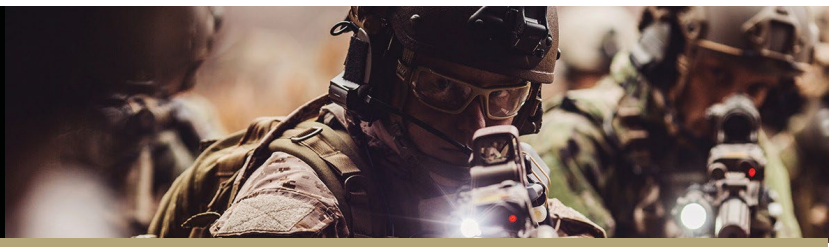
ENERCON TECHNOLOGIES LTD | Networking Products



MILTECH™ 912

Compact, Portable Military Managed Gigabit Ethernet Switch

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:

- Vetronics
- Manned and unmanned vehicles
- Aerial environments

The MILTECH912 is a MIL-STD, fully managed military-grade network switch offering 12 triple-speed (10/100/1000Mbps) connections. 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.

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.

The MILTECH912's gigabit speeds and 24VDC power make it instantly compatible with any network device and power systems in these mobile platforms.

The MILTECH912 is widely used in battlefield communications C4ISR, video, sensor data acquisition and transmission. Its mechanical packaging enhancements, including two ruggedized D38999 circular connectors, is designed for MIL-STD-810F airborne and ground environmental compliance and high reliability. Leveraging best-in-class switching technology, the MILTECH912 serves as a robust commercial off-the-shelf (COTS) solution for rugged LAN connectivity.

NIST 800-171 Compliant

AS9100D CERTIFIED ISO 9001

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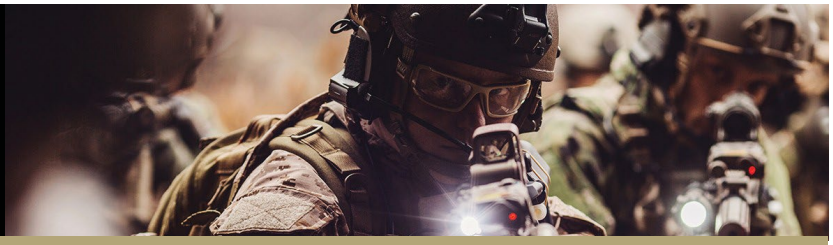
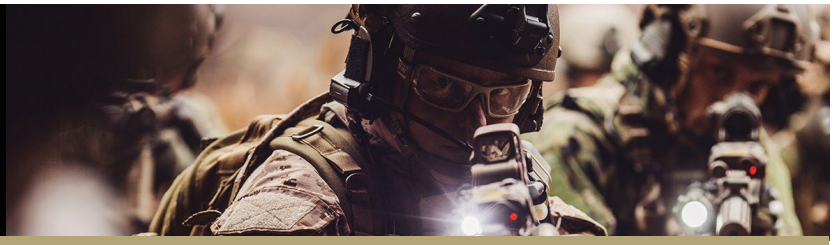


SPECIFICATIONS

ETHERNET PORTS:	• Managed 12 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 • WEB, CLI, Telnet Management • L3 static routing • 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 numbers 1-912-101, 1-912-102
CONNECTORS:	• Power Connector Type: D38999/24WB35PN* • LAN Connector Type: D38999/24WF35PN* • LED Indication Per Port (Speed, Link/Activity) * See ORDERING INFORMATION for other connector plating options
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
STANDARDS:	• MIL-STD-461E, MIL-STD-810F GM, IP67, MILSTD-1275, MILSTD-704
PERFORMANCE:	• 26.8 Mpps wire speed forwarding rate • 52 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:	• MIL-STD-1275B Surge and Spike protection • Voltage Input: 24Vdc Nominal (16-36V) • Power Consumption: 7W Typical • Chassis grounding



SPECIFICATIONS

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. • IP67
PHYSICAL:	• Dimensions: 178mm(L) x 136mm(W) x 47mm(H), including connectors • Weight: 1.150 kg • Dimensions: 7.1”(L) x 5.4”(W) x 1.85”(H), including connectors
INSTALLATION:	• Set of four # 10-32UNF Captive Screws * Part Number 1-912-002 will be supplied with four 4-40 threads for mounting
COOLING:	• No Moving Parts. Passive Cooling.
OPERATING TEMP:	• -45ºC to +80ºC (-49ºF to +176ºF) Cold Start-Up
STORAGE TEMP:	• -45ºC to +85ºC (-49ºF to +185ºF)

