

MILTECH™ 1000 SERIES

Compact, Portable Military Gigabit Media Converters with PoE and Security

PRODUCT DESCRIPTION

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.

Modern platforms contain dozens of network devices that must be interconnected. The MILTECH1000 is an ideal solution for mobile Ethernet-equipped platforms utilizing both copper and fiber connections such as:

- Ship board fiber deployments
- Airborne systems
- Ground mobile applications
- Long range video camera connectivity
- Infantry base camp deployments

With the MILTECH1000, transparent, line-speed media conversion is provided along with the flexibility of power over Ethernet (PoE). The 1000 series extends the distance of LAN networks using fiber connectivity that can stretch up 120 km. The MILTECH1000 PoE capabilities enable the device to function as PD (powered device) or PSE (power source equipment), saving valuable and expensive resources at the field. MILTECH1000 can be defined as a unidirectional security gateway allowing data to travel only in one direction,

used in guaranteeing information security and enables Red/Black network segregation.

The 1000 offers 2 triple-speed (10/100/1000Mbps) copper ports and two fiber port at 100Mbps or 1Gbps. It can be remotely managed to optimize communications and prioritize critical information traffic. Advanced network features include auto-negotiation, auto MDI-II, MDI-X, FDX, HDX, flow control, link pass-through, fiber fault alert and loopback that reduce onsite maintenance and troubleshooting time.

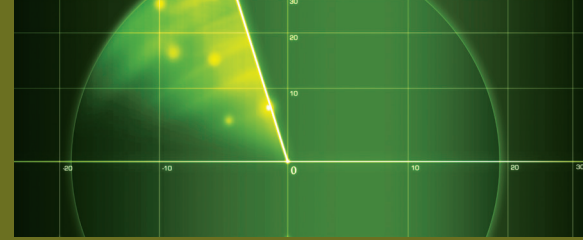
Orderable options include the use of the 100 as a powered device (PD) or power source equipment (PSE), and the number and types of Ethernet and fiber connections. The 1000 also includes a unidirectional security gateway, allowing data to travel only in one direction - providing Red/Black network segregation.

The MILTECH1000 mechanical packaging enhancements include configurable D38999, TFOCA-II, and expanded beam connectors, is designed for MIL-STD-810F airborne and ground environmental compliance and high reliability. Leveraging best-in-class switching technology from Techaya, the MILTECH1000 serves as a robust commercial off-the-shelf (COTS) solution for rugged LAN connectivity.

FEATURES

ETHERNET PORTS:	<ul style="list-style-type: none"> • Up to 2 x 10/100/1000Base-TX and up to 2 x 100/1000 Base FX (MM/SM) Media Converter (WDM - Optional)
NETWORKING:	<ul style="list-style-type: none"> • Full wire-speed forwarding rate • Option for Up to 2 ports PoE – IEEE802.3af, IEEE802.3at • Auto MDI-II, MDI-X, FDX, HDX, Flow control • Auto-Negotiation and fixed settings via DIP switch • Jumbo Frame Support • Option for one way fiber security
CONNECTORS:	<ul style="list-style-type: none"> • MIL-D-38999 (Power & Ethernet signals) • Power Connector Type: D38999/24WA98PA • LAN Connector Type: D38999/24WB355N • Fiber Connector Type: see ordering information table • LED Indication Per Port (Speed, Link/Activity)
CHASSIS:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • MILSTD-1275 MILSTD-704A MILSTD-461E • MILSTD-810F GM IP67
VOLTAGE:	<ul style="list-style-type: none"> • 24VDC (18VDC~32VDC), 48VDC for PoE versions • 85-265VAC version



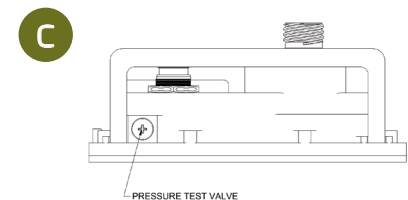
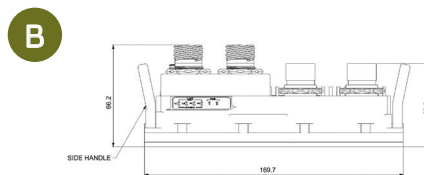
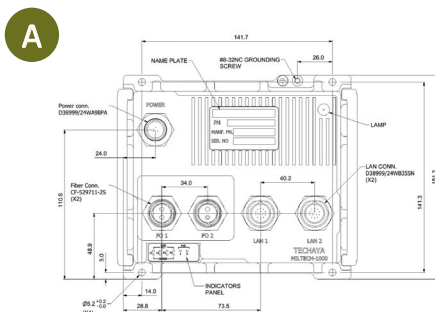


