



Switches

Cost Effective Solutions for Network Migration to Fiber

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Switches Product Line Card

Enterprise

Fast Ethernet	7 or Less Ports	8 to 12 Ports	13-18 Ports	19 or More Ports	Managed	PoE	PoE+	PoE++	APR
(8) 10/100Base-TX Ports		S8TXA							
(24) 10/100Base-TX Ports				S24TXA					
Gigabit Ethernet									
(4) 10/100/1000Base-T Ports + (4) 100/1000 SFP Slots		SM4T4DPA			X				
(8) 10/100/1000Base-T Ports		S8TB							
(8) 10/100/1000Base-T Ports + (2) 100/1000Base-X Dual Speed SFP ports		SM8TAF2DPA			X	X	X		
(8) 10/100/1000Base-T Ports + (2) 100/1000 SFP/RJ-45 Combo Ports		SM8TAT2DPB			X	X	X		X
(8) 10/100/1000Base-T Ports + (2) 100/1000 SFP Slots		SM8TAT2SA			X	X	X		X
(8) 10/100/1000Base-T Ports + (2) 100/1000 SFP/RJ-45 Ports		SM10T2DPA			X				
(12) 100/1000Base-X SFP Slots + (2) 1G/10GBase-X SFP+ Slots + (2) 10/100/1000Base-T RJ-45 Ports			SM12DP2XA		X				
(16) 10/100/1000Base-T Ports + (2) 100/1000 SFP Slots			SM16TAT2SA		X	X	X		X
(16) 10/100/1000Base-T Ports + (2) 100/1000 SFP/RJ-45 Combo Ports			SM16TAT2DPA		X	X	X		X
(24) 10/100/1000Base-T Ports + (2) 100/1000 SFP/RJ-45 Combo Ports				SM24TAT2DPA	X	X	X		X
(24) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP/RJ-45 Combo Ports				SM24TBT2DPA	X	X	X	X	X
(24) 10/100/1000Base-T Ports + (2) 100/1000 SFP Slots				SM24TAT2SA	X	X	X		X
(20) 100/1000Base-X SFP Ports + (4) 100/1000Base-X SFP/RJ-45 Combo Ports				SM24DPB	X				
(20) 10/100/1000Base-T Ports + (4) 100/1000 SFP/RJ-45 Combo Ports + (2) 100/1000 SFP Ports				SM24T6DPA	X				
(24) 10/100/1000Base-T Ports + (4) 1000/10GBase SFP+ Ports				SM24TAT4XA	X	X	X		X
10 Gigabit Ethernet									
(4) 1000/10GBase SFP+ Ports	S4140				X				
(24) 100/1000Base SFP Ports + (4) 1000Base/10GBase SFP+ Ports				S4224 Series	X				

*Continued on Next Page



SM8TAT2SA SM16TAT2SA SM24TAT2SA



SM24TBT2DPA



Note: APR - Auto Power Reset - is a unique feature offered on our PoE Devices to remotely reboot and power-cycle unresponsive PoE powered devices, saving time and money.

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Switches Continued

Hardened

Fast Ethernet	7 or Less Ports	8 to 12 Ports	13-18 Ports	19 or More Ports	Managed	PoE	PoE+	APR
(4) 10/100Base-TX Ports + (1) 100Base-FX Port	SISTF101x-241-LRT							
(4) 10/100Base-TX PoE Ports + (1) 100Base-FX Port	SISTP101x-141-LRT					X		
(5) 10/100Base-TX Ports or (8) 10/100Base-TX Ports	SISTF1010-2x0-LRT	SISTF1010-2x0-LRT						
(6) 10/100Base-TX Ports + (1 or 2) 100Base-FX Port	SISTF1013-x62-LRT	SISTF1013-x62-LRT						
(7) 10/100Base-TX Ports + (3) 100/1000Base-X Combo Ports		SISTM1040-173D-LRT			X			
(16) 10/100Base-TX Ports + (2) 10/100/1000Base-T Ports or (2) 100/1000Base-X SFP Combo Ports			SISTF1040-162D-LRT					
(16) 10/100Base-TX Ports + (2) 10/100/1000Base-T Ports or (2) 100/1000Base-X SFP Combo Ports			SISTM1040-262D-LRT-B		X			