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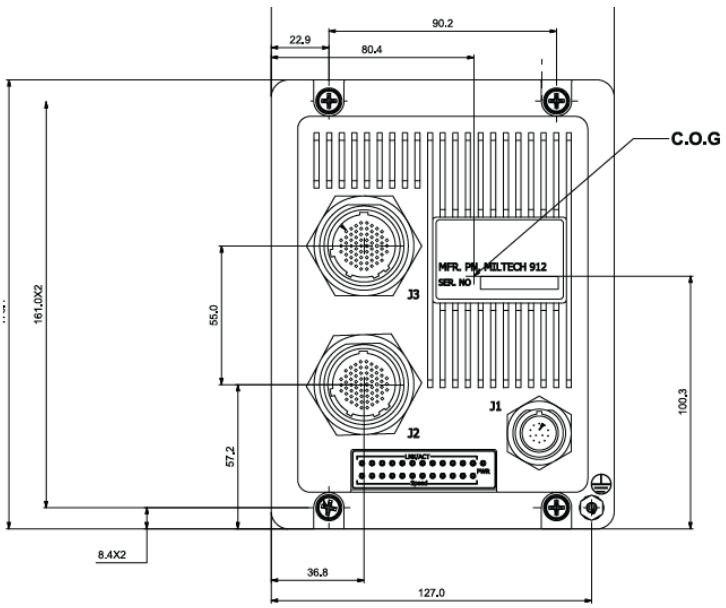

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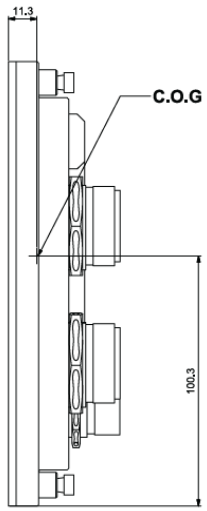

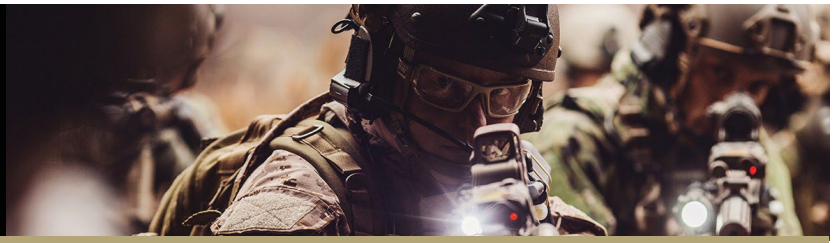

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-2022-000	Military Rugged, 12 x 10/100/1G TX, Managed Switch with Nickle Plated D38999 Connectors
1-912-001	Military Rugged, 12 x 10/100/1G TX, Managed Switch with Olive-Drab D38999 Connectors
1-912-002	Military Rugged, 12 x 10/100/1G TX, Managed Switch with Marine Aluminum Bronze D38999 Connectors
1-912-003	Military Rugged, 12 x 10/100/1G TX, Managed Switch with Olive-Drab D38999 Connectors (J2 Keyway A, J3 Keyway N)
1-912-100	Enhanced Military Rugged, 12 x 10/100/1G TX, Managed Switch with Nickle Plated D38999 Connectors
1-912-101	Enhanced Military Rugged, 12 x 10/100/1G TX, Managed Switch with Olive-Drab D38999 Connectors
1-912-102	Enhanced Military Rugged, 12 x 10/100/1G TX, Managed Switch with Marine Aluminum Bronze D38999 Connectors
1-912-103	Enhanced Military Rugged, 12 x 10/100/1G TX, Managed Switch with Olive-Drab D38999 Connectors (J2 Keyway A, J3 Keyway N)
1-912-104	Enhanced Military Rugged, 12 x 10/100/1G TX, Managed Switch with Black Zinc Nickel D38999 Connectors
2-CBL912PWR	Power cable MILTECH912, MIL-D38999 Connector, 3 Meters length
2-CBL908MPLN	LAN cable for MILTECH 908MP & MILTECH912, MIL-D38999 to 8xRJ45 connector, 3 Meters length
2-CBL912LN	LAN cable for MILTECH912, MIL-D38999 to 4xRJ45 connector, 3 Meters length
2-CBL912LANCON	LAN cable for MILTECH912, MIL-D38999 to 4xRJ45 & DB9 connector, 3 Meters length