



# MILTECH™ 402

## Rugged PoE Ethernet Switch with Power Distribution Capabilities

### FEATURES DESCRIPTION

Techaya's MILTECH™ 402 Rugged POE Ethernet Switch with Power Distribution Capabilities provides constant LAN & Power between multiple devices used by infantry Soldiers. This MIL-STD, Rugged POE Ethernet Switch with Power Distribution Capabilities features 5 LAN 10/100 (Fast Ethernet) ports + Power supply for each port.

With a voltage range of 10-16.8VDC, from a military battery pack, the MILTECH™ 402 supplies 2 LAN channels with PoE (15.4 watt each), 2 LAN channels with 16.8 Vdc/5A (Vbat) & 1 LAN channel with 5V/1.5A.

MILTECH™ 402 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. Passive cooling allows for the elimination of moving parts. Sealed connectors ensure protection against water and dust.

This flexible Network & Power platform creates another superior lightweight & flexible solution for Future Soldier applications in the modern battlefields. The MILTECH™ 402 is well suited to provide LAN + Power while packed in combat vests for infantry soldiers. It extends Techaya's commitment to unique, tailor-made SWAP rugged communications solutions.

### SPECIFICATIONS

<b>ETHERNET PORTS</b>	<ul style="list-style-type: none"> <li>Total of 5 Ethernet 10/100 (Fast Ethernet) ports + Power Supply:</li> <li>2 x PoE, 10/100 (Fast Ethernet) ports</li> <li>1 x 10/100 (Fast Ethernet) port + 5V/1.5A Power Supply</li> <li>2 x 10/100 (Fast Ethernet) port + 10V -16.8V/5A (Vbat) Power Supply</li> </ul>
<b>NETWORKING</b>	<ul style="list-style-type: none"> <li>Full wire-speed forwarding rate</li> <li>Store-and-forward mechanism</li> <li>Auto MDI-II, MDI-X</li> <li>Auto-Negotiation Protocol</li> <li>Address Look-Up</li> </ul>
<b>CONNECTORS</b>	<ul style="list-style-type: none"> <li>Power Connector: SCE2-B-76A -10ASN</li> <li>LAN/PoE Connectors: SCE2-B-76A06-075N</li> <li>PAN1 Connector: SCE2-B-76A06-075N</li> <li>PAN2,3 Connectors: SCE2-B-76A-145N</li> <li>Indication Per Port (Link/Activity, Speed, PoE)</li> <li>On/Off Switch</li> <li>Dark Mode</li> </ul>
<b>CHASSIS</b>	<ul style="list-style-type: none"> <li>Machined 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</li> </ul>
<b>STANDARDS</b>	<ul style="list-style-type: none"> <li>MILSTD-461E</li> <li>MILSTD-810F GM   IP67</li> </ul>





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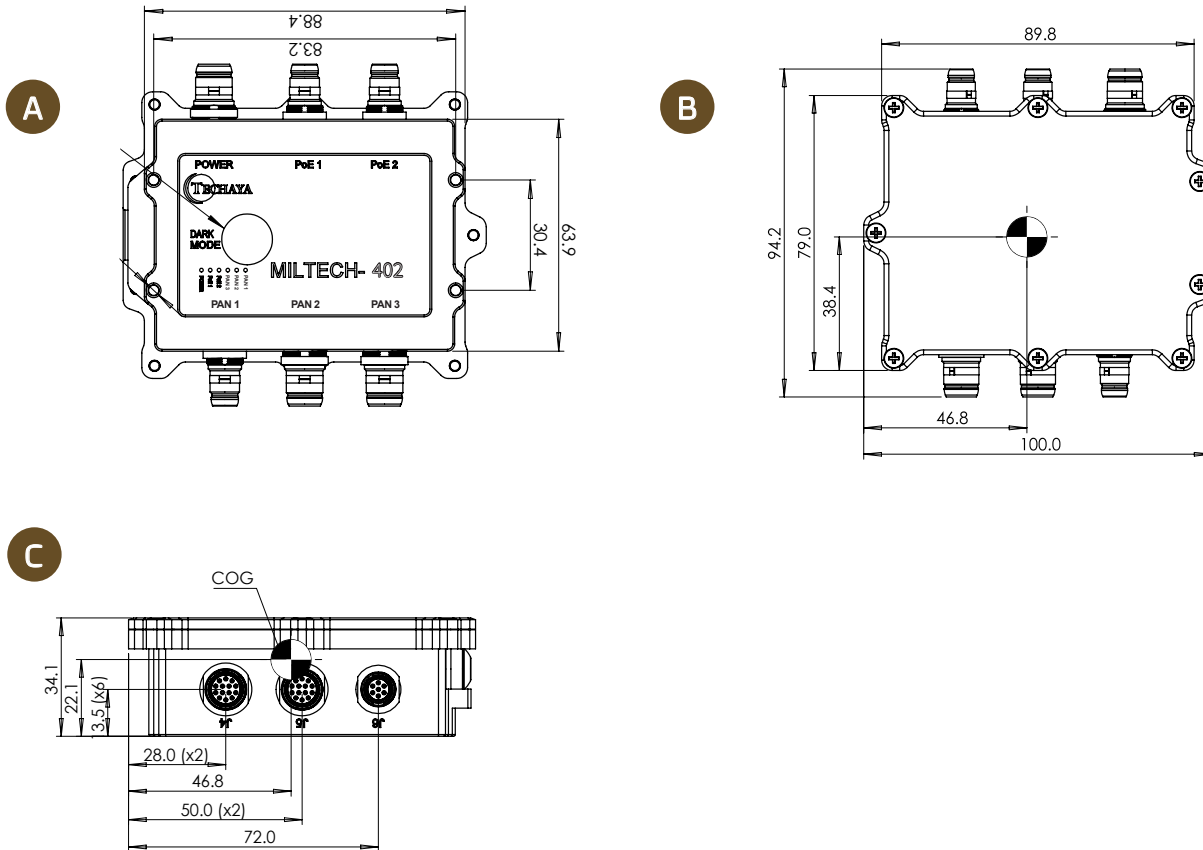
## SPECIFICATIONS

