



MILTECH™ 9080

Power Distribution Unit with integrated Gigabit Ethernet Switch

The MILTECH 9080 is a comprehensive solution for power distribution and networking capabilities.

Modern platforms contain dozens of network devices that must be interconnected. The MILTECH9080 is an ideal solution for mobile Ethernet-equipped platforms utilizing both power distribution and IP networking such as:

- Shipboard
- Airborne systems
- Ground mobile applications
- Infantry base camp deployments

With the MILTECH 9080, by combining power and communication interfaces into a single device, it optimizes volume and cost efficiency and supports Ethernet communication to control, configure, and monitor each power channel.

The MILTECH™ M9080 is a MIL-STD fully managed network switch with 8 individual triple-speed (10/100/1000BaseT) and an 8-channel power distribution unit of 28V/30A per channel.



SPECIFICATIONS

GENERAL SPECIFICATIONS:	<ul style="list-style-type: none"> • Managed 8 x switched 10/100 /1000BaseT + 1000BaseFX(MM/SM) • 1 input, 8 outputs power distribution
CONNECTORS:	<ul style="list-style-type: none"> • J1 (Power): TV07DZ25-1AP or eq • J2 (Fiber optics): 16032202MD-01 or eq • J3 (Service): TV07ZRCI15-19SF404 or eq, (mating Connector D38999/26ZD19PN or eq) • J4-J11 (ethernet and power): TV07ZRCI17-26SF404 or eq, (mating Connector D38999/26ZE26PN or eq)



NETWORKING SPECIFICATIONS

<p>NETWORKING:</p>	<ul style="list-style-type: none"> • 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. • L3 static routing • Link Aggregation 802.3AD. • WEB, CLI, Telnet Management. • 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
<p>PERFORMANCE:</p>	<ul style="list-style-type: none"> • 26.8 Mpps wire speed forwarding rate • 20 Gbps maximum forwarding bandwidth • 8K MAC Address
<p>STANDARTS COMPLIANCE:</p>	<ul style="list-style-type: none"> • 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
<p>MANAGEMENT:</p>	<ul style="list-style-type: none"> • RS232 via specific contacts on J3

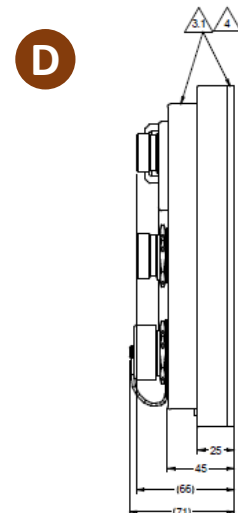
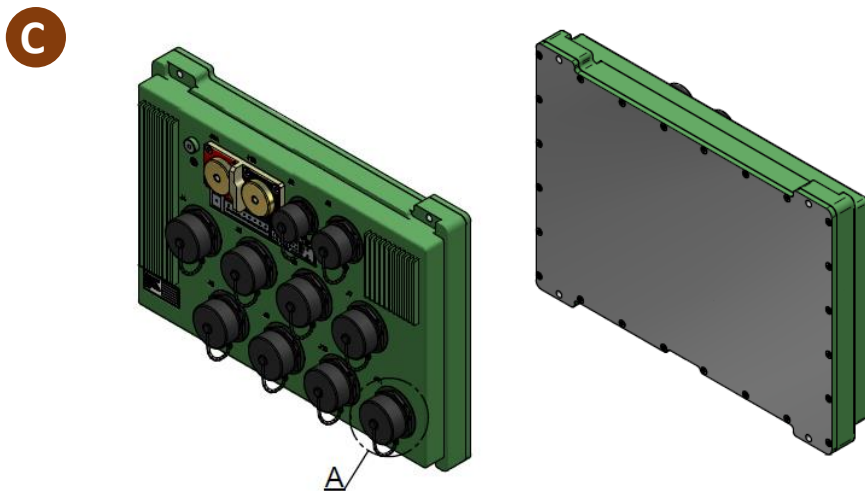
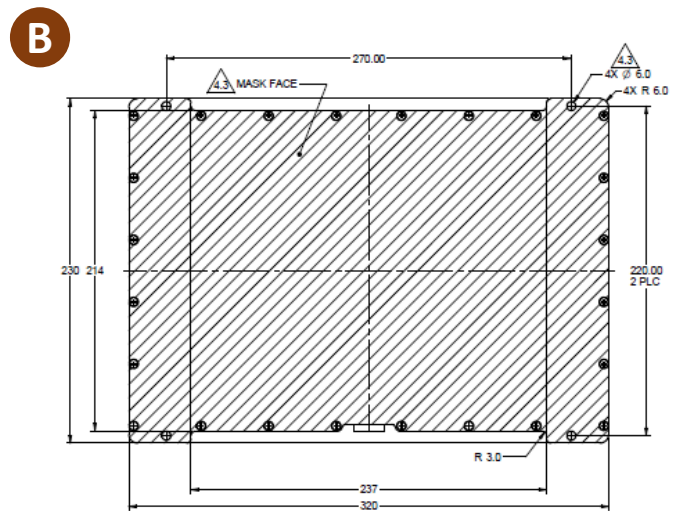
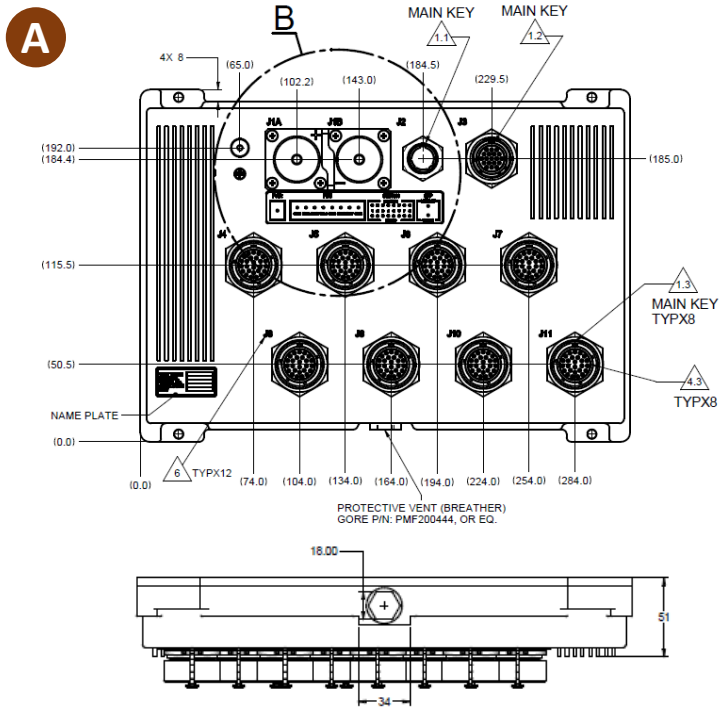
POWER DISTRIBUTION SPECIFICATIONS

