MILTECH™ 904

Compact, Portable Military Managed Gigabit Ethernet Switch

FEATURES

Driven by rapid advancement and lower costs, Ethernet is becoming the standard for IP-based components in a wide range of military and commercial applications, including:

- UAVs
- Land autonomous vehicles (UGVs)
- Robots
- Mobile equipment fielded in harsh environments

Modern platforms contain dozens of network devices that must be interconnected. The MILTECH904 is an ideal solution for mobile Ethernet-equipped platforms. With the best combination of size, weight, power and cost (SWaP-C) in the industry, it saves valuable real estate for computers, sensors, targeting systems, and other devices that make mobile platforms highly effective.

The 904 is a MIL-STD, fully managed military grade network switch offering 4 triple-speed (10/100/1000Mbps) ports. It can be remotely managed to optimize communications and prioritize critical information traffic. Advanced network features, never before found in a package of this size, include switching protocols, virtual LANS (VLANS), traffic prioritization (QoS), and bandwidth aggregation are standard.

The MILTECH904's gigabit speeds and 24VDC power make it instantly compatible with any network device and power systems.

Its mechanical packaging enhancements, including ruggedized SCE2 circular connectors, is designed for MIL-STD-810F airborne and ground environmental compliance and high reliability. Leveraging best-in-class switching technology, the MILTECH 904 serves as a robust commercial off-the-shelf (COTS) solution for rugged LAN connectivity.

SPECIFICATIONS

ETHERNET PORTS	• Managed 4 x switched 10/100 /1000 ports
NETWORKING	• Spanning Tree (802.1d), RSTP (802.1w) and multiple Spanning Tree (802.1S) for fast recovery rings • Security via Radius Authentication 802.1x, Port Security, Port Mirroring • Multicasting (IGMP Snooping), GARP, GMRP, and GVRP Broadcasting and flooding Control up to 8K Groups. • 802.1q Tagged based VLAN up to 4K VLAN groups. • QoS Multi-Layer Classifier, 802.1p, ToS/DSCP traffic classification. WFQ, Strict Queuing. • Bridge support for Q-in-Q. • Link Aggregation 802.3AD. • L3 static routing • WEB, CLI, Telnet Management • Rmirror* • Port Protection: 1+1 port protection, 1:1 port protection, 1:N port protection* • G.8032 ring protection* • DHCP option 82 relay* • L2CP tunneling • Protocol-based VLAN* • 1588v2 PTP with two-step clock* *Available in part number 1-904-101
CONNECTORS	• Power Connector Type: SCE2-B-76A06-07SN • LAN Connector Type: SCE2-B-76A07-14SN • Management RS-232 Type via Port #1 • LED Indication Per Port (Link/Activity)
CHASSIS	• Machined rugged aluminum • Conductively cooled w/custom internal heat-sinks • Ingress protection against sand, dust and moisture • Anodize Coating, MIL-A-8625, Type II, Class 2

NON ITAR

AS9100D CERTIFIED ISO 9001

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STANDARDS	• MIL-STD-461E, MIL-STD-810F GM, MILSTD-1275, MILSTD-704, IP68
PERFORMANCE	• 26.8 Mpps wire speed forwarding rate • 20 Gbps maximum forwarding bandwidth • 8K MAC Address
STANDARDS COMPLIANCE	• IEEE 802.1x MAC based Authentication • IEEE 802.1Q Vlan Tagging • IEEE 802.1P QoS • IEEE 802.1S Multiple STP • IEEE 802.1W Rapid STP • IEEE 802.1AD Link Aggregation • IEEE 802.1X
POWER	• MILSTD-1275, MILSTD-704 • Voltage Input: 24Vdc Nominal (16-36V) • Power Consumption: 5W Max • Chassis grounding
ELECTROMAGNETIC	• MIL-STD-461E Electromagnetic compatibility • CE-102, CS-114, CS-115, CS-116, RE-102, RS-103
ENVIRONMENTAL	• MILSTD-810F/G/GM: • 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), Blowing Dust (510.5I), Loose Cargo Vibration (514.6II), Wind Analysis. • IP68
PHYSICAL	• Dimensions: 102mm (L) x 73.3mm (W) x 36mm (H), including connectors. Weight: 370g • Dimensions: 4.72"(L) x 2.88"(W) x 1.42"(H), including connectors
INSTALLATION	• Four 4.3mm holes for mounting to any flat surface
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)

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-904-001	Manage Military Grade Gigabit Ethernet Switch, 4 x 10/100/1000TX
1-904-101	Enhanced Managed Military Grade Gigabit Ethernet Switch, 4 x 10/100/1000TX
2-CBL918PWR3M	Power cable for MILTECH904, MIL-SCE2, 3 meter length
2-CBL9028LAN	LAN cable for Miltech904, MIL-SCE2 To RJ45 connector, 3 Meters length
2-CBL9028LN+	LAN & management cable for MILTECH904, MIL-SCE2 To RJ45 & DB9 connector, 3 Meters length