MILTECH™ 1000

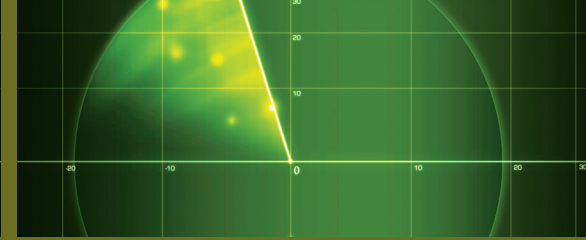
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PRODUCT SPECIFICATIONS

PERFORMANCE:	<ul style="list-style-type: none"> • 26.8 Mpps wire speed forwarding rate • 20Gbps maximum forwarding bandwidth • 4K MAC Address • 2LED indication (Speed, Link/Activity) per port • Wire-Speed Reception and Transmission
STANDARDS COMPLIANCE:	<ul style="list-style-type: none"> • IEEE 802.3, 10 Mbps 10BASE-T (Ethernet) • IEEE 802.3u, 100BASE-TX 100 Mbps (Fast Ethernet) • IEEE 802.3ab, 1000Base-TX • IEEE 802.3z, 1000Base-FX Gigabit • IEEE 802.3af, IEEE802.3at
POWER:	<ul style="list-style-type: none"> • MIL-STD-1275B & MIL-STD 704A Surge and Spike protection • Voltage Input: 24VDC Nominal (18-32V) or 85-265VAC • Power Consumption: 2.8W Typical • Chassis grounding
ELECTROMAGNETIC:	<ul style="list-style-type: none"> • MIL-STD-461E Electromagnetic compatibility
SHOCK/VIBRATION/HUMIDITY:	<ul style="list-style-type: none"> • MIL-STD-810F 501.4I 501.4II 502.4I 502.4II 507.4 500.4II 514 516I 516VI 514.5 512.4 • IP67
PHYSICAL:	<ul style="list-style-type: none"> • Dimensions: 170mm(L) x 150mm(W) x 65mm(H), including connectors & hardware • Dimensions: 6.7"(L) x 5.9"(W) x 2.55"(H), including connectors & hardware • Weight: 1.5kg
INSTALLATION:	<ul style="list-style-type: none"> • Set of Four 4x4.5 mounting holes on bottom for mounting to any flat surface • Carrying handles - Optional
COOLING:	<ul style="list-style-type: none"> • No Moving Parts. Passive Cooling
OPERATING TEMP:	<ul style="list-style-type: none"> • -40°C to +85°C (-40°F to +185°F) – Cold Start-Up
STORAGE TEMP:	<ul style="list-style-type: none"> • -45°C to +85°C (-49°F to +185°F)



*All measurements are in millimeters



MILTECH™ 1000

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ORDERING INFORMATION Options for MILTECH1000/1000AC*

MILTECH1000 - A - B - C - D - E

A	Fiber and copper ports combination
1	1 port fiber and 1 port copper D38999 connector
2	2 Ports fiber and 2 ports copper D38999 connector
3	1 port fiber and 2 ports copper D38999 connector
4	2 Ports fiber and 1port copper D38999 connector
5	1 port fiber and 1 copper RJFTV45
6	2 ports fiber and 1 port copper RJFTV

B	Fiber connector types
1	D38999
2	TFOCA
3	CTOS
4	ARINC801
5	TACBeam

C	Fiber port #1 type / speed
0	None
1	Multimode fiber 100Mbps
2	Multimode fiber 1000 Mbps
3	Singlemode fiber 100 Mbps distance 30 Km
4	Singlemode fiber 1000 Mbps distance 30 Km
5	WDMA TX 1310nm/RX1550nm 100Mbps distance 20Km
6	WDMA TX 1310nm/RX1550nm 1000Mbps distance 20Km
7	WDMB TX 1550nm/RX1310nm 100Mbps distance 20Km
8	WDMB TX 1550nm/RX1310nm 1000Mbps distance 20Km

D	Fiber port #2 type / speed
0	None
1	Multimode fiber 100Mbps
2	Multimode fiber 1000 Mbps
3	Singlemode fiber 100 Mbps distance 30 Km
4	Singlemode fiber 1000 Mbps distance 30 Km
5	WDMA TX 1310nm/RX1550nm 100Mbps distance 20Km
6	WDMA TX 1310nm/RX1550nm 1000Mbps distance 20Km
7	WDMB TX 1550nm/RX1310nm 100Mbps distance 20Km
8	WDMB TX 1550nm/RX1310nm 1000Mbps distance 20Km

E	Special configurations
0	4 ports switch mode All ports are inter connected
1	Dual media converter mode, complete segregation between Ports
2	PSE
3	PD
4	PSE and Dual Media Converter mode, complete segregation between Ports

*Ordering Information for AC power supply version use1000AC-A-B-C-D-E

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
CBL908LAN	• LAN harness for single LAN ports, 1 x D38999 connector to 1 x RJ45 connector, 3 meters length
CBL610PWR	• Power harness 1 x D38999 to open wires 3 meter length