

RUGGED 120 CHANNEL ETHERNET SWITCHBOX

HIGH SPEED SOLUTIONS

PDS - 308



DESCRIPTION

Amphenol's Rugged 120 Channel Ethernet Switch Box provides an unmatched level of flexibility to meet any system requirement. The switch box is a 120 port standalone Ethernet Switch box that is configurable for system connectivity, speeds, port types, and interoperability with various high-speed media converters and connectors for system interfacing.

Each port is capable of 10G Ethernet – some ports can either be configured as 10G-Base-T (also supporting 100-Base-T and 1G-Base-T) or 10G-Base-SR and 1G-Base-SX. The switching throughput is up to 1.2 Tbps when using all 120 ports on the switch box. In addition, the switch is non-blocking and low-latency for high-throughput architectures and applications. In Amphenol's state of the art Spirent communications testing center, the switch box is tested aggressively at line rates to RFC 2889 for switching and RFC 2544 for L2/L3 performance, latency, packet forwarding, and other key items.

The switch is manufactured using Amphenol's MIL Qualified MIL-DTL-38999 Series III connectors. These connectors contain standard AS39029 qualified Size 22D contacts, Octonet contacts and 48F MT Ferrule Fiber Optic contact assemblies.

Amphenol's Octonet Contacts are a proven design used in a variety of Military Programs. The Octonet is a Size 8 contact housing (4) differential pair contacts. It is a 100 Ohm impedance, capable of a data rate of 4 Gbps maximum per contact pair. The contact system has been tested and passed all the Qualification Requirements of AS39029 contact.

Our 48F MT Ferrule Fiber Optic Contacts are industry standard, very high density plastic ferrules available in either 12-fiber, 24-fiber versions, 48 pin, in multi-mode PC, single mode PC, or single mode APC configurations.

FEATURES & BENEFITS

- 96 ports of 10GBASE-SR (Can also be configured for 1GBase-SX)
- 24 ports of 100/1G/10GBase-T - auto negotiation
- Supports Ethernet multicast, IP multicast, IGMP, SNMP, & many other management options
- Host management processor
- Chassis with 38999 series III high performance & density connectors
- 10 LED indicators reporting all internal power supply voltage levels
- MIL-STD-704 28V DC power supply interface
- 50ms power holdup
- Embedded elapsed time indicator
- Circuit breaker for incoming power
- Self-encapsulated mounting screws

