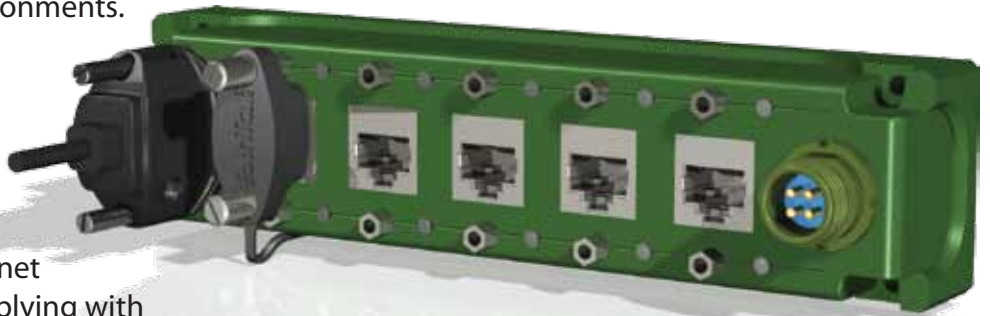


InTalTech's **MILCOMM™** ETH100-6P is a compact, rugged, Unmanaged (Managed is optional) 6-port Power-over-Ethernet (PoE) switch. The switch provides 10/100BaseTX Fast Ethernet and PoE on all 6 ports. The unit is an easy to install 4U²™ module fitting into a standard 19" 1U height rack. It is also suitable for direct mounting on vehicle or vessel. The product is designed for airborne, naval and ground mobile applications, while providing high levels of performance and reliability in the harshest environments.



Product Highlights

- 6-port PoE switch
- 10BaseT/100BaseTX Fast Ethernet
- High performance switch complying with
- MIL-STD-810F, MIL-STD-461F, MIL-STD-1275B
- Sealed casing and connectors, complying with IP65
- Rugged Industrial RJ45 connectors
- Operating temperature range of -35 to 70°C

Ethernet Performance

- Plug-n-Play operation
- Unmanaged operation (Managed is optional)
- Full/Half duplex operation
- Wire speed performance with max. 2K frames
- Auto negotiation for Ethernet speed/duplex/flow cont.
- Auto crossover for Ethernet MDI/MDIX wiring
- Auto polarity correction
- Quality of Service (QoS)
- Port-based VLAN
- Rapid Spanning Tree Protocol (RSTP)

Flexible Mounting

- 4U²™ Direct mounting on vehicle or vessel
- 4U²™ Fitting into standard 19" 1U height

Rugged Military Solution

- Compact, tough, corrosion proof Aluminum casing
- Conductively cooled unit – no moving parts
- Olive drab epoxy painting per MIL-C-22750F

Product Customization

- The product is open for customization, based on project volume

Technical Specification

Ethernet Interface	
Description	6-ports Power over Ethernet switch
Speed	10BaseT/100BaseTX
Main Standards	Compliant with IEEE 802.3/802.3u/802.3x
Plug-n-Play	Supported w/auto crossover, auto polarity
Power over Ethernet	Fully compliant to IEEE 802.3af on all 6 ports
Mode of Operation	Unmanaged operation (Managed is optional)
Duplex	Full Duplex/Half Duplex
Auto Negotiation	Auto Negotiation for Ethernet Speed, Duplex & Flow cont.
VLAN	Port-based VLAN, complies with IEEE 802.1Q
Network QoS	Port-based QoS with 4 traffic classes: IEEE 802.1p, TOS/DS, IPv6 TC, Port MAC.
Network Redundancy	Rapid/Multiple Spanning Tree Protocol (RSTP) complies with IEEE 802.1D/w/s
Network Security	Port/MAC based authentication, complies with IEEE 802.1X
Energy	Energy Efficient Ethernet, complies with IEEE 802.3az
Indicators	3 LED's: Link/Activity; Speed; Duplex/Collision
Connectors	
Power Connector	Glenair: 801-009-07NF9-4PA or compatible
Ethernet Connector	Female RJ45 Connector
Electrical	
Input Voltage	10 - 36 VDC
Input Power	105 W Max.
Input Power Protection	Reverse Polarity Protection
Mechanical	
Weight	~340 gram
Length	177 mm
Width	43.6 mm
Height	36.5 mm
Case Cooling	No moving parts, Passive Conductively cooled unit
Case Material	Corrosion proof Aluminum casing
Case Sealing	IP65 dust, oil and water sealing
Case Painting	Olive drab epoxy painting per MIL-C-22750F
Accessories (Not supplied with the product)	
Mech. Accessories	for fitting into a 19' rack (see accessories Data Sheet)

