

Military Rugged GbE Managed Ethernet Switch



Model SD-08PRSM



Features:

- 8 Port 10/100/1000 Mbps Switch
- MIL-STD-810G Environmental compliance
- MIL-STD-461E EMC compliance
- Full IP67 water dust proof, anti-corrosion housing
- Conduction cooled design
- Extended Temperature Range -40°C to +85°C

Hardware Specifications

Ethernet Switch Engine	Vitesse VSC7428 Ethernet Switch Chipset wA powerful embedded 416 MHz RISC 32-bit CPU, with DDR2 external memory and DMA-based frame extraction and insertion supports timing over packet, Ethernet OAM, and performance monitoring.
Memories	1Gb DDR2 SDRAM 128Mb Serial NOR Flash
Port Type	Gigabit ethernet (10/100/1000 Mbps)
Connectors	MIL-D38999
Layer 2 Switching	802.1Q VLAN switch with 8K MACs and 4K VLANs Push/pop up to two VLAN tags IPv4/IPv6 multicast Policing with storm control and MC/BC protection RSTP and MSTP support Hardware and software-based learning Link aggregation (IEEE 802.3ad) Independent and shared VLAN learning (IVL, SVL) Jumbo frame support
Management Access	Web Interface RS-232 Serial Interface (CLI) Software APIs
Indicator LEDs	Power LED Status LED
Input Voltage	Wide input rage: +9V to +36V DC with Reverse Polarity Protection
Power Consumption	Idle: 0.3A, 3.6W Typical: 0.35A, 4.2W Max: 0.5A, 6W (with +12V input)
Dimensions	136 x 50 x 150 mm (W x H x D)

- ✓ *Conduction cooled*
- ✓ *8 Port 10/100/1000 Mbps Switch*
- ✓ *Web GUI or CLI Management*
- ✓ *Extended Temperature Range
-40°C to +85°C*

8 Port GbE Managed Switch

Software Specifications

Port control	Port Speed/Duplex Mode/Flow Ctrl Port Frame Size (Jumbo frames) Port State (administrative status) Port Status (link monitoring) Port Statistics (MIB counters) Port VeriPHY (cable diagnostics)
QoS	Traffic Classes (8 active priorities) Port Default Priority QoS User Priority Input priority mapping QoS Control List (QCL Mode) Storm Control for UC, MC and BC Port policers Global/VCAP (ACL) policers Port egress shaper Queue egress shapers TRTCM (two rate three color market) Scheduler mode (Strict or Weighted Fair Queuing)
L2 Switching	Auto MAC addr. Learning/Ageing MAC Addresses – Static Virtual LAN Private VLAN – Static Port Isolation – Static IEEE-802.1ad Provider Bridge (Native or Translated VLAN) Rapid Spanning tree – RSTP, STP Loop Guard Link Aggregation – Static Link Aggregation – LACP IGMPv2 snooping Port Mirroring (Ingress and Egress Mirroring)
L3 Switching	IPv4 Unicast: RIPv1/RIPv2
Security	Port-Based 802.1X Multiple 802.1X Web & CLI Authentication ACLs for filtering/policing/port copy

Environmental

Operating: -40°C ~ 85°C
Humidity: 5~95%, non-condensing
Vibration: 2.5G, 5Hz~500Hz / XYZ
Shock: 40G, 11ms duration, MIL-STD-810G
EMI: MIL-STD-461F for CE101, RE101
IP Level: Full IP67

Software Specifications Continued

Synchronization SNTP & client

Power Saving Cold start
Cool start
ActiPHY
PerfectReach
EEE Power Management
LED Power Management
Thermal Protection

Management DHCP Client
HTTP Server
CLI - Console Port
Industrial Standard CLI
Industrial Standard Configuration
Management access filtering
HTTPS
System Syslog
Software Upload via web
SNMP v1 / v2c / v3 Agent
SNMP multiple trap destinations
IEEE 802.1AB-2005 Link Layer Discovery – LLDP
Configuration Download/Upload - XML
Configuration Download/Upload - Industrial Standard
Loop detection restore to default
Symbolic Register Access

MIBs RFC 1213 MIB II
RFC 1215 TRAPS MIB
RFC 4188 Bridge MIB
RFC 3635 Ethernet-like MIB
RFC 3411 SNMP Management Frameworks
IEEE 802.1 MSTP MIB
IEEE 802.1AB LLDP-MIB (LLDP MIB included in a clause of the STD)
RFC 3621 LLDP-MED Power (POE) (No specific MIB for POE+ exists)
Private MIB framework