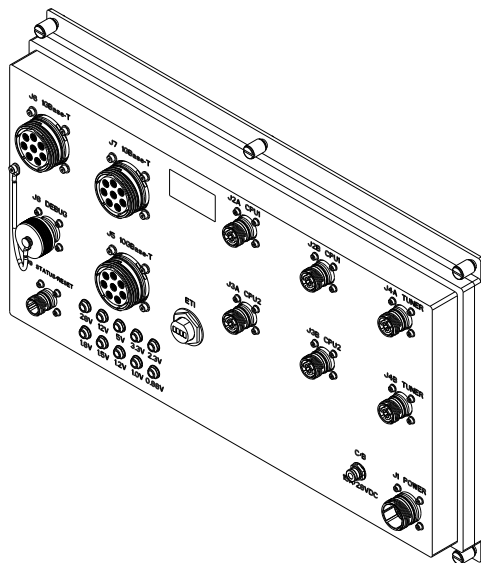
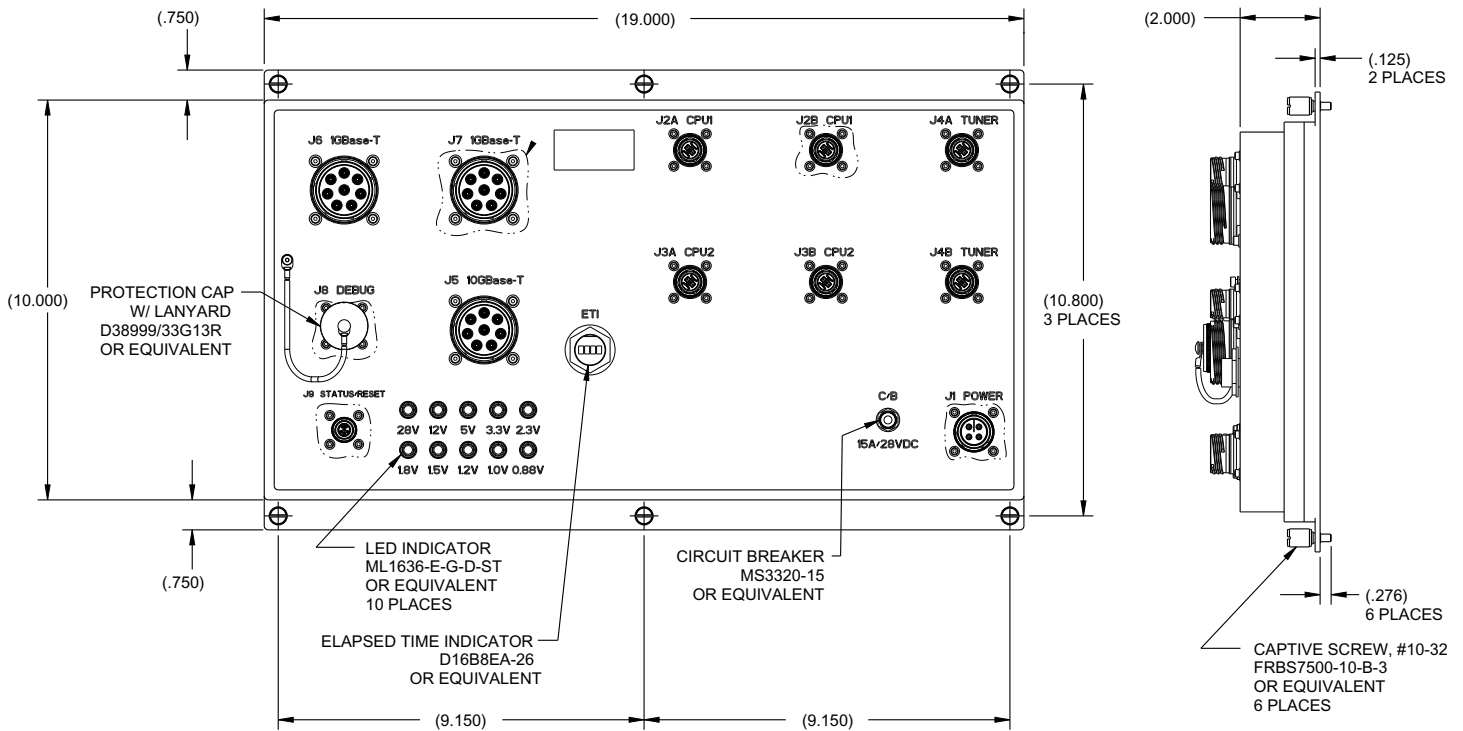
ENVIRONMENTAL

- -55 C to 85 C operating depending on altitude – perfect for military aerospace environments
- Conduction cooled for cold plate interface
- Vita 47 Shock and Vibration
- Plating & paint is configurable
- EMI/EMC per MIL-STD-461 E