Mating Connectors (Not supplied with the product)

Description	P/N
Power Connector	801-007-16NF9-4SA or compatible
Ethernet Connector	Male RJ45 on cable*

(*) For ITT Rugged connection solutions see accessories data sheet

Ordering Information

Model	Description
ETH100-6P	Rugged RJ45 connectors
ETH100-6P-EPoE	Rugged RJ45 connectors w/Ext. PoE P.S
ETH100-6P-IPoE	Rugged RJ45 connectors w/Int. PoE P.S

Note 1: Preliminary version, Specification subject to change without notice
 Note 2: Images are for illustration purposes only
 Note 3: 1U□ means 1U width x 1U height; 10U□ fully fits 19" 1U slot

EMC (Designed to Meet)

MIL-STD-461F	Description	Freq. Range
Method CE102	Conducted Emission, Power lines (army)	10 KHz - 10 MHz
Method CS101	Conducted Susceptibility, Power lines (curve #2)	30 Hz - 150 KHz
Method CS114	Conducted Susceptibility, Bulk cable Inj. (curve #4)	10 KHz - 30 MHz
Method CS115	Conducted Susceptibility, Bulk cab. Inj.+ Imp. Exc.	
Method CS116	Conducted Susceptibility, Damped Sin. Transients	10 KHz - 100 MHz
Method RE102	Radiated Emission, Electric field (army & navy)	2 MHz - 18 GHz
Method RS103	Radiated Susceptibility, Electric field	2 MHz - 18 GHz

MIL-STD-1275B	Description
Paragraph 5.1.2.1, 5.1.3.1, 5.2.1	Steady-state DC voltage
Paragraph 4.4	Polarity reversal
Paragraph 5.1.2.3, 5.1.3.3, 5.2.3, 5.4.2.4, figure 4, 6	Voltage surges
Paragraph 5.1.2.2, 5.1.3.2, 5.2.2, figure 2	Voltage ripple
Paragraph 5.1.2.4, 5.1.3.4, 5.2.4, 5.4.2.3, figure 5, 7	Spikes imported
Paragraph 5.4.2.2	Spikes exported
Paragraph 3.1.7, 5.1.3.5, figure 3	Starting disturbances test

Environmental (Designed to Meet)

MIL-STD-810F	Operating	Storage
Temperature Method 501.4&502.4 Proc. I & II	-35 to 70°C	-40 to 71°C -40 to 71°C
Temperature Shock Method 503.4, Proc. I	15000 ft for 1h min.	40000 ft for 1h min.
Altitude Methode 500.4, Proc. I & II	3 cycles of 24h on each angle	
Solar Radiation Methode 505.4, Proc. I cat. A1	Rain rate 1.7lit/m ² /min. Wind velocity 64km/h For 30 min.	
Rain Methode 506.4, Proc. I	30°C to 60°C 85% to 95% rel. humidity 10 cycles of 24h	
Humidity Method 507.4,		
Dust & Sand Method 510.4, Proc. I	2 Cycles of 48 hours	
Salt Atmosphere Method 509.4,	Tracked & wheeled vehicles	
Fungus Method 508.5,		
Vibration Method 514.5, Proc. I cat. 20	Test period - 3 hours	
Loose cargo Method 514.5, Proc. II Cat. 5	40g, 11msec. Saw tooth peak pulse	
Functional shock Method 516.5 Proc. I		