ENERCON TECHNOLOGIES LTD

Networking Products

# 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:

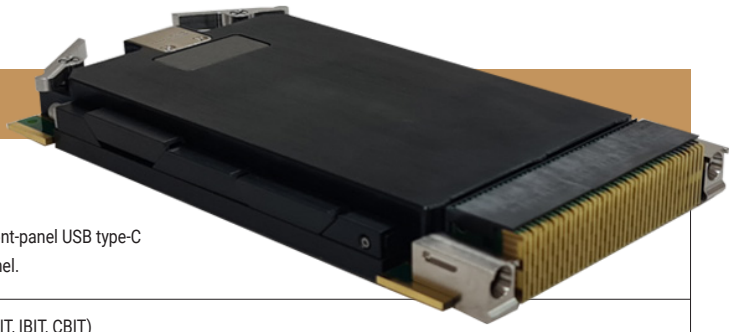
- Unmanned aerial vehicles (UAVs) or Drones
- Land autonomous vehicles (UGVs)
- Robots
- Other unmanned support vehicles

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 MILTECH322G3UVPX 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

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|---|---|
| ETHERNET PORTS | • Slot Profiles (per SOSA™):<br>1) SLT35WH2F24U14.4.3<br>2 x 40 GKR + 24 x 10 GKR<br>• Out-of-band management via backplane and front-panel USB type-C<br>• Out-of-band management via 1G RJ45 front-panel. |
| NETWORKING | • Quick boot time with enhanced Built-in-Test (PBIT, IBIT, CBIT)<br>• Secure Boot via FPGA<br>• IPMI SOSA™ Aligned<br>• Spanning Tree (802.1d), RSTP (802.1w) and multiple Spanning Tree (802.1S) for fast recovery rings<br>• Security via Radius Authentication 802.1x, Port Security, Port Mirroring<br>• Built-in-Zeroization for data declassification<br>• Multicasting (IGMP Snooping), GARP, GMRP, and GVRP Broadcasting and flooding Control up to 8K Groups<br>• 802.1q Tagged based VLAN up to 4K VLAN groups<br>• QoS Multi-Layer Classifier, 802.1p, ToS/DSCP traffic classification, WFQ, Strict Queuing<br>• Bridge support for Q-in-Q<br>• Full L3: VRRP, OSPF V3, PIM, RIP V1/V2, ECMP<br>• Link Aggregation 802.3AD<br>• WEB, CLI, Telnet Management, RS-232 or LVCMOS |
| STANDARDS | • MIL-STD-461E, MIL-STD-810F/G, when installed in an appropriate chassis |
| PERFORMANCE | • 922.4 Mpps wire speed forwarding rate<br>• 320 Gbps maximum forwarding bandwidth<br>• 32K MAC Address |

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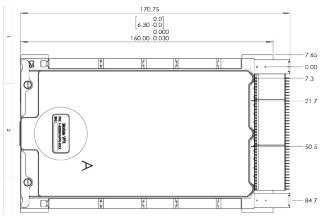
## Military Grade 2 Ports of 40 Gigabit and 24 Ports of 10 Gigabit Ethernet Switch L2/L3 3U VPX Form Factor

## SPECIFICATIONS

| | |
|---|---|
| STANDARDS COMPLIANCE | • Fully VITA 65 SOSA™ Aligned<br>• Complies with module profile: SLT3SWH2F24U14.4.3, SLT3SWH6F1U7U14.4.14, SLT3SWH6F7U14.4.15<br>• IEEE 802.1x MAC based Authentication<br>• IEEE 802.1Q Vlan Tagging<br>• IEEE 802.1P QoS<br>• IEEE 802.1S Multiple STP<br>• IEEE 802.1W Rapid STP<br>• IEEE 802.1AD Link Aggregation<br>• IEEE 802.1X |
| POWER | • Voltage Input: 12VDC (Backplane) + 3.3VDC secondary supply per SOSA™ guidelines<br>• Power Consumption: Typical 29W, Maximum 35W<br>• Led indication: power, status |
| ELECTROMAGNETIC | • MIL-STD-461E Electromagnetic compatibility<br>• CE-102, CS-114, CS-115, CS-116, RE-102, RS-103, when installed in an appropriate chassis |
| ENVIRONMENTAL | • MILSTD-810F/G/GM:<br>Random vibration (514.5I), Bench Handling (516.6VI), High Temp.(501.5I,II), Low Temp.(502.5I),<br>Humidity (507.5II), Air Pressure (500.5I,II), Blowing Rain (506.5I), Immersion (512.5I), Salt Atmosphere (509.5I),<br>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<br>• Two level maintenance (2LM) covers |
| INSTALLATION | • VPX 3U Card Size Format |
| COOLING | • No Moving Parts, Passive Cooling |
| OPERATING TEMP | • -45ºC to +85ºC (-49ºF to +185ºF) Cold Start-Up |
| STORAGE TEMP | • -45ºC to +85ºC (-49ºF to +185ºF) |

A



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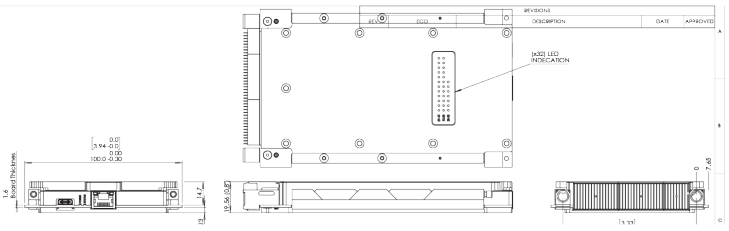

## ORDERING INFORMATION

| PART NUMBER | DESCRIPTION |
|---|---|
| 1-322G3UVPX-000 | 3U VPX Managed Military Grade Gigabit Ethernet Switch, 2 x 40 GKR + 24 x 10 GKR/ Conduction Cooled, managed via RS-232 |
| 1-322G3UVPX-001 | 3U VPX Managed Military Grade Gigabit Ethernet Switch, 2 x 40 GKR + 24 x 10 GKR/ Conduction Cooled, managed via LVCMOS |

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