Gigabit Ethernet

(4) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots	SISTG1040-242-LRT							
(4) 10/100/1000Base-T PoE+ Ports + (2) 100/1000Base-X SFP Slots	SISTP1040-342-LRT					X	X	
(4) 10/100/1000Base-T PoE+ + (2) 10/100/1000Base-T RJ-45 + (2) 100/1000Base-X SFP Ports		SISPM1040-362-LRT			X	X	X	X
(4 or 7 or 8) 10/100/1000Base RJ-45 Ports + (1 or 2) 100/1000Base-X SFP Ports + (2) 100/1000/2500Base-X SFP Ports		INDURA			X			
(8) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots		SISTG1040-282-LRT						
(8) 10/100/1000Base-T PoE+ Ports + (2) 100/1000Base-X SFP Slots		SISTP1040-382-LRT				X	X	
(8) 10/100/1000Base-TX Ports + (4) 100/1000Base-X SFP Ports		SISGM1040-184D-LRT			X			
(8) 10/100/1000Base-T PoE+ Ports + (4) 100/1000Base-X SFP Ports		SISPM1040-384-LRT-C			X	X	X	X

10 Gigabit Ethernet

3 Full size bays – accommodates (8) port 100/1000Base modules, 1 Half size bay – accommodates (2) or (4) port 1000/10Gb SFP module	SISGM-CHAS-Lx	SISGM-CHAS-Lx	SISGM-CHAS-Lx	X
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SISPM1040-362-LRT & SISPM1040-384-LRT-C



SISTM1040-173D-LRT



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Switches

Enterprise Switching Built for a High Level of Service and Reliability

You need your enterprise network to do more, for more users, for less. As a result, new technologies may have outpaced your cabling infrastructure. You could begin an expensive upgrade of your cabling plant, or, you could use Transition Networks solutions to migrate to a fiber-based cabling system at a fraction of the cost.

Transition Networks' portfolio of multilayer Ethernet switching products are designed to facilitate low-cost network evolution by allowing customers to only pay for the port counts and features they need. Our switching portfolio offers customers unique configurations and a high level of service and reliability, all while serving to ease network stress caused by high bandwidth demand and applications requiring advanced capacity to run them.

Transition Networks solutions can link new fiber cabling with legacy copper-based network devices – including RJ-45 based switches, routers, and NICs – to greatly reduce the expense of a fiber upgrade while improving bandwidth, distance and security throughout the network.



Hardened Ethernet Devices - Built to Perform

Transition Networks is an industry leader with over 30 years experience designing fiber integration products which affordably deliver the reliability that today's industrial networks require. With unparalleled experience serving the unique needs of our customers, world-class 24/7 support, and a Lifetime Hardware Warranty, Transition Networks is the choice for cost-effective fiber integration, extending from the office to the factory floor, and other environments where the need for performance in extended temperatures is critical.

Our hardened Ethernet switches and media converters all provide interoperable networking solutions that will operate under extreme conditions, improve network performance and reduce operational expenses. Providing Class 1, Div 2 certified products for hazardous environments; shock, vibration and temperature enduring products for transportation networks; and intelligent products that meet security protocols for maximum protection and control in utility and process networks, Transition Networks offers the ability to affordably integrate the benefits of fiber optics into any data network – in any application – in any environment.

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S8TXA

Unmanaged Fast Ethernet Switch

(8) 10/100Base-TX Ports



This is a (8) 10/100Base-TX port compact switch with an internal power supply. This switch Auto-Negotiates 10/100Mbps connections for fast and simple switching in workgroup, small office and home environments.

