Industrial Rack Managed Network Switch

SIL 71684M

Industrial Managed Top-of-Rack Switch

SIL 716E8C4M
28 Port Industrial Rack
Managed Network Switch
16 RJ45, 8 Combo, 4 SFP+

SIL 716S8C4M
28 Port Industrial Rack
Managed Network Switch
16 SFP, 8 Combo, 4 SFP+

OVERVIEW

The fully managed, layer 3 rack mountable SilverNet 7168C4M Series Switches are designed for industrial use. The sleek Top-of-Rack design enables efficient spacing in rack cabinets, making them ideal for installation in enterprise, ITS and utlity market networks.

Two versions of the Industrial Gigabit Managed Switch are available; the first offers 16 x Gigabit Ethernet Downlink Ports, 8 x RJ45+SFP Combo Ports and 4 x 10Gb SFP Uplink Ports. The second version offers 16 x Gigabit SFP Downlink Ports, 8 x RJ45+SFP Combo Ports and 4 x 10Gb SFP Uplink Ports.

The fanless design of the SIL 7168C4M utilises natural cooling and ensures proficient heat dissipation. This allows more power consumption to be used elsewhere, increasing processing power.

In areas where effective use of space and interconnectivity are vital, for example large scale enterprise networks, these Switches are ideal. They have an extended temperature range which enables them to continue their high-performance in unconditioned outdoor cabinets and industrial environments. Encased in a high strength metal enclosure, these Switches are designed to withstand the elements.

Reliable and robust, the SilverNet 7168C4M is fully compliant with the IEEE802.3, u, z, ab, x, az, ah standards, as well as IEEE802.1X + 802.1Q.

The fibre optics ports feature a modular SFP slot suitable for any kind of MSA-compliant pluggable 1.25Gbps SFP transceiver or 10Gbps SFP+ transceiver.

Features

- 16 x GE, 8 x Combo, 4 x 10G SFP+ Ports / 16 x SFP, 8 x Combo, 4 x 10G SFP+ Ports
- Up to 12Mbit Cache, supporting up to 4k Video Traffic
- 128Gbps Bandwidth
- 10Kbytes Maximum Packet Length
- 16K MAC Address Table
- Store and Forward (Full/Half Duplex Mode)
- <7µs Response Time
- Supports IEEE802.3, u, z, ab, x, az, ah
- Supports IEEE802.1X + IEEE802.1Q

- Dual Redundant Power Supply
- Wide range power design (15~56VDC)
- Operating temperature (-40°C ~+75°C)
- Overcurrent Protection
- Reverse Polarity Protection
- Ethernet ESD protection
- IP40 Protection
- High Strength Metal Enclosure

Distributed By:

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Technical Specifications

Part No.	SIL 716E8C4M	SIL 716S8C4M
Ports		
Total number of Ports	28	
Gigabit Ethernet	16	8
SFP	8	16
Combo	8 x RJ45 ; 8 x SFP	
SFP+	4	
Performance		
Switch Bandwidth	128Gbps	
MAC address size	16K	
Processing type	Store and Forward	
Time delay	<7μs	
Jumbo Frames	10KBytes	
Packet buffer space	12Mbits	
MTBF	>250,000 Hours	
Power		
Power input	9~56VDC, Redundant (2 Inputs Available)	
Power consumption	24W Full Load	
Standards		
Ethernet Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z IEEE 802.3ae, IEEE 802.3x, IEEE 802.1D-2004 IEEE 802.1w, IEEE 802.1s, IEEE 802.1p IEEE 802.1Q IEEE 802.1X, IEEE 802.3ad	
EMC/EMI/EMS	FCC Part15 Class A CE-EMC/LVD RoHS EN61000-4-2 (ESD):LEVEL 4 IEC 6100-4-2 (EFT):LEVEL 4 IEC 6100-4-2 (Surge): LEVEL 4 IEC 6100-4-2 (CS)：LEVEL 3 IEC 61000-4-2(PFMP) : LEVEL 5 EN61000-4-3 (RS):LEVEL 4	
Shock	IEC60068-2-27	
Freefall	IEC60068-2-31	
Hit	IEC60068-2-27	
Physical		
Dimensions and weight	400mm x 300mm x 45mm ; 2.8kg	
Enclosure	IP40 Protection, Aluminium Alloy	
Mounting	1U Rack Mount	
Environment		
Operating Temperature	-40~+75℃ (Storage -40~+85℃)	
Humidity	5-90% (non-condensing)	

Switching Features

Part No.	SIL 716E8C4M ; SIL 716S8C4M
Software Features	
Management Interface	CLI(Console/Telnet(RFC854)), WebUI(HTTPS), SNMPv3
Management	ARP, Flow Control, DDM, DHCP Server/Client, IPv4/IPv6, LLDP, LLDP-MED, UDLD, Port Mirror, RMON, SNMPv1/v2c/v3, Syslog, Telnet,
File Management	Firmware Upgrade/Backup, Dual Images, Configuration Download/Backup, Multiple Configuration, TFTP(RFC783), HTTP, UART
Management Access	Management VLAN, Management ACL(256)
Filter	802.1Q, GMRP, GVRP, IGMP Snooping v1/v2/v3, IGMP Querier V2/V3 QinQ VLAN
Redundant network	Link Aggregation, STP/RSTP/MSTP/ERPSv2, Auto Edge Port, BPDU Filtering, Self Loop Detection
VLAN	Support IEEE 802.1Q 4K VLAN, QINQ, Double VLAN, Voice LAN, Surveillance VLAN(Auto/Manual), Multicast VLAN Registration(MVR)
Time Management	Local, SNTP, NTP
Unicast Routing	OSPFv2, RIPv1/v2, Static Route
QOS	Support Queue Scheduling(WRR, WFQ, Strict Priority , Hybrid(WRR+SP or WFQ+SP); Priority Queue(8 queues/port); Class of Service(Port-based, 802.1p, IP TOS Precedence, IP DSCP), Trusted QoS, Rate Limitation
ACL Type	L2/L3/L4, MAC-based, IPv4-based, IPv6-based
Diagnostic Method	Support port mirroring, Syslog, Ping
Security	Broadcast Storm Control, HTTPS/SSLv2v3,TLSv1 RADIUS, TACACS+,AAA SSHv1/v2,Support DHCP Snooping, Option 43/82, 802.1X security access, Support user hierarchical management, ACL access control list, Support DOS, port-based MAC filtering/binding, MAC whitelist
MIB	Ethernet-like MIB, MIB-II, MIB-I, Bridge MIB, Bridge MIB extensions, RMON MIB(1,2,3 & 9 groups, RFC2737 Entity, RFC2863 Interface Group, SNMPCommunity-MIB

Top View