



# MILTECH™ 322G3UVPX - SOSA™ ALIGNED

Military Grade 2 Ports of 40 Gigabit and 24 Ports of 10 Gigabit Ethernet Switch  
L2/L3 3U VPX Form Factor

## FEATURES

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.

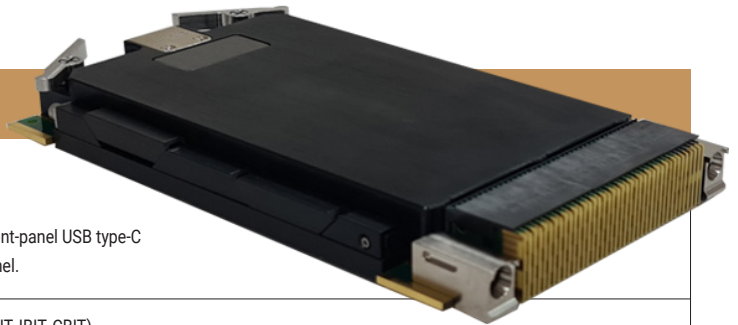
The MILTECH320G3UVPX is cost-effective, 3U VPX Ethernet switching solution. This VPX switch is ideal for integrating into system level solutions being developed with size, weight, power and cost (SWaP-C) at top of mind.

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

The MILTECH322G3UVPX is instantly compatible with any VPX platform.

## SPECIFICATIONS

ETHERNET PORTS	<ul style="list-style-type: none"> <li>• Slot Profiles (per SOSA™): 1) SLT35WH2F24U14.4.3 2 x 40 GKR + 24 x 10 GKR</li> <li>• Out-of-band management via backplane and front-panel USB type-C</li> <li>• Out-of-band management via 1G RJ45 front-panel.</li> </ul>
NETWORKING	<ul style="list-style-type: none"> <li>• Quick boot time with enhanced Built-in-Test (PBIT, IBIT, CBIT)</li> <li>• Secure Boot via FPGA</li> <li>• IPMI SOSA™ Aligned</li> <li>• Spanning Tree (802.1d), RSTP (802.1w) and multiple Spanning Tree (802.1S) for fast recovery rings</li> <li>• Security via Radius Authentication 802.1x, Port Security, Port Mirroring</li> <li>• Built-in-Zeroization for data declassification</li> <li>• Multicasting (IGMP Snooping), GARP, GMRP, and GVRP Broadcasting and flooding Control up to 8K Groups</li> <li>• 802.1q Tagged based VLAN up to 4K VLAN groups</li> <li>• QoS Multi-Layer Classifier, 802.1p, ToS/DSCP traffic classification, WFQ, Strict Queuing</li> <li>• Bridge support for Q-in-Q</li> <li>• Full L3: VRRP, OSPF V3, PIM, RIP V1/V2, ECMP</li> <li>• Link Aggregation 802.3AD</li> <li>• WEB, CLI, Telnet Management</li> </ul>
STANDARDS	<ul style="list-style-type: none"> <li>• MIL-STD-461E, MIL-STD-810F/G, when installed in an appropriate chassis</li> </ul>
PERFORMANCE	<ul style="list-style-type: none"> <li>• 922.4 Mpps wire speed forwarding rate</li> <li>• 320 Gbps maximum forwarding bandwidth</li> <li>• 32K MAC Address</li> </ul>



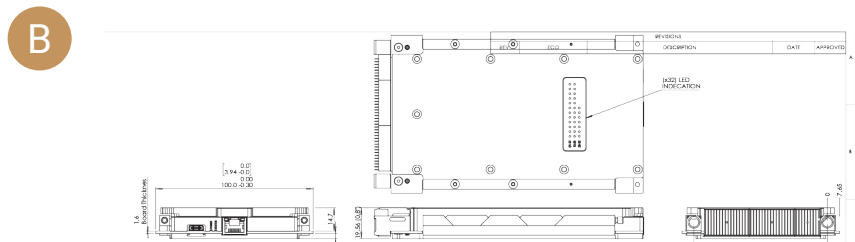
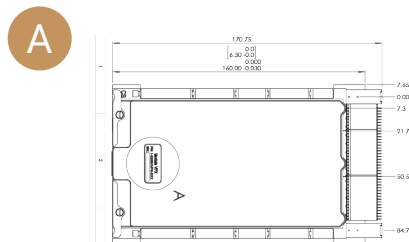


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Military Grade 2 Ports of 40 Gigabit and 24 Ports of 10 Gigabit Ethernet Switch L2/L3 3U VPX Form Factor

## SPECIFICATIONS

STANDARDS COMPLIANCE	<ul style="list-style-type: none"> <li>Fully VITA 65 SOSA™ Aligned</li> <li>Complies with module profile: SLT3SWH2F24U14.4.3, SLT3SWH6F1U7U14.4.14, SLT3SWH6F7U14.4.15</li> <li>IEEE 802.1x MAC based Authentication</li> <li>IEEE 802.1Q Vlan Tagging</li> <li>IEEE 802.1P QoS</li> <li>IEEE 802.1S Multiple STP</li> <li>IEEE 802.1W Rapid STP</li> <li>IEEE 802.1AD Link Aggregation</li> <li>IEEE 802.1X</li> </ul>
POWER	<ul style="list-style-type: none"> <li>Voltage Input: 12VDC (Backplane) + 3.3VDC secondary supply per SOSA™ guidelines</li> <li>Power Consumption: Typical 29W, Maximum 35W</li> <li>Led indication: power, status</li> </ul>
ELECTROMAGNETIC	<ul style="list-style-type: none"> <li>MIL-STD-461E Electromagnetic compatibility</li> <li>CE-102, CS-114, CS-115, CS-116, RE-102, RS-103, when installed in an appropriate chassis</li> </ul>
ENVIRONMENTAL	<ul style="list-style-type: none"> <li>MILSTD-810F/G/GM: Random vibration (514.5I), Bench Handling (516.6VI), High Temp.(501.5I,II), Low Temp.(502.5I), Humidity (507.5I), 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</li> </ul>
PHYSICAL	<ul style="list-style-type: none"> <li>3U VPX Form Factor, 0.8" or 0.85" pitch, Weight: 520g</li> <li>Two level maintenance (2LM) covers</li> </ul>
INSTALLATION	<ul style="list-style-type: none"> <li>VPX 3U Card Size Format</li> </ul>
COOLING	<ul style="list-style-type: none"> <li>No Moving Parts, Passive Cooling</li> </ul>
OPERATING TEMP	<ul style="list-style-type: none"> <li>-45°C to +85°C (-49°F to +185°F) Cold Start-Up</li> </ul>
STORAGE TEMP	<ul style="list-style-type: none"> <li>-45°C to +85°C (-49°F to +185°F)</li> </ul>



## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-322G3UVPX-000	3U VPX Managed Military Grade Gigabit Ethernet Switch, 2 x 40 GKR + 24 x 10 GKR/ Conduction Cooled