Ordering Information

S8TXA
(8) 10/100Base-TX ports

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: S8TXA-NA

-NA = Country Code

- NA = North America
- LA = Latin America
- EU = Europe
- UK = United Kingdom
- SA = South Africa
- JP = Japan
- OZ = Australia
- BR = Brazil

Features

- Small Form Factor
- Internal Power Supply
- Auto-Negotiation
- Auto-MDI/MDIX
- Supports IEEE 802.3x flow control for full-duplex and back pressure flow control for half-duplex
- Wire-speed packet filtering and forwarding rate
- Supports IEEE 802.3az energy efficient Ethernet

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3az IEEE 802.3x
Connectors	(8) 10/100 RJ-45
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
MAC Address	2K MAC address table
Memory Buffer	96K bytes
Status LEDs	1 power LED (Power: Green) 8 port LEDs Link / Activity (Green)
Backplane	1.6 Gbps
Dimensions	Width: 7.6" [193 mm] Depth: 3.31" [84 mm] Height: 1.02" [26 mm]
Power Consumption	1.72 Watts (max)
Power Input	Internal Power: 100 - 240VAC
Environment	Operating: 0°C to 40°C Humidity: 10% to 90% (non-condensing)
Weight	9.6 lbs. [4.35 kg]
Compliance	Safety: LVD Emissions: FCC Class A, CE Mark, UL Listed, KCC
Warranty	Lifetime

S8TB

Unmanaged Gigabit Ethernet Switch (8) 10/100/1000Base-T Ports



This (8) 10/100/1000Base-T port switch with Auto-MDI/MDIX is an unmanaged multi-port Switch that can be used to build high-performance switched networks. This switch is a store-and-forward device that offers low latency for high speed networking. The switch is designed for the core of the network backbone computing environment to solve traffic block problems at SME (small, medium enterprise) business.

Features

- Small Form Factor
- Internal Power Supply
- Auto-Negotiation
- Auto-MDI/MDIX
- Supports full and half-duplex for 10/100Mbps and full-duplex for 1000Mbps
- Wire-speed packet filtering and forwarding rate
- Support Jumbo Frame up to 9K bytes
- Supports IEEE 802.3az energy efficient Ethernet

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3az
Connectors	(8) 10/100/1000 RJ-45
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
MAC Address	8K MAC address table
Memory Buffer	128K bytes
Status LEDs	(8) port LEDs speed (Green: 1000Mbps, Amber 10/100 Mbps), Link/Activity (flashing)
Backplane	16 Gbps
Dimensions	Width: 3.94" [100 mm] Depth: 6.3" [160 mm] Height: 1.28" [32.5 mm]
Power Consumption	3.5 Watts (max)
Power Input	Internal Power: 100 - 240VAC
Environment	Operating: 0°C to 40°C Humidity: 10% to 90% (non-condensing)
Weight	9.6 lbs. [4.35 kg]
Compliance	Safety: LVD Emissions: FCC Class B, CE Mark, UL Listed, CCC
Warranty	Lifetime

Ordering Information

S8TB
(8) 10/100/1000Base-T ports

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: S8TB-NA

-NA = Country Code
-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

SM4T4DPA

Managed Layer 2 Gigabit Ethernet Switch

(4) 10/100/1000Base-T Ports + (4) 100/1000Base-X SFP Slots



This switch is a high performance Layer 2 managed switch with (4) 10/100/1000Base-T copper ports and (4) dual speed 100/1000Base-X SFP slots.

