



## MILTECH 718

Ultra Compact 8 x 1GbE Embedded Military Board Level Ethernet Switch

One of the most exciting advancement in technology over the last decade has been unmanned vehicles including:

- Unmanned aerial vehicles (UAVs) or Drones
- Land autonomous vehicles (UGVs)
- Robots
- Other unmanned support vehicles



These vehicles must be agile, compact and highly intelligent. In order to support this sophisticated intelligence, these platforms may have to carry and connect a variety of Ethernet-based devices including computers, sensors, and targeting systems - all in compact platforms that must operate in extreme environmental conditions.

The MILTECH718 is a rugged, cost-effective, ultracompact board-level Ethernet switching solution (70x40mm). Equipped with 8GbE 10/100/1000Mbps ports, this board - level switch is ideal for integrating system level solutions through board-to-board connectors.

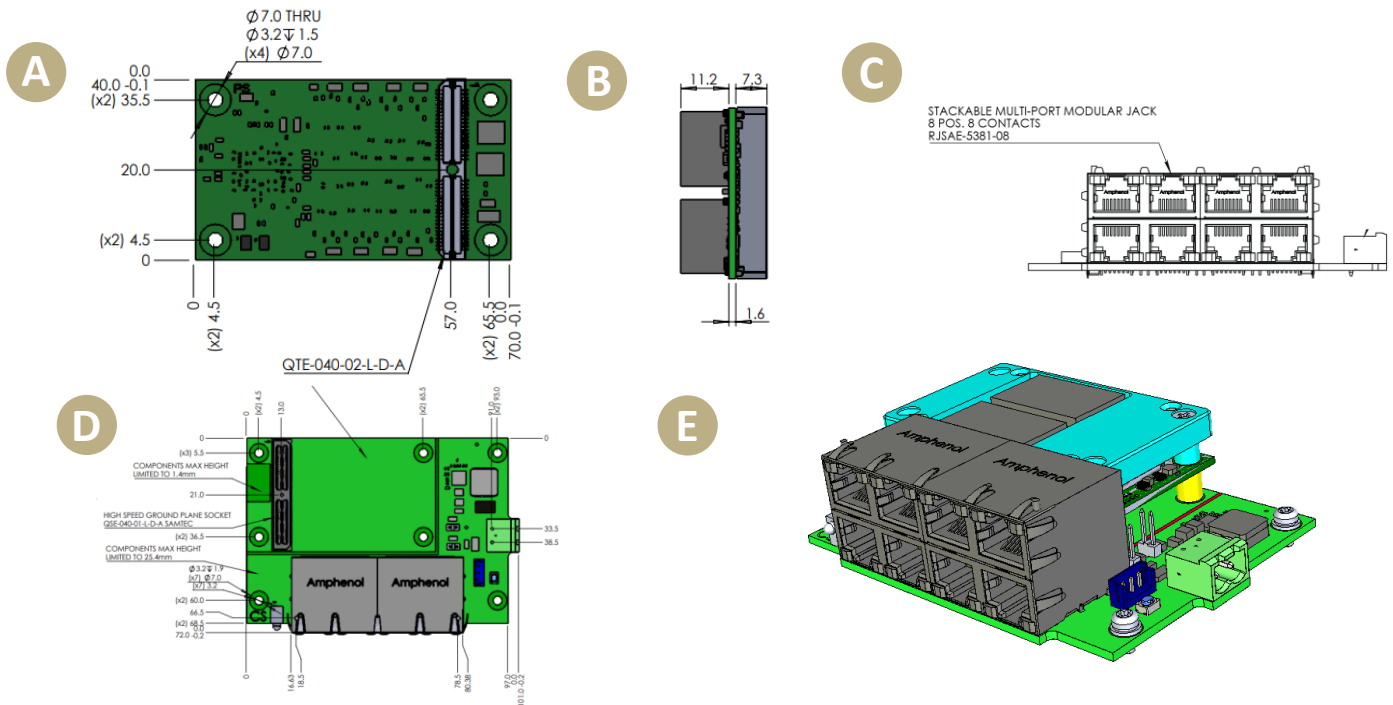
The MILTECH718 consumes only 5W of power and uses 9-32VDC. Its ruggedized design feature mechanical packaging enhancements designed for MILSTD-461E, MILSTD-810F/G and IP68 compliance when installed in an appropriate enclosure.

### SPECIFICATIONS

ETHERNET PORTS:	<ul style="list-style-type: none"> <li>• 8 x triple-speed 10/100/1000Mbps</li> </ul>
NETWORKING:	<ul style="list-style-type: none"> <li>• Full wire-speed forwarding rate</li> <li>• Cut through switch fabric</li> <li>• Auto MDI, MDI-X</li> <li>• Jumbo frame up to 10K Bytes</li> <li>• 16K mac addresses</li> </ul>
CONNECTORS:	<ul style="list-style-type: none"> <li>• Power + LAN Connector: Samtec board to board connector: QTE-040-02-L-D-A</li> </ul>
STANDARDS:	<ul style="list-style-type: none"> <li>• MILSTD-461E, MILSTD-810F/G, IP68 when installed in an appropriate chassis</li> </ul>
PERFORMANCE:	<ul style="list-style-type: none"> <li>• 2Mbit packet buffer</li> <li>• 25Gbps High-Performance Bandwidth</li> <li>• LED indication (Speed, Link/Activity) per port - Optional</li> <li>• Wire-Speed Reception and Transmission</li> <li>• Integrated Address Look-Up Engine</li> <li>• Automatic Address Learning</li> </ul>
STANDARDS COMPLIANCE:	<ul style="list-style-type: none"> <li>• IEEE 802.3ab 1000BASE-TX</li> <li>• IEEE 802.3u 100BASE-TX</li> <li>• IEEE 802.3x Flow Control</li> </ul>
POWER:	<ul style="list-style-type: none"> <li>• Voltage Input: 9-32Vdc Nominal</li> <li>• Power Consumption: 5W Typical</li> <li>• Chassis grounding</li> </ul>



SPECIFICATIONS	
ELECTROMAGNETIC:	<ul style="list-style-type: none"> <li>MIL-STD-461E Electromagnetic compatibility</li> <li>CE-102   CS-114   CS-115   CS-116   RE-102   RS-103</li> <li>*When installed in an appropriate chassis</li> </ul>
ENVIRONMENTAL:	<ul style="list-style-type: none"> <li>MILSTD-810F/G</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>IP68</li> <li>*When installed in an appropriate chassis</li> </ul>
PHYSICAL:	<ul style="list-style-type: none"> <li>Dimensions: 70mm (L) x 40mm(W)</li> <li>Dimensions: 2.75"(L) x 1.57"(W)</li> </ul>
INSTALLATION:	<ul style="list-style-type: none"> <li>4 x mounting holes for board to board mounting</li> </ul>
COOLING:	<ul style="list-style-type: none"> <li>No Moving Parts. Passive Cooling</li> </ul>
OPERATING TEMP:	<ul style="list-style-type: none"> <li>-40°C to +85°C (-40°F to +185°F) - Cold Start-Up</li> </ul>
STORAGE TEMP:	<ul style="list-style-type: none"> <li>-45°C to +85°C (-49°F to +185°F)</li> </ul>



### ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-718-000	Ultra Compact 1G Embedded Military Board Level Ethernet Switch, 8 x 10/100/1000TX, ESoB
1-718EV-000	Evaluation board for MILTECH718
1-718EV-001	Evaluation board MILTECH718 with conformal coating
1-CP718-000	Cooling Plate Kit for MILTECH-718