

# SPECIFICATIONS

## • APPLICABLE STANDARDS

IEEE 802.3u 100BaseFX  
IEEE 802.3z 1000BaseSX  
IEEE 802.3z 1000BaseLX  
IEEE 802.1p Priority (QoS)  
IEEE 802.1D Spanning Tree  
IEEE 802.1Q Tagged VLAN  
IEEE 802.3x Flow Control  
IEEE 802.3ad Link Aggregation

## • PORTS

### Model 065-7732AFSC:

**24** – Fixed 100FX ports, SC MM connectors (IEEE 802.3u 100FX).  
Maximum distance: 2,000 meters with 62.5/125 micron or 50/125 micron MM fiber.

**2** – Fixed 1000SX ports, SC MM connectors (IEEE 802.3z 1000SX).  
Maximum distance: 220 meters with 62.5/125 micron MM fiber or 55.0 meters with 50/125 micron MM fiber.

**1** – RS-232C DB-9 local console serial port (Default Parameters: 115,200 bps, 8 data bits, no parity, 1 stop bit)

### Model 065-7732AFSM:

**24** – Fixed 100FX ports, SC SM connectors (IEEE 802.3u 100FX).  
Maximum distance: 75 kilometers with 9/125 micron SM fiber.

**2** – Fixed 1000BaseLX Gigabit Ethernet ports, SC SM connectors (IEEE 802.3z 100LX).

Maximum distance: 20 kilometers with 9/125 micron SM fiber.

**1** – RS-232C DB-9 local console serial port (Default Parameters: 115,200 bps, 8 data bits, no parity, 1 stop bit)

## • LED STATUS INDICATORS

**Per Unit:** Power status

**Per Port:** LNK/ACT, FDX (2 LEDs) for each 100BaseFX port

## • FIBER INTERFACES:

### 100BaseFX multimode (Model 065-7732AFSC):

Type: LED  
Wavelength: 1300 nm nominal  
(1270 nm maximum, 1380 nm minimum)  
Maximum Output Power: - 14.0 dBm  
Minimum Output Power: - 20.0 dBm  
Sensitivity: -33.0 dBm  
Maximum Input Power: - 8.0 dBm  
Link Power Budget: 13.0 dB

### 1000BaseSX multimode (Model 065-7732AFSC):

Type: Laser Diode  
Wavelength: 850 nm nominal.  
Maximum Output: - 4.0 dBm  
Minimum Output Power: - 9.5 dBm  
Sensitivity: -13.5 dBm  
Maximum Input Power: - 13.5 dBm  
Link Power Budget: 4.0 dB

### 100BaseFX singlemode (Model 065-7732AFSM):

Type: MQW Laser  
Wavelength: 1300 nm nominal  
(1260 nm maximum, 1360 nm minimum)  
Maximum Output Power: - 7.0 dBm  
Minimum Output Power: - 15.0 dBm  
Sensitivity: -34.0 dBm  
Maximum Input Power: - 7.0 dBm  
Link Power Budget: 19.0 dB

### 1000BaseLX singlemode (Model 065-7732AFSM):

Type: MQW Laser  
Wavelength: 1300 nm nominal  
(1260 nm maximum, 1360 nm minimum)  
Maximum Output Power: - 7.0 dBm  
Minimum Output Power: - 15.0 dBm  
Sensitivity: -34.0 dBm  
Maximum Input Power: - 7.0 dBm  
Link Power Budget: 19.0 dB

## • PERFORMANCE

**Latency:** <4.5  $\mu$ s (LIFO).

**Throughput:** 1.48810 million pps (64-byte packets)

**Switch Fabric Speed:** 12.0 Gbps

**Packet Buffer Size:** 4 MB shared packet buffers.

**MAC Address Capacity:** 12 K MAC addresses

**Port Mirroring:** Through dedicated ports, port 1 & port 13

**RAM/ROM Capacity:** 2 MB

**Processor Type & Speed:** Motorola 850 @50 MHz

**Flash Capacity:** 8 MB

## • INTERNETWORKING PROTOCOLS SUPPORTED

### Bridging:

802.1D Spanning Tree  
802.1p/Q - GARP/GVRP

## • INTERNETWORKING PROTOCOLS SUPPORTED

### Routing:

RIP  
RIP-2  
DHCP-Relay  
ICMP Router Discovery Message

### IP Multicast:

IGMP Snooping  
IP Multicast Packet Filtering  
Maximum 128 VLANs and IP multicast sessions

## • VLAN CAPABILITIES

Port-based VLAN, up to 64 groups

IEEE 802.1Q Tag-based VLAN: up to 128 active VLANs possible

## • QoS CAPABILITIES

Supports 802.1p QoS with four level priority queue and 4 queues per output port

Packet transmission scheduled using Weighted Round Robin (WRR) protocol with user-defined weights.

Classification of packet priority based on either a VLAN tag on the packet or a user-definable port priority

## • LINK AGGREGATION

MAC-based Port Trunking with up to 4 trunking groups

Maximum 4 aggregated ports per trunking group

Load sharing based on source and destination MAC addresses

## • PORT SECURITY

Limited number of MAC addresses learned per port

Static MAC addresses stay in the filtering table

MAC address filtration to either deny or allow only given MAC addresses.

## • MANAGEMENT

Console port access via RS-232 cable

Telnet remote access

### SNMP agent:

MIB-2 (RFC1213)  
Bridge MIB (RFC1493)  
RMON MIB (RFC1757) - statistics, history, alarm and events  
VLAN MIB (802.1Q/RFC2674)  
Private MIB

Java applet-based MIB browser

Web browser support based on HTTP server and CGI parser

Kermit/TFTP software-upgrade capability

## • PHYSICAL CHARACTERISTICS

Dim: 17.4"Wx 16.4"Dx 1.8"H (440mm x 415mm x 45 mm)

standard 19-in rack mounting (hardware included).

Weight: 7.5 lbs. (3.4 kg)

## • ELECTRICAL CHARACTERISTICS

**Heat Dissipation/Hour:** 85 BTU/hr

**Maximum Wattage:** 52 W.

**Current:** 2.0 A maximum

**AC Input:** 100 – 260 V AC, 47 – 63Hz internal universal power supply

Specification applies to each of two included redundant, load-sharing, hot-swappable power supplies.

## • ENVIRONMENT

### Operating:

**Temperature:** 32°F to 104°F (0°C to 40°C)

**Relative Humidity:** 10 to 90%, non-condensing

### Non-Operating/Storage:

**Temperature:** -13°F to 158°F (-25°C to 70°C)

**Relative Humidity:** 10 to 90%, non-condensing

**Altitude:** 3,048 meters (10,000 feet)

**Shock & Vibration:** HP759, HP760 (similar to EN60068 IEC 68)

## • SAFETY

FCC Part 15 Class A & CE Mark Approval, VCCI Class A

UL 1950

## • IMMUNITY

**Generic:** EN 50082-1

**ESD:** IEC/EN 61000-4-2; 4 kV CD, 8 kV AD

**Radiated:** IEC/EN 61000-4-3; 3 V/m

**EFT/Burst:** IEC/EN 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)

## • WARRANTY

Five years, including power supply