Features

- Supports Jumbo Frame up to 9K bytes
- Authentication – RADIUS 802.1x, TACACS+
- Security - Supports SSH/SSL
- Port based or tagged (802.1Q) VLAN, QinQ double tag VLAN, Guest VLAN
- Bandwidth Allocation Ingress and Egress
- DHCP Snooping including option 82
- IP-MAC binding for security
- ACL based on Ethernet Type / ARP / IPv4 for packets permit or deny, rate limitation and port copy
- LLDP (Link Layer Discovery Protocol)
- SYSLOG for device management
- IEEE 802.3az Energy Efficiency
- Single IP management

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB
Connectors	(1) RJ-45 Console port (4) 10/100/1000 RJ-45 ports (4) 100/1000 SFP slots
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
MAC Address	8K MAC address table
Backplane	16 Gbps
Dimensions	Width: 8.66" [220 mm] Depth: 6.26" [159 mm] Height: 1.69" [44 mm]
Power Input	Internal power: 100-240VAC
Environment	Operating: 0°C to 40°C Humidity: 5% to 90% (non-condensing)
Weight	3.85 lbs. [1.75 kg]
Compliance	Safety: LVD Emissions: FCC Class A, CE
Warranty	Lifetime

Ordering Information

SM4T4DPA
(4) 10/100/1000Base-T ports
+ (4) 100/1000Base-X SFP slots

Optional Accessories (sold separately)

SFP Modules

Mounting Brackets

RMSM4-01
19" Rack Mount Bracket

BRSMB-01
Wall Mount Bracket

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM4T4DPA-NA

-NA = Country Code

- NA = North America
- LA = Latin America
- EU = Europe
- UK = United Kingdom
- SA = South Africa
- JP = Japan
- OZ = Australia
- BR = Brazil

Features (Continued)

- Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP).
- Support IGMP Snooping V1/V2/V3, IGMP Proxy and GVRP
- Supports 8 hardware queues with Strict priority and WRR. Per port bandwidth management
- Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- Port Based VLAN, IEEE 802.1Q tag-based, 4096 VLAN entries, MAC-based VLAN, Private VLAN Edge, Priority VLAN override
- Firmware Update, configure backup/restore through Web GUI and TFTP
- Support IPv4/IPv6 dual protocol stack
- Redundant Ring Protection Protocol

SM10T2DPA

Managed Layer 2 Gigabit Ethernet Switch

(8) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP/RJ-45 Combo Ports



This switch is a high performance Layer 2 managed switch with (8) 10/100/1000Base-T copper ports and (2) dual speed 100/1000Base-X SFP/RJ-45 Combo ports.

Key benefits include: secure and high performance connections, flexible copper/fiber dual uplinks, and unified communications with open standard.

Features

- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS 802.1x, TACACS+
- Security - Support SSH/SSL
- Port based or tagged (802.1Q) VLAN, QinQ double tag VLAN, Guest VLAN
- Bandwidth Allocation Ingress and Egress
- DHCP Snooping including option 82
- IP-MAC binding for security
- ACL based on Ethernet Type / ARP / IPv4 for packets permit or deny, rate limitation and port copy
- LLDP (Link Layer Discovery Protocol)
- SYSLOG for device management
- IEEE 802.3az Energy Efficiency

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB
Connectors	(1) RJ-45 Console Port (8) 10/100/1000 RJ-45 ports (2) 100/1000 SFP/RJ-45 ports
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
MAC Address	8K MAC address table
Backplane	20 Gbps
Dimensions	Width: 11.02" [280 mm] Depth: 6.53" [166 mm] Height: 1.73" [44 mm]
Power Input	Internal power: 100-240VAC
Environment	Operating: 0°C to 40°C Humidity: 5% to 90% (non-condensing)
Weight	4.2 lbs. [1.90 kg]
Compliance	Safety: LVD Emissions: FCC Class A, CE
Warranty	Lifetime

Ordering Information

- SM10T2DPA**
(8) 10/100/1000Base-T ports
+ (2) 100/1000Base-X SFP/RJ-45 combo ports
- Optional Accessories** (sold separately)
- SFP Modules**
- Mounting Brackets**
- RMSM8-01**
19" Rack Mount Bracket
- BRSM8-01**
Wall Mount Bracket

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM10T2DPA-NA

-NA = Country Code
 -NA = North America
 -LA = Latin America
 -EU = Europe
 -UK = United Kingdom
 -SA = South Africa
 -JP = Japan
 -OZ = Australia
 -BR = Brazil

