



## MILTECH<sup>™</sup> 5002

Military Rugged Communication System

## FEATURES

Techaya's MILTECH<sup>™</sup>5002 Series is a MIL-STD rugged, military-grade communication system for transferring Video, Serial (RS-422), Discrete Signals, Gigabit Ethernet switch, over single strand Tactical Fiber with Expanded Beam technology.

Developed for military and harsh environment applications, the MILTECH<sup>™</sup>5002 features mechanical packaging enhancements designed for MIL-STD-810F airborne and ground environmental compliance and high reliability. The unit has been especially hardened to improve ingress, impact, and shock/vibration protection, as well as eliminate all moving parts through passive cooling, and interface through sealed MIL-D-38999 circular connectors.

Leveraging best-in-class technology from Techaya, the MILTECH<sup>™</sup>5002 serves as a robust solution for transferring Tactical Communication signals over fiber, to provide connectivity to IP-enabled systems and netcentric devices. Compact in size, the MILTECH<sup>™</sup>5002 is particularly useful for expanding port density in space-constrained airborne and ground vehicle environments.

MILTECH<sup>™</sup>5002 is specifically designed for Data Acquisition & Transmission, Battlefield Communication C4ISR, Rugged Networks, Mobile Communications, Combat vehicles and Avionic & Shipboard Systems.

SPECIFICATIONS	
PORTS	<ul> <li>2 x Composite Video</li> <li>1 x Data Inputs R5422</li> <li>8 x DI (Open / GND)</li> <li>8 x DO (Open / GND)</li> <li>4 x managed switched 10/100/1000TX ports</li> <li>Expanded Beam Tactical Fiber Optic</li> </ul>
NETWORKING	<ul> <li>Full wire-speed forwarding rate</li> <li>Dedicated FPGA based</li> <li>Extreme Low Latency</li> </ul>
CONNECTORS	<ul> <li>MIL-D-38999 (Power &amp; Ethernet, I/O, Discrete signals)</li> <li>Power Connector Type: D38999/24WA98PN</li> <li>Tactical Expanded Beam Fiber Connector</li> </ul>
CHASSIS	<ul> <li>Low profile rugged aluminum</li> <li>Conductively cooled w/custom internal heat-sinks</li> <li>Ingress protection against sand, dust and moisture</li> <li>Anodize Coating, MIL-A-8625, Type II, Class 2</li> </ul>
STANDARDS	• MILSTD-1275, MILSTD-704A, MILSTD-461E,
VOLTAGE OPERATION	• 24VDC (18VDC ~ 36VDC)



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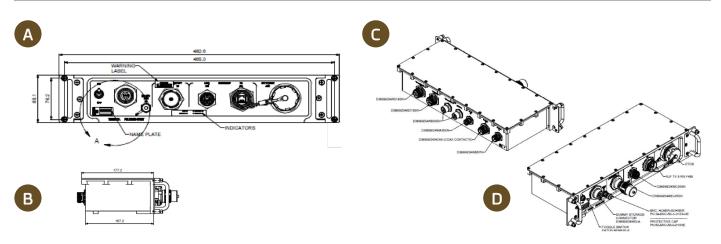




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SPECIFICATIONS	
PERFORMANCE	<ul> <li>Bi-Directional Dry Contact up to 28VDC</li> <li>Analog video NTSC/PAL/RS170</li> <li>Serial Interfaces RS-422 up to 20Mbps per interface</li> <li>Serial Interfaces RS-232 up to 230Kbps</li> </ul>
POWER	<ul> <li>MIL-STD-1275B &amp; MIL-STD 704A Surge and Spike protection</li> <li>Voltage Input: 24Vdc Nominal (18-32V)</li> <li>Power Consumption: 20W Typical</li> </ul>
ELECTROMAGNETIC	<ul> <li>MIL-STD-461E Electromagnetic compatibility</li> <li>CE-102, CS-114, CS-116, RE-102, RS-103</li> </ul>
SHOCK/ VIBRATION/ HUMIDITY	<ul> <li>MIL-STD-810F, 501.4I, 501.4II, 502.4I, 502.4II, 507.4, 500.4II, 514, 516I, 516Vi, 514.5, 512.4.</li> <li>IP67</li> </ul>
PHYSICAL	<ul> <li>Dimensions: 440mm (L) x 200(D) x 88(H), 19", 2U</li> <li>Weight: 4.5kg</li> </ul>
INSTALLATION	<ul> <li>Set of Four 4x10-32 captive screws for 19" cabinet mounting or holes on bottom for mounting to any flat surface.</li> <li>Carrying handles.</li> </ul>
COOLING	No Moving Parts. Passive Cooling
OPERATING TEMP	• -35°C to +75°C (-31°F to +167°F) - Cold Start-Up
STORAGE TEMP	• -45°C to +85°C (-49°F to +185°F)



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PART NUMBER	DESCRIPTION
MILTECH5002T/R	• MILTECH <sup>™</sup> 5002 MIL-STD Rugged communication system over tactical fiber (T=Transmitter, R= Receiver)
MIL5002-HND	Carrying Handles Kit for MILTECH™5002



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