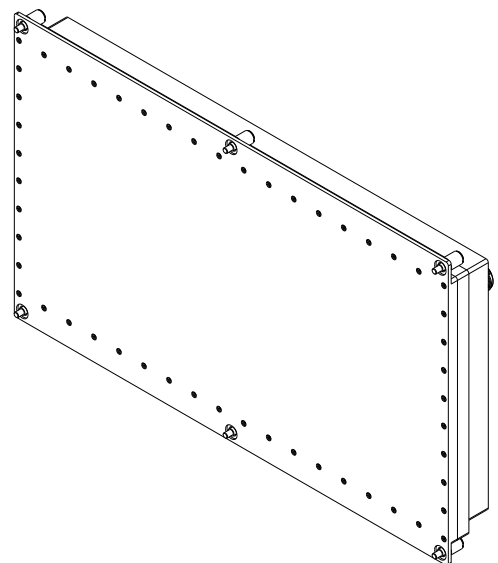
SOFTWARE FEATURES

Stacking	Defining IP Addresses	Managing System Files
Stacking Ring Topology	Configuring IP Addressing	Downloading System Files
Stacking Chain Topology	Defining IP Addresses	Firmware Download
Stacking Members and Unit ID	Defining ARP	Configuration Download
Removing and Replacing Stacking Members	Defining Domain Name Servers	Uploading System Files
Exchanging Stacking Members	Defining DNS Servers	Upload Type
Switching the Stacking Master	Defining DNS Host Mapping	Software Image Upload
Configuring System Time	Defining the Forwarding Database	Configuration Upload
Configuring Daylight Savings Time	Defining Static Forwarding Database Entries	Copying Files
Configuring SNTP	Defining Dynamic Forwarding Database Entries	Restoring the Default Configuration File
Polling for Unicast Time Information	Configuring Spanning Tree	Configuring Quality of Service
Polling for Anycast Time Information	Defining Classic Spanning Tree	Quality of Service Overview
Broadcast Time Information	Defining STP on Interfaces	VPT Classification Information
Defining SNTP Settings	Defining Rapid Spanning Tree	CoS Services
Configuring Device Security	Defining Multiple Spanning Tree	Defining General QoS Settings
Configuring Management Security	Defining MSTP Instance Settings	Configuring QoS General Settings
Configuring Authentication Methods	Defining MSTP Interface Settings	Restoring Factory Default QoS Interface Settings
Defining Access Profiles	Configuring SNMP	Defining Queues
Defining Profile Rules	SNMP v1 and v2c	Defining Bandwidth Settings
Defining Authentication Profiles	SNMP v3	Mapping CoS Values to Queues
Mapping Authentication Methods	Configuring SNMP Security	Mapping DSCP Values to Queues
Defining RADIUS Settings	Defining SNMP Security	Defining QoS Basic Mode
Defining TACACS+ Authentication	Defining SNMP View	Defining Basic Mode Settings
Configuring Passwords	Defining SNMP Group Profiles	Rewriting Basic Mode DSCP Values
Defining Local Users	Defining SNMP Group Members	Defining QoS Advanced Mode
Defining Line Passwords	Defining SNMP Communities	Setting Policy Binding
Defining Enable Passwords	SNMP Communities Basic Table	Managing Device Diagnostics
Configuring Network Security	SNMP Communities Advanced Table	Configuring Port Mirroring
Network Security Overview	Configuring SNMP Notifications	Viewing Statistics
Port-Based Authentication	Defining SNMP Notification Global Parameters .	Viewing Interface Statistics
Advanced Port-Based Authentication	Defining SNMP Notification Filters	Viewing Interface Statistics
Defining Port Authentication Properties	Defining SNMP Notification Recipients	Receive Statistics
Defining Port Authentication	SNMPv1,2c Notification Recipients	Transmit Statistics
Configuring Multiple Hosts	SNMPv3 Notification Recipients	Viewing Etherlike Statistics
Defining Authentication Hosts	Configuring Multicast Forwarding	Managing RMON Statistics
Viewing EAP Statistics	Multicast Forwarding	Viewing RMON Statistics
Defining Access Control Lists	Typical Multicast Setup	Configuring RMON History
Defining IP Based Access Control Lists	Multicast Operation	Defining RMON History Control
Defining MAC Based Access Control Lists	Multicast Registration	Viewing the RMON History Table
Binding Device Security ACLs	Multicast Address Properties	Configuring RMON Events
Managing Port Security	Defining Multicast Properties	Defining RMON Events Control
Enabling Storm Control	Adding MAC Group Address	Viewing the RMON Events Logs
Configuring System Logs	Adding IP Multicast Groups	Defining RMON Alarms
Defining General Log Properties	Configuring IGMP Snooping	
Viewing Memory Logs	Configuring MLD Snooping	
Viewing Flash Logs	Viewing IGMP/MLD IP Multicast Groups	
Configuring Interfaces	Defining Multicast Router Ports	
Configuring Ports	Defining Forward All Multicast	
Aggregating Ports	Defining Unregistered Multicast Settings	
Configuring LACP		
Configuring VLANs		
Defining VLAN Properties		
Defining VLAN Membership		
Defining VLAN Interface Settings		
Configuring GARP		
Defining GARP		
Defining GVRP		
Viewing GVRP Statistics		

