



# MILTECH™ 2T6UVPX - SOSA™ ALIGNED

Military Grade 30 Ports 25G/100G Ethernet Data Plane + 15 Ports 10G Ethernet Control Plane Switch L2/L3 6U VPX Form Factor

One of the most exciting advancements in technology over the last decade has been The MILTECH 2T6UVPX that supports advanced secure boot via dedicated FPGA, BIT functionality, zeroization and data declassification. Monitoring and management via IPMI SOSA™ aligned interface. Comply with MIL-STD-461E, MIL-STD-810F/G, when installed in an appropriate chassis.

The MILTECH 2T6UVPX is a 6U VPX Ethernet Switch.

In order to support sophisticated intelligence, these platforms may have to carry and connect a variety of high speed Ethernet-based devices including computers, sensors, and targeting systems - all in compact platforms that must communicate with each other. Advanced network features, including routing protocols, virtual LANS (VLANs), traffic prioritization (QoS), and bandwidth aggregation and more.

The MILTECH 2T6UVPX is instantly compatible with any VPX SOSA™ ALIGNED platform.

## SPECIFICATIONS

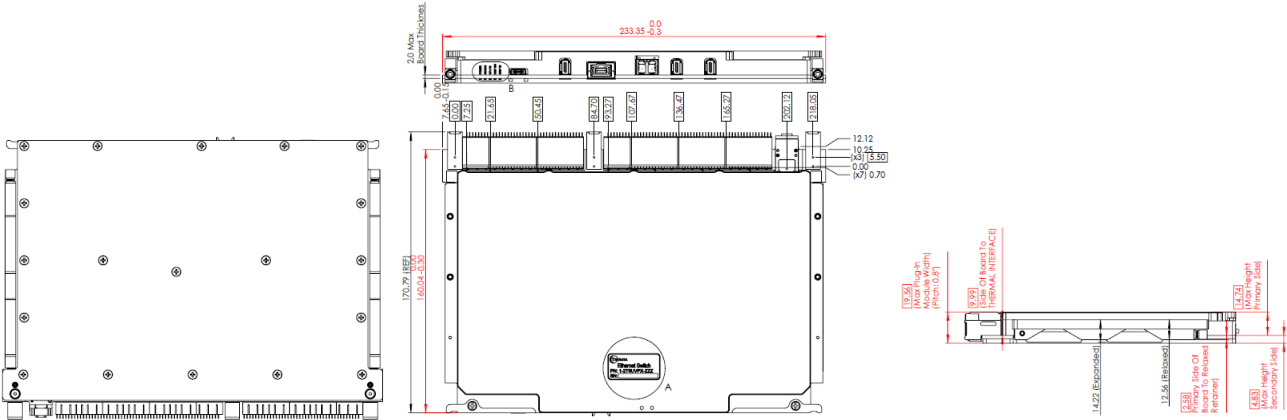
ETHERNET PORTS	<ul style="list-style-type: none"> <li>Slot Profiles (per SOSA™):             <ol style="list-style-type: none"> <li>SLT6-SWH-14F16U1U1U15U1J-10.8.1-n</li> <li>Front Panel:                 <ul style="list-style-type: none"> <li>1X100GKR4 F/O (MM) Data Plane , MPO connector</li> <li>1X10GKR F/O (MM) Control Plane, LC connector</li> <li>1X10G Copper Control plane, HARTING P/N 09451812560</li> <li>1XUSB type C for CLI to both data and control plane</li> </ul> </li> </ol> </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 per VITA 46.11 tier II, LVCMOS via backplane</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	MIL-STD-461E, MIL-STD-810F/G, when installed in an appropriate chassis



PERFORMANCE	<p>Data Plane Switch:</p> <ul style="list-style-type: none"> <li>• Non-blocking, wire speed forwarding rate</li> <li>• 14X100G-KR4</li> <li>• 16X25G-KR4</li> <li>• Optional 100G-KR4 to front panel F/O, MM, MPO</li> <li>• Optional 100G-KR4 to BP via VITA 66.5, F/O, MM</li> </ul> <p>Control Plane Switch:</p> <ul style="list-style-type: none"> <li>• 15X10GKR</li> <li>• 1X10G Copper front panel</li> <li>• 1X10G F/O front panel</li> <li>• Non-blocking, wire speed forwarding rate</li> </ul>
STANDARDS COMPLIANCE	<ul style="list-style-type: none"> <li>• Fully VITA 65 SOSA™ Aligned</li> <li>• VITA 66.5 Aligned – 100G fiber module on backplane J6B</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 160W</li> <li>• Led indications: Power and 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>• MIL-STD-810F/G/GM:</li> <li>• 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),</li> <li>• 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>• 6U VPX Form Factor, 1" pitch. Weight: 750g</li> <li>• Two level maintenance (2LM) covers</li> </ul>
COOLING	No Moving Parts. Passive Cooling.
OPERATING TEMP	-40°C to +85°C (-40°F to +185°F) Cold Start-Up
STORAGE TEMP	-40°C to +85°C (-40°F to +185°F)



**OUTLINE DRAWING:**



**Standard Models List (for other options – consult factory)**

Part Number	Description
1-2T6UVPX -001	6U VPX Managed Military Grade Gigabit Ethernet Switch, 30 Ports 25G/100G Ethernet Data Plane + 15 Ports 10G Ethernet Conduction Cooled

- Additional standard configurations available. **Contact factory for more details.**
- All of our products can be configured to comply with EU REACH, RHOS regulations. **Contact factory for more details.**

Note: Specifications are subject to change without prior notice by the manufacturer.