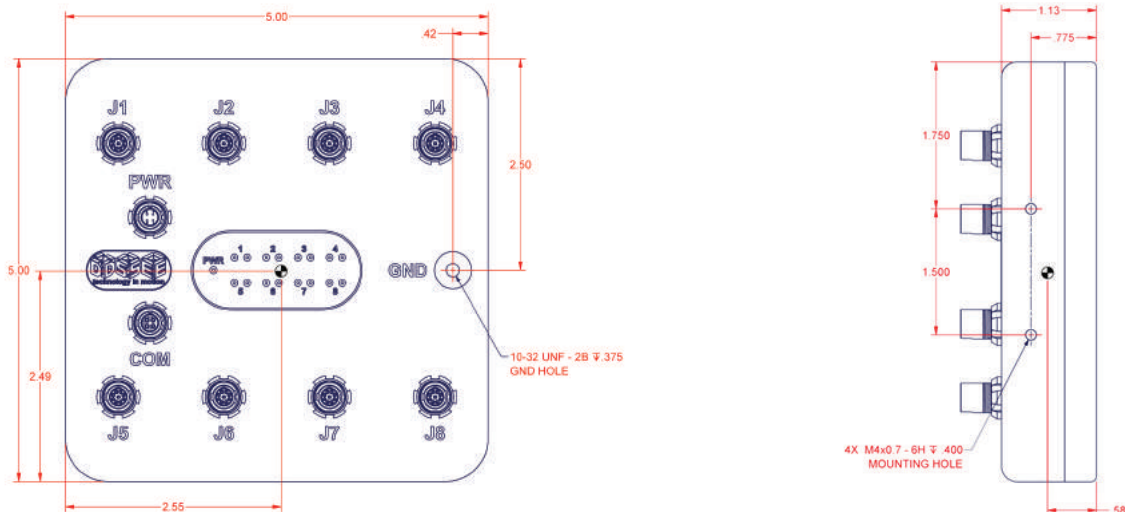# VS8

RUGGED MANAGED GIGABIT ETHERNET SWITCH

The VS8 is a managed eight (8) port Gigabit Ethernet Switch designed for harsh environments that demand systems with SWaP concerns: scaled-down footprints (SFF), reduced power consumption and weight constraints. The micro-circular connectors provide an easy and cost effective solution for connection with network ports, RS-232 and web GUI management access, and a wide range of DC voltage input. Specified for military platforms such as ground vehicles, aircraft, and unmanned vehicles, the featherweight compact VS8 delivers a powerful feature package capable of securely managing a complex GbE network under all environmental conditions specified in MIL-Standards 461, 810, 1275 and DO-160. This L2 switch with L3 forwarding protectively distributes data with carrier grade features such as IPv4/IPv6 multicast traffic routing between VLANs, RSTP, and MSTP support, QoS user priority, link aggregation, input priority mapping, port control, and authentication per 802.1, Web/CLI, and ACLs. With a fully sealed enclosure, the VS8 is a perfect solution for environments subject to temperature extremes, dust, water, shock, and vibration.

STANDARD FEATURES

- Port Gigabit Ethernet Ports (8), RS-232 and Power
- MIPS CPU with DDR-2 Memory
- DMA-based Frame Extraction, Performance Monitoring, Ethernet OAM
- IPv4/IPv6 Multicast, QoS Prioritization, Link Aggregation (Static and LACP), QCL, Port VLAN (Static), Port Isolation (Static), IGMPv2 Snooping, Loop Guard, RSTP, STP
- Management - Web Interface, RS-232, API, HTTP, Syslog, SNMPv3, CLI, DHCP Client
- Port Indicator LEDs
- Designed to MIL-STD-461, 810, 1275 and DO-160

TECHNICAL SPECIFICATIONS

System I/O	GbE Ethernet Ports (8), RS-232, Power
Housing	Milled Aluminum, Black Hard Anodized
Mount Option	M4
DC Power Input†, Power Usage	28 VDC (18-33 VDC) (per MIL-STD-704, 1275); Power Consumption: maximum 8W
Power Conditioning	Protected against Internal Short Circuit, Load Dump, Over Voltage and Reverse Polarity

ENVIRONMENTAL SPECIFICATIONS

IP Rating	IP67 (NEMA 6 Submersible)
Operating Temperature	-40°C to 71°C (-40°F to 160°F)
Storage Temperature	-54°C to 71°C (-65°F to 160°F)
Humidity	0-100%
Altitude	45,000 ft.

MILITARY SPECIFICATIONS

MIL-STD-461	EMI (Designed to meet)	**MIL-STD-810**	Method 512; Immersion
MIL-STD-810	Method 500; Altitude	**MIL-STD-810**	Method 513; Acceleration
MIL-STD-810	Method 501; I & II; High Temperature	**MIL-STD-810**	Method 514; Procedure I, II, V, VI; General Vibration
MIL-STD-810	Method 502; I & II; Low Temperature	**MIL-STD-810**	Method 516; Procedure I, Functional Shock
MIL-STD-810	Method 503; Temperature Shock	**MIL-STD-810**	Method 520; Temp, Humidity, Vibe and Altitude
MIL-STD-810	Method 506; Rain	**MIL-STD-1275**	Vehicle Power Requirements (Designed to meet)
MIL-STD-810	Method 507; Humidity	**MIL-STD-1472**	Thermal Contact Hazard
MIL-STD-810	Method 508; Fungus	**MIL-A-8625**	Standard Finish, Type III (Class 1 & 2)
MIL-STD-810	Method 509; Salt/Fog	**DO-160**	Section 17 Voltage Spike; Section 22 Lightning Transient; Section 25, Electrostatic Discharge
MIL-STD-810	Method 510; Blowing Sand and Dust		
MIL-STD-810	Method 511; Explosive Atmosphere		

* - Please note cables are not included.

† - The power range specified covers momentary environmental fluctuations generally found in a mobile environment while display is operating. For power initialization and continual operation, nominal voltages are required.

ON-GOING PRODUCT DEVELOPMENT MAY NECESSITATE DESIGN AND SPECIFICATION CHANGES WITHOUT NOTICE.