

RUGGEDIZED ETHERNET SWITCH

ToughSwitch[®] 2

Designed for Commercial & Military Transport Aircraft



ToughSwitch[®] 2 Ethernet switches eliminate problems with installing industrial grade devices in extremely harsh environments. Their rugged packaging and protection circuitry keep them working under the most extreme conditions that may cause industrial grade switches to fail. The ToughSwitch 2 exceeds MIL-STD requirements and strict environmental standards for shock, vibration and temperature.

- Meets Rugged, MIL-STD Requirements for Shock and Vibration
- Nine Real-time 10/100BaseT Ethernet Ports
- Fully Compliant with IEEE 802.3 and 802.3u Fast Ethernet Operation
- Port Activity and Power Indicators
- Auto-detecting 10/100 Mbps Operation

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CHARACTERISTIC	SPECIFICATION
ETHERNET INTERFACE	
Ports	Nine 10BaseT/100BaseT ports
Auto-negotiation	Supports 802.3X auto-negotiation between 10BaseT and 100BaseT on each port
Fast Ethernet	Fully compliant with IEEE 802.3 (10BaseT) and 802.3u (100BaseT) operation
Prioritization	Supports 802.1p layer 2
Duplex	Supports auto-sensing of full or half duplex on each port
Expansion	Supports one uplink port for network expansion
Indicators	Provides port activity indicator for each port plus power indicator
Connectors	Power: MS3470W10-6P Single Quadrx Ethernet: TV00RGQW9-5P Octal Quadrx Ethernet: TV00RGQW25-8p
PHYSICAL	
Weight	2.9 lbs
Height (Length)	6.5 in
Width	7.0 in
Depth	2.7 in
ENVIRONMENTAL	
Altitude (operating)	-1,800 to 25,000 ft, Ref: MIL-STD-810F
Altitude (non-operating)	-1,800 to 50,000 ft, Ref: MIL-STD-810F
Decompression (operating)	8,000 ft to 50,000 ft in 15 seconds
Over pressure	-15,000 ft for 10 min
Temperature (operating)	-40 to 71 deg C, Ref: MIL-STD-810F
Temperature (non-operating)	-54 to 85 deg C, Ref: MIL-STD-810F
Temperature Shock	Meets MIL-STD-810F
Humidity	5% to 100%

CHARACTERISTIC	SPECIFICATION
MECHANICAL	
Shock (operating)	20 g, 11 msec sawtooth, Ref: MIL-STD-810F
Shock (crash safety)	40 g, 11 msec sawtooth, Ref: MIL-STD-810F
Random Vibration (operating)	0.01 g ² /Hz to 500 Hz, -6 dB/oct to 2000 Hz, Ref: MIL-STD-810F
Random Vibration (non-operating)	0.01 g ² /Hz to 500 Hz, -6 dB/oct to 2000 Hz, Ref: MIL-STD-810F
EMC	
Conducted Emissions	MIL-STD-461E CE102
Radiated Emissions	MIL-STD-461E RE102
Conducted Susceptibility	MIL-STD-461E CS101, CS114, CS115, CS116
Radiated Susceptibility	MIL-STD-461E RS103
ELECTRICAL	
Input Voltage	10-30 VDC
Power Consumption (typical)	4 watts
Maximum Power	6 watts
MISCELLANEOUS	
MTBF	440,000 hours at 35°C



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