DRAWING

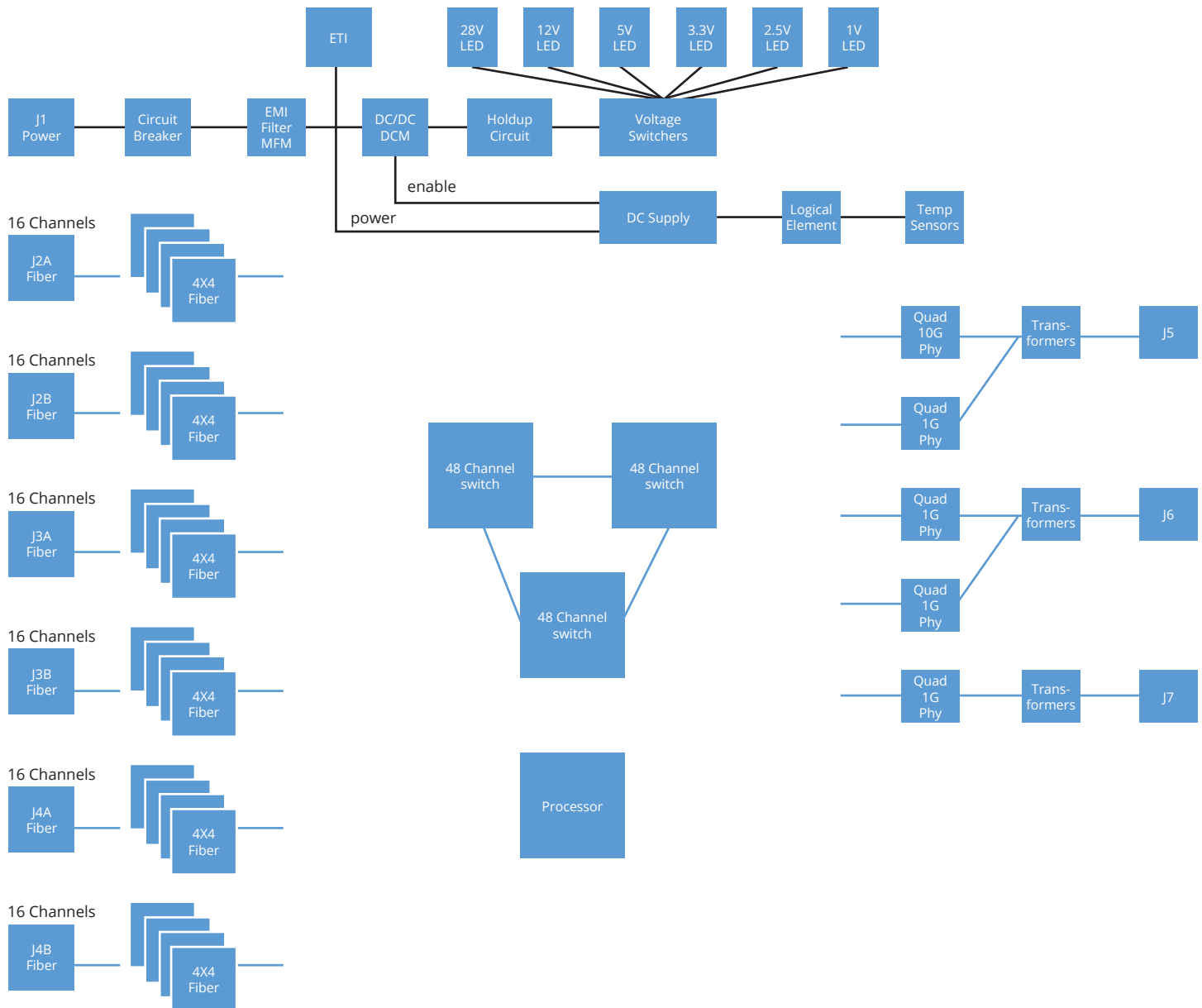


FRONT ISOMETRIC VIEW



REAR ISOMETRIC VIEW

BLOCK DIAGRAM



COMPANY PROFILE

ABOUT AMPHENOL AEROSPACE :

Amphenol Aerospace, a Division of Amphenol Corporation, is one of the largest manufacturers of interconnect products in the world for the Military, Commercial Aerospace and Industrial markets. Amphenol designs, manufactures and markets circular and rectangular, electronic, fiber optic, EMI/EMP filter, and a variety of special applications connectors and interconnect systems.

Our state-of-the-art facility is nestled at the foothills of the Catskill Mountains in Sidney, NY. The Amphenol complex houses many technologies including CNC machining, die-casting, molding, impact and extruding, plating, screw machining and process controls. Our fully equipped material evaluation lab and engineering organization utilize the latest in computer aided design software and analysis tools, allowing us to design, test, and qualify advanced interconnect systems. Amphenol's interconnect products are supplied to thousands of OEMs worldwide and are supported by our worldwide sales and engineering force, including the largest global network of electronic distributors.

The High Speed Solutions group is one of the fastest growing and most technologically advanced groups within Amphenol Aerospace. Every day, the High Speed Solutions team is developing custom connector and cable solutions for High Speed Copper, Fiber Optic, and Integrated applications. As a basic business philosophy, the team is dedicated to concentrating on those advanced and challenging market segments that demand an extraordinary level of supplier support and reaction. Our approach to implement this strategy is based on the following key principles:



Customer-Centric:

Our #1 priority is our customers who deserve quality product on time.

Accountable:

Clear owners, clear actions, clear results.

Reliable:

What we build matters and quality is imperative.

Enthusiastic:

Challenges create rewarding opportunities. Enthusiasm is contagious and we will spread it.

Quality Assurance:

Amphenol Aerospace has been awarded both AS9100 - Revision C and ISO9001:2008 Quality Assurance Certifications.