<p>SPECICIAL FEATURES :</p>	<ul style="list-style-type: none"> • User defined maximum current per channel – Current Limit Protection • Large capacitance charge capability • 1 input, 8 outputs Power Distribution Unit • Configurable current breaker per Switch – Overload Protection Switch • I²T curve for overload switching delay duration • Configurable turn-on sequence by card wakeup and by discrete input • Ethernet Interface (Static & Dynamic IP configurations) • 5 Discrete inputs (DCI, RAT, WP,SHDN, DM) • 1 Discrete output (Fault, trip error output)
<p>INPUT POWER:</p>	<ul style="list-style-type: none"> • Input voltage, 16 to 40 VDC steady state, compliant with MIL-STD-704A-F, DO-160G, EN2282 • Surges and Spikes, IAW MIL-STD-704F and DO-160G, section 16.0 cat Z, Input clamp at 80V for device and loads • Under Voltage Lockout, Device and outputs turn off when input voltage drops below 5.5 V. Device turns back on when input voltage rises above 6V • Quiescent Current, 80mA maximum at 28V input.



POWER DISTRIBUTION SPECIFICATIONS

POWER CHANNELING RATING:	<ul style="list-style-type: none"> Number of Outputs: <ol style="list-style-type: none"> 1, current rating of 30A 2, current rating of 30A 3, current rating of 30A 4, current rating of 30A 5, current rating of 30A 6, current rating of 30A 7, current rating of 30A 8, current rating of 30A
DROP VOLGATE:	<ul style="list-style-type: none"> 175mV maximum at rated current
OVERLOAD PROTECTION:	<ul style="list-style-type: none"> Configurable from 2A up to 30A outputs rated current with 5% accuracy using OVERLOAD register.
SHORT LOAD PROTECTION:	<ul style="list-style-type: none"> Configurable from 10A to 125A with 20% accuracy using CURR_LIMIT parameter. Protection is active, preventing the short from spreading through the system.
PARALLELING OUTPUTS:	<ul style="list-style-type: none"> Outputs can be paralleled to achieve one common channel with a large current limit
CONTROL & INDICATION:	<ul style="list-style-type: none"> Ethernet: The PDU channels are controlled by 100Base-TX fast ethernet Communication through simple UDP messages Static IP and Dynamic IP are supported Discrete Inputs: DCI – Enables a Macro. RAT – Resets all tripped channels. WP – Write protect for the non-volatile RAM. DM – Dark Mode, front panel LEDs off. Measurements Input and output voltages. Outputs current. Device Temperature
ENVIRONMENTAL:	<ul style="list-style-type: none"> Humidity, DO-160G, section 6.3.2, Category B Salt-fog, MILT-STD-810H - 509.7 Altitude, MIL-STD-810H - 500.6 (Procedure I,II) Mechanical Shock, Saw-tooth, 40 g peak, 11 ms. Vibration, MIL-STD-810H - 514.8 (category 7, 24)
ELECTROMAGNETICS:	<ul style="list-style-type: none"> CE-102, CS-114, CS-115, CS-116, RE-102, RS-103
OPERATING TEMP:	<ul style="list-style-type: none"> -45°C to + 85°C (-49°F to +185°F)
STORAGE TEMP:	<ul style="list-style-type: none"> -45°C to + 85°C (-49°F to +185°F)
PHYSICAL:	<ul style="list-style-type: none"> Dimensions: 320mm x 230mm x 71 mm Dimensions: 12.6" x 9" x 0.28" Weight: 4.5Kg, 9.92 lbs



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-9080PDU-000	Managed 8 Port Ethernet Switch With 8 Port PDU
1-9080PDU-001	Managed 8 Port Ethernet Switch With 8 Port PDU, 1G FO Single Mode
1-9080PDU-002	Managed 8 Port Ethernet Switch With 8 Port PDU, 1G FO Multi Mode
29-040435-00	M9080H01 HARNESS J1 for MT9080
29-040436-00	M9080H010 HARNESS J3 for MT9080
29-040437-00	M9080H29 HANRESS J4-11 for MT9080