<b>PERFORMANCE</b>	<ul style="list-style-type: none"> <li>• 26.8 Mpps wire speed forwarding rate</li> <li>• 20 Gbps maximum forwarding bandwidth</li> <li>• 8K MAC Address</li> <li>• Wire-Speed Reception and Transmission</li> <li>• Integrated Address Look-Up Engine</li> <li>• Automatic Address Learning</li> </ul>
<b>STANDARDS COMPLIANCE</b>	<ul style="list-style-type: none"> <li>• IEEE 802.3 10 Mbps 10BASE-T (Ethernet)</li> <li>• IEEE 802.3u 100BASE-TX 100 Mbps (Fast Ethernet)</li> <li>• IEEE 802.3x Flow Control</li> </ul>
<b>POWER</b>	<ul style="list-style-type: none"> <li>• Voltage Input: 10VDC – 16.8VDC Battery Supply</li> <li>• Power Consumption: 140W maximum</li> <li>• Chassis grounding</li> <li>• Over Current Protection 1.5A &amp; 5A.</li> <li>• Overload, Over-Voltage &amp; Short Circuit Protection for PoE Ports.</li> <li>• Reverse Polarity Protection</li> </ul>
<b>PoE</b>	<ul style="list-style-type: none"> <li>• Total PoE Budget 35W</li> <li>• Maximum Consumption per port 15.4W</li> <li>• Dynamic Power Allocation</li> <li>• PoE Priority per port</li> <li>• Full Comply to IEEE 802.3af</li> <li>• No Power Degradation at +85°C</li> <li>• Operates from Regular Military 10-16.8VDC Smart Battery Supply (4 cell Li-ion)</li> </ul>
<b>ELECTROMAGNETIC</b>	<ul style="list-style-type: none"> <li>• Design to meet: MIL-STD-461E Electromagnetic compatibility</li> <li>• CE-102   CS-114   CS-115   CS-116   RE-102   RS-103</li> </ul>
<b>SHOCK/VIBRATION/HUMIDITY</b>	<ul style="list-style-type: none"> <li>• Design to meet: MILSTD-810F/G/GM:</li> <li>• 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.</li> <li>• IP67</li> </ul>
<b>PHYSICAL</b>	<ul style="list-style-type: none"> <li>• Dimensions: 100mm (L) x 94.2mm(W) x 34.1mm(H), including connectors &amp; hardware</li> <li>• Dimensions: 3.93”(L) x 3.7”(W) x 1.34”(H), including connectors &amp; hardware</li> <li>• Weight: 280gr</li> </ul>
<b>INSTALLATION</b>	<ul style="list-style-type: none"> <li>• Set of Four 4x40 mounting holes on bottom for mounting to any flat surface</li> <li>• Option for Strap Mounting Bracket</li> </ul>
<b>COOLING</b>	<ul style="list-style-type: none"> <li>• No Moving Parts. Passive Cooling.</li> </ul>
<b>OPERATING TEMP</b>	<ul style="list-style-type: none"> <li>• -40°C to +85°C (-40°F to +185°F) - Cold Start-Up</li> </ul>
<b>STORAGE TEMP</b>	<ul style="list-style-type: none"> <li>• -45°C to +85°C (-49°F to +185°F)</li> </ul>



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## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-402-000	5 x 10/100 Fast Ethernet Switch + PoE & Power Supply
800-A402-00	Strap Mounting Bracket
2-CBL402PWR	Power cable for MILTECH402
2-CBL402PAN1	PAN1 LAN+POWER Cable for MILTECH402
2-CBL402PAN2/3	PAN2/3 LAN+POWER Cable for MILTECH402
2-CBL402LANP	LAN/PoE cable for MILTECH402
2-CBL402LANP+	LAN/PoE + Management cable for MILTECH402