

28-Port Stackable Managed Switch: 24-Port 10/100/1000BaseT/TX ports plus Four 1000Base/10GB SFP+ Slots



Signamax' 065-7880 is a new 10 GB-capable leader of the Signamax Ethernet switch product line. It provides non-blocking performance for 24 10/100/1000BaseT/TX Ports plus 4 1000Base/10GB SFP+ only ports, for a total of 28 ports. This new switch supports modern capabilities including Static Routing, IPv6, SSH management, QoS and Tagged VLAN, and full SNMP management at a surprisingly low cost. The 4 SFP+ slots (and four SFP Dual Media ports) use auto-detected SFP+ and SFP modules for fiber optic switch interconnection at extended distances. Both ring and star Gigabit backbone network architectures are possible with full automatic failover. The included SNMP management package is complete and comprehensive, with web browser, local console, and Telnet remote terminal connections and real time updating. The 065-7880 communicates with network management systems such as HP OpenView™ via SNMP for enterprise-wide status display, statistical monitoring, and switch control. Enhanced Layer 2+ features, IPv6 and IPv4 Static routing, and IEEE 802.1p Quality of Service / 802.1Q Tagged VLAN / IP Type of Service support make the Signamax 065-7880 an excellent foundation for establishing or adding to an Enterprise network.

KEY FEATURES

- Dual speed SFP+ slots for 10 Gigabit Ethernet or Gigabit Ethernet fiber connectivity.
- 802.3az Energy Efficient Ethernet standard.
- IPv6 and s-Flow support.
- IEEE 802.1AB LLDP (Link Layer Discovery Protocol) and LLDP-MED (Media Endpoint Discovery) support.
- Supports RSTP/MSTP/STP for Ethernet redundancy.
- IP Multicast Filtering through IGMP Snooping V1, V2 & V3.
- Supports port-based VLAN and IEEE 802.1Q VLAN Tagging and GVRP.
- IEEE 802.1p QoS with eight priority queues.
- Full wire-speed forwarding rate.
- IPv6 and IPv4 Static routing supported.
- IEEE 802.3ad Link Aggregation Control Protocol (LACP) support.
- RS-232 console, Telnet, SNMP V1, V2c & V3, RMON, SSL/SSH, HTTP (Web Browser), and TFTP Management.
- Supports Command Line Interface in RS-232 Console.
- Supports IEEE 802.1x Security.
- Bandwidth Rate Control, via port-policer.
- Per-port programmable MAC address locking.
- Static Secure MAC addresses supported.
- Port mirroring, both Inbound and Outbound.
- Supports Network Time Protocol (NTP).

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
065-7880	24-Port 10/100/1000 Stackable Managed Switch plus 4 1000Base/10GB SFP+ only ports

Note: Optional SFP Gigabit Ethernet & Fast Ethernet Modules, and SFP+ 10 GB Modules Sold Separately. Please see for complete selection.

SPECIFICATIONS

• APPLICABLE STANDARDS

IEEE 802.3 10BaseT
 IEEE 802.3u 100BaseTX
 IEEE 802.3ab 1000BaseT
 IEEE 802.3z 1000BaseSX/LX
 IEEE 802.3ae 10Gb Ethernet over fiber
 IEEE 802.1p Priority (Quality of Service [QoS])
 IEEE 802.1s Multiple Spanning Tree Protocol
 IEEE 802.1w Rapid Spanning Tree Protocol
 IEEE 802.1D Spanning Tree Protocol compatible
 IEEE 802.1Q Tagged VLAN with GVRP
 IEEE 802.3x Flow Control
 IEEE 802.1x Access Control
 IEEE 802.1AB LLDP (Link Layer Discovery Protocol) / LLDP-MED (Media Endpoint Discovery)
 IEEE 802.3 ad Link Aggregation Control Protocol (LACP)

• PORTS

24 - RJ-45 10/100/1000BaseT/TX ports.
4 - 1000Base / 10 Gb ports with SFP+ receptacles only. Broadcast/Multicast Storm Suppression enabled.
Optional SFP+ 10 Gb Ethernet and SFP Gigabit Ethernet and Fast Ethernet Modules are also available. Please visit www.signamax.com for additional details.

• LED STATUS INDICATORS

Per Switch: Power
Per Port: Copper: Status (LINK/ACT), 10/100/1000M
 SFP Port: Status (LINK/ACT/SPD), 100/1000M
 SFP+ Port: Status (LINK/ACT/SPD), 1000M/10Gb

• PERFORMANCE

Latency: <4.5 µs (LIFO).
Throughput, per switch: 95.232 Mpps
Switch Fabric Speed: 128 Gbps (non-blocking, wire speed performance)
MAC Address Capacity: 32 K MAC addresses
Jumbo Frame Support: up to 10056 bytes frame size
Port Mirroring: Inbound and Outbound, assignable to any port

• NETWORK SECURITY

SSL/SSH (Secure Socket Layer / Secure Shell)
 IEEE 802.1x access control with RADIUS and TACACS+
 Management Access Policy Control (ACL):
 Supports up to 512 entries. Drop or rate limitation based on:
 • Source and destination MAC, VLAN ID or IP address, protocol, port,
 • Differentiated services code point (DSCP) / IP precedence
 • TCP/ UDP source and destination ports
 • 802.1p priority
 • Ethernet type
 • Internet Control Message Protocol (ICMP) packets
 • TCP flag

• INTERNETWORKING PROTOCOLS SUPPORTED

LLDP (Link Layer Discovery Protocol) and LLDP-MED (Media Endpoint Discovery): IEEE 802.1AB
Link Aggregation Control Protocol (LACP) Trunking: IEEE 802.3ad; 26 trunking groups; up to 4 ports for each group.
GVRP/GARP (GARP VLAN Registration Protocol / Generic Attribute Registration Protocol): IEEE 802.1Q with GVRP/ GARP
Multicasting: Supports IP Multicast Filtering via IGMP Snooping V1, V2 & V3
STP/RSTP/MSTP (Spanning Tree Protocol / Rapid Spanning Tree / Multiple Spanning Tree Protocol): IEEE 802.1d/1w/1s
Static Routing: IPv4 and IPv6 Unicast Static Routing

• 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
 Private VLAN Edge
 Voice VLAN

• QoS CAPABILITIES

Supports Layer 4 TCP/UDP port and ToS classification
 Supports 802.1p QoS with eight hardware queues
 Supports Strict Priority and Weighted Round Robin (WRR)
 Supports priority in a Q-in-Q tag for Bandwidth Control Classification:
 • Port based
 • 802.1p VLAN priority based
 • IPv4/IPv6 precedence / DSCP based
 • Differentiated Services (DiffServ)
 • Classification and re-marking ACLs
 Supports bandwidth rating per port
 • Ingress policer
 • Egress shaping and rate control

• MANAGEMENT

Access Methods: Console port access via RS-232C / RJ-45 local console serial port (cable included with switch), SSH/SSL, Telnet, SNMP, or HTTP.

Software Upgrade Capability: Via HTTP, TFTP in-band, Console out-of-band

SNMP v1, v2, and V3 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

Other Management:

- HTTP/HTTPS; SSH
- DHCP Client/ DHCPv6 Client
- Cable Diagnostics
- Ping
- Syslog
- Telnet Client
- IPv6 Management

• PHYSICAL CHARACTERISTICS

Dimensions: 17.4" (W) x 8.1" (D) x 1.73" (H)
 (442mm x 211mm x 44 mm)

Housing: Metal case.

19-in rack mounting hardware included.

Weight: 5.3 lbs (2.4 kg)

• ELECTRICAL CHARACTERISTICS

AC Input: 100 ~ 240 V AC, 50 ~ 60 Hz internal universal power supply

• OPERATING ENVIRONMENT

Operating Temperature: 32°F to 113°F (0°C to 45° C)
Storage Temperature: -4°F to 158°F (-20°C to 70° C)
Relative Humidity: 10 to 90%, non-condensing
Altitude: 10,000 feet or less (3,000 meters or less)

• CERTIFICATIONS

Emissions: CE, FCC Part 15 Class A

• WARRANTY

Five years, including power supply