Features (Continued)

- Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP).
- Support IGMP Snooping V1/V2/V3, IGMP Proxy and GVRP
- Supports 8 hardware queues with Strict priority and WRR. Per port bandwidth management
- Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- Port Based VLAN, IEEE 802.1Q tag-based, 4096 VLAN entries, MAC-based VLAN, Private VLAN Edge Priority VLAN override
- Firmware Update, configure backup/restore through Web GUI and TFTP
- Support IPv4/IPv6 dual protocol stack

Switches

SM24T6DPA

Managed Layer 2 Gigabit Ethernet Switch

(20) 10/100/1000Base-T Ports + (4) 100/1000Base-X SFP/RJ-45 Combo Ports + (2) 100/1000Base-X SFP Slots



This switch is a high performance Layer 2 managed switch with 52Gbps switching capacity. It provides (20) 10/100/1000 copper ports, (4) 100/1000Base-X SFP/RJ-45 Combo Ports, and (2) 100/1000Base-X dual speed SFP slots.

Features

- Support IPv4/IPv6 dual protocol stack
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS 802.1x, TACACS+
- Security - Support SSH/SSL
- Port based or tagged (802.1Q) VLAN, MAC based VLAN, Management VLAN and Private VLAN Edge
- DHCP Relay including option 82
- L2/L3/L4 ACLs Support MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security
- DHCP Server
- Device Management System (DMS): Graphic Monitoring, Grouping, Traffic Monitoring

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ab IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad
Connectors	(1) RJ Console Port (20) 10/100/1000 RJ-45 ports (4) 100/1000 SFP/RJ-45 Combo ports (2) 100/1000 SFP slot
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
MAC Address	8K MAC address table
Backplane	52 Gbps
Dimensions	Width: 17.4" [442 mm] Depth: 8.3" [211 mm] Height: 1.73" [44 mm]
Power Input	100 - 240VAC
Environment	Operating: 0°C to 50°C Humidity: 5% to 90% (non-condensing)
Weight	5.3 lbs. [2.4 kg]
Compliance	Safety: IEC 60950-1 EMC: EN55022 Class A, IEC61000-3, EN55025, IEC61000-4, CISPR PUB.22 Class A, FCC Part 15, ICES-003 Class A
Warranty	Lifetime

Ordering Information

SM24T6DPA

(20) 10/100/1000Base-T ports
+ (4) 100/1000Base-X SFP/RJ-45 Combo ports
+ (2) 100/1000Base-X SFP slots
(19" Rack Mount Brackets Included)

Optional Accessories (sold separately)

SFP Modules

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM24T6DPA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk.
- IGMP: Support IGMP Snooping V1/V2/V3, GVRP, IGMP Proxy, and IGMP Querier
- Quality of Service: Supports 8 egress queues per port enable differentiated management of up to 8 traffic types across the stack. Strict priority and WRR
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC-based VLAN, Private VLAN, Guest VLAN, Voice VLANs and Management VLAN
- IPv4 / IPv6 Static Routing
- Firmware Update, configure backup/restore through TFTP and HTTP

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SM24DPB

Managed Layer 2 Gigabit Ethernet Switch

(20) 100/1000Base-X SFP Slots + (4) 100/1000Base-X SFP/RJ-45 Combo Ports



This switch is a high performance Layer 2 managed switch with 48Gbps switching capacity. It provides up to (24) dual speed fiber slots, it's an ideal switch for fiber connectivity applications.

Ordering Information

SM24DPB
Managed fiber switch
(20) 100/1000Base-X SFP slots
+ (4) 100/1000Base-X SFP/RJ-45 Combo Ports
19" Rack Mount Ears included

Optional Accessories (sold separately)

SFP Modules

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: S8TXATA-NA

-NA = Country Code

- NA = North America
- LA = Latin America
- EU = Europe
- UK = United Kingdