

NCDS-065-7840

## SPECIFICATIONS

## • APPLICABLE STANDARDS

IEEE 802.3 10BaseT  
IEEE 802.3u 100BaseTX  
IEEE 802.3ab 1000BaseT  
IEEE 802.3z 1000BaseSX/LX  
IEEE 802.1p Priority (Quality of Service [QoS])  
IEEE 802.1D/802.1w/802.1s Spanning Tree & Rapid Spanning Tree Protocols  
IEEE 802.1Q Tagged VLAN with "Q-in-Q" support  
IEEE 802.3x Flow Control  
IEEE 802.3ad Link Aggregation  
IEEE 802.1x Access Control

## • PORTS

24 - RJ-45 10/100/1000BaseT/TX ports; ports 23 & 24 are Dual Media Gigabit Ethernet ports (RJ-45 10/100/1000BaseT/TX ports with corresponding Small Form-factor Pluggable [SFP] auto-detecting ports.)  
Broadcast/Multicast Storm Suppression enabled.

## • Optional SFP Modules:

**065-79SXMG:** 1000BaseSX SFP fiber optic module with LC multimode fiber connectors. Maximum distance: 220 meters with 62.5/125 micron fiber or 550 meters with 50/125 micron fiber.  
**065-79SXEDMG:** 1000BaseSX SFP fiber optic module with LC multimode fiber connectors. Maximum distance: 2 km with 62.5/125 micron fiber.  
**065-79LXMG:** 1000BaseLX SFP fiber optic module with LC singlemode fiber connectors. Maximum distance: 10 km with 9/125 micron fiber.  
**065-79LXMGED:** 1000BaseLX SFP with fiber optic module with LC singlemode fiber connectors. Maximum distance: 20 km with 9/125 micron fiber.

## • LED STATUS INDICATORS

**Per Switch:** Power, CPU  
**Per Port:** Link/Activity (separate for SFPs), 10/100/1000 speed for RJ-45 ports

## • PERFORMANCE

**Latency:** < 4.5  $\mu$ s (LIFO).  
**Throughput:** 1.48810 million pps (64-byte packets)  
**Switch Fabric Speed:** 48.0 Gbps (non-blocking, wire speed performance)  
**MAC Address Capacity:** 8 K MAC addresses  
**Frame Buffer:** 400 KB, on-chip  
**Jumbo Frame Support:** up to 9 Kbytes frame size  
**Port Mirroring:** Inbound and Outbound, assignable to any port

## • NETWORK SECURITY

IEEE 802.1x access control with RADIUS authentication  
Management Access Policy Control (ACL)

## • INTERNETWORKING PROTOCOLS SUPPORTED

**LACP (Link Aggregate Control Protocol):**  
IEEE 802.1ad Port Trunking with 8 trunking groups; up to 12 ports for each group  
**GVRP/GARP (GARP VLAN Registration Protocol / Generic Attribute Registration Protocol):**  
IEEE 802.1Q with GVRP/ GARP  
**Multicasting:**  
Supports IGMP snooping including active and passive mode  
IEEE 802.1Q with GVRP/ GARP  
**STP/RSTP (Spanning Tree Protocol / Rapid Spanning Tree Protocol):**  
IEEE 802.1d/1w/1s STP

## • MANAGEMENT

**Access Methods:** Console port access via RS-232C DB-9 local console serial port, Telnet remote access, SNMP agent, and Web browser.  
**Software Upgrade Capability:** Via Kermit/TFTP

## • MANAGEMENT

**VSM (Virtual Stacking Management)**

Up to 16 switches can be managed via a single IP address. Can be a mix of Signamax 065-7840, 065-7726S, 065-7726SPOE, and/or 065-7820POE switches within the 16 switch Virtual Stack.  
Virtual stacking via switch uplink channels; no extra proprietary stacking hardware required  
Distributed stacking; no physical central wiring closet is needed

**SNMP v1, v2c Network Management  
RFC 1213 MIB (MIB-II)**

Interface MIB  
Address Translation MIB  
IP MIB  
ICMP MIB  
TCP MIB  
UDP MIB  
SNMP MIB

**RFC 1757 RMON MIB**

Statistics Group 1  
History Group 2  
Alarm Group 3  
Event Group 9

**RFC 1493 Bridge MIB  
RFC 1643 Ethernet MIB  
Enterprise MIB**

## • VLAN CAPABILITIES

Port-based VLAN  
IEEE 802.1Q Tag-based VLAN; up to 4,096 active VLANs possible  
Q-in-Q VLAN supported, to efficiently enable Subscriber Aggregation

## • QoS CAPABILITIES

Supports Layer 4 TCP/UDP port and ToS classification  
Supports 802.1p QoS with two level priority queue  
Supports priority in a Q-in-Q tag for Bandwidth Control  
Supports bandwidth rating per port  
Ingress and egress rate limits: 1000 Mbps in 1 Mbps increments

## • PHYSICAL CHARACTERISTICS

**Dimensions:** 17.4"W x 8.3"D x 1.73"H  
(442mm x 210mm x 44 mm)  
Standard 19-in rack mounting (hardware included)  
**Weight:** 7.5 lbs (3.4 kg)

## • ELECTRICAL CHARACTERISTICS

Maximum Wattage: 30 W.  
**Model 065-7840:**  
AC Input: 100 ~ 240 VAC, 50 ~ 60 Hz internal universal power supply  
**Model 065-7840DC, special order only:**  
DC Input: -48 VDC, LUG Type - 2 pin connector block

## • OPERATING ENVIRONMENT

Temperature: 32°F to 122°F (0°C to 50° C)  
Relative Humidity: 5 to 90%, non-condensing

## • SAFETY

FCC Part 15 Class A & CE Mark Approval

## • WARRANTY

Five years, including power supply

• Optional SFP Gigabit Ethernet Modules Sold Separately