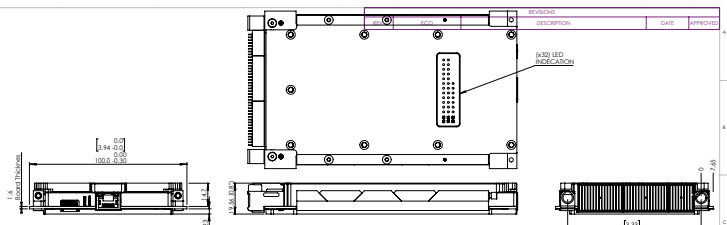Military Grade 32 Port 10 Gigabit Ethernet Switch L2/L3 3U VPX Form Factor

SPECIFICATIONS

PERFORMANCE	• 922.4 Mpps wire speed forwarding rate • 320 Gbps maximum forwarding bandwidth • 32K MAC Address
STANDARDS COMPLIANCE	• Fully VITA 65 SOSA™ Aligned. • Complies with module profile: SLT3SWH2F24U14.4.3, SLT3SWH6F1U7U14.4.14, SLT3SWH6F7U14.4.15 • IEEE 802.1x MAC based Authentication • IEEE 802.1Q Vlan Tagging • IEEE 802.1P QoS • IEEE 802.1S Multiple STP • IEEE 802.1W Rapid STP • IEEE 802.1AD Link Aggregation • IEEE 802.1X
POWER	• Voltage Input: 12VDC (Backplane) + 3.3VDC secondary supply per SOSA™ guidelines. • Power Consumption: Typical 65W, Maximum 85W • Led indication: power, status.
ELECTROMAGNETIC	• MIL-STD-461E Electromagnetic compatibility • CE-102, CS-114, CS-115, CS-116, RE-102, RS-103 (when installed in an appropriate chassis)
ENVIRONMENTAL	• MILSTD-810F/G/GM: • Random vibration (514.5I), Bench Handling (516.6VI), High Temp.(501.5I,II), Low Temp.(502.5I), Humidity (507.5II), Air Pressure (500.5I,II), Blowing Rain (506.5I), Immersion (512.5I), Salt Atmosphere (509.5I), • Blowing Dust (510.5I), Loose Cargo Vibration (514.6II), Wind Analysis (when installed in an appropriate chassis)
PHYSICAL	• 3U VPX Form Factor, 0.8''or 0.85'' pitch. Weight: 520g. • Two level maintenance (2LM) covers.
INSTALLATION	• VPX 3U Card Size Format
COOLING	• No Moving Parts. Passive Cooling.
OPERATING TEMP	• -45⁰C to +85⁰C (-49⁰F to +185⁰F) Cold Start-Up
STORAGE TEMP	• -45⁰C to +85⁰C (-49⁰F to +185⁰F)

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-320G3UVPX-000	3U VPX Managed Military Grade Gigabit Ethernet Switch, 24 x 10GKR + 2 x 40GKR/ Conduction Cooled
1-320G3UVPX-001	3U VPX Managed Military Grade Gigabit Ethernet Switch, 6 x 40GKR + 8 x 10GKR / Conduction Cooled