ETHERNET SWITCHES

BENEFITS
- **RJ-45 port support Auto MDI/MDI-X Function**
- **Store-and-Forward Switching Architecture**
- **Back-plane (Switching Fabric): 1.6Gbps**
- **1Mbits Packet Buffer**
- **2K MAC Address Table**
- **IP-30 Protection**
- **DIN Rail and Wall Mount Design**
- **Wide-range Redundant Power Design**
- **Power Polarity Reverse Protect**
- **Support IEEE802.1d Spanning Tree**

- **Support IEEE802.1w Rapid Spanning Tree**
- **Port Based VLAN**
- **Support 802.1 Q Tag VLAN**
- **X-Ring, Dual Homing, and Couple Ring Topology**
- **Provide redundant backup feature and the recovery time below 300ms**
- **Support IEEE 802.1p Class of Service,**
- **Per port provides 4 priority queues**
- **Port Base, Tag Base and Type of Service Priority**
- **Ingress Packet Filter and Egress Rate Limit**
- **Broadcast/Multicast Packet Filter Control**
- **Port Mirror: Monitor traffic in switched networks**

6 10/100TX + 2 100FX w/ X-Ring Managed Industrial Switch

SPECIFICATIONS

STANDARD COMPLIANCE
IEEE 802.3 10Base-T Ethernet, IEEE 802.3x Flow Control and Back Pressure
IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet
IEEE 802.1d Spanning Tree/ IEEE802.1w Rapid Spanning Tree
IEEE 802.1p Class of Service, IEEE 802.1Q VLAN Tag

HARDWARE SPECIFICATION
Switch Architecture:
- Back-plane (Switching Fabric): 1.6Gbps
- Packet throughput ability (Full-Duplex): 1.19Mpps @64bytes

Transfer Rate:	14,880pps for Ethernet port, 148,800pps for Fast Ethernet port
Memory Buffer:	1Mbits
MAC Address:	2K MAC address table
Flash ROM:	512Kbytes
DRAM:	8Mbytes

Connector:
- 10/100TX: 6 x RJ-45 with auto MDI/MDI-X function
- 100M fiber: 2 x SC type connector for Single-mode or Multi-mode type fiber cable

Network Cable:
- 10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable, EIA/TIA-568 100-ohm (100m),
- 100Base-TX: 2-pair UTP/STP Cat. 5 cable, EIA/TIA-568 100-ohm (100m)

Optical Cable:
- SC (Multi-mode): 50/125um~62.5/125um, SC (Single-mode): 9/125um,
- Available distance: 2km (Multi-mode)/30km (Single-mode)
- Wavelength: 1310nm (Multi-mode/Single-mode)
- WDM13 (Single-mode):TX-1310/RX-1550 nm /25km
- WDM15 (Single-mode):TX-1550/RX-1310 nm /25km

Protocol: CSMA/CD

LED:
- Per port: Link/Activity (Green), Full duplex/Collision (Yellow),
- Per unit: Power (Green), Power 1 (Green), Power 2 (Green), Fault (Yellow), Master (Green)

Power Supply:
- DC 12~48V, Redundant power with polarity reverse protect function and connective removable terminal block for master and slave power

Power Consumption: 7.68 Watts
Operating Humidity: 5%~95% (Non-condensing)
Operating Temperature:
- Standard: -10°~60°C; Wide Operating Temperature (-40°~75°C)
- Storage Temperature: -40°~85°C

Case Dimension:	IP-30 Case protection, (WxDxH) 54 x 105 x 135 mm
Installation:	Provides DIN rail kit and wall mount ear for wall mount or DIN-type cabinet install

EMI:
- FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS), CE EN-61000-4-4 (EFT), CE EN61000-4-5 (Surge), CE EN61000-4-6 (CS), CE EN61000-4-8, CE EN61000-4-11, CE EN61000-4-12, CE EN61000-6-2, CE EN61000-6-4

Safety:	UL, cUL, CE/EN60950-1
Stability Testing:	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)

SOFTWARE FEATURE
Management: SNMP v1 v2c, Web interface management
SNMP MIB:
- RFC 1213 MIBII, RFC 1493 Bridge MIB, RMON RFC 1757, RFC 2674 VLAN MIB, RFC 1643 Ethernet like MIB, RFC1215 Trap MIB, IGMP MIB, Private MIB for switch information, X-Ring, port alarm, TFTP firmware upgrade, reset, port mirror, IP security

VLAN: Supports Port based VLAN and IEEE802.1Q Tag VLAN
Both of port based and Tag based VLAN group up to 64 VLANs

Spanning Tree:
- Supports IEEE802.1d Spanning Tree and IEEE802.1w Rapid Spanning Tree

X-Ring: Supports X-Ring, Dual Homing, and Couple Ring, Provide redundant backup feature and the recovery time below 300ms

Quality of Service:
- The quality of service determined by port, Tag and IPv4 Type of service

Class of Service:
- Supports IEEE802.1p class of service, per port provides 4 priority queues

Port Mirror: Supports TX packet only or both of TX and RX packet
IGMP: Supports IGMP v1 and Query mode. Up to 256 groups

IP Security:
- Supports 10 IP addresses that have permission to access the switch management

Bandwidth Control:
- Supports ingress packet filter and egress packet limit
- The egress rate control supports all of packet type and the limit rates are 128Kbps, 256Kbps, 512Kbps, 1Mbps, 2Mbps, 4Mbps, and 8Mbps
- Ingress filter packet type combination rules are Broadcast/Multicast/Unknown
- Unicast packet, Broadcast/Multicast packet, Broadcast packet only and all of packet. The packet filter rate can be set follow as: 1, 2, 4, 8, 16, 32, 64 Mbps

Flow Control:
- Supports Flow Control for Full-duplex and Back Pressure for Half-duplex
System Log: Supports System log record and remote system log server
SMTP: Supports SMTP Server and 4 e-mail accounts for receiving event alert
Relay Alarm:
- Provides one relay output for port breakdown, power fail and provide DIP switch to mask link down port, Alarm Relay current carry ability: 1A @ DC24V
SNMP Trap:
- Up to 3 Trap stations, Cold start, Port link up, Port link down, Authentication Failure, Private Trap for power status, Port Alarm configuration, Fault alarm, X-Ring topology change
DHCP: Provide DHCP client function to obtain IP address from DHCP server
SNTP: Supports SNTP to synchronize system clock in Internet

Firmware Update:
- Supports TFTP firmware update, TFTP backup and restore
Configuration upload and download:
- Supports text format configuration file for system quick installation

10/100TX + 2 100FX w/ X-Ring Managed Industrial Switch

PART NO.	DESCRIPTION
065-7426F216	Signamax industrial switch 6x10/100BaseT/Tx + 2xSC MM,Man, -10+60°C

NETWORK CONNECTIVITY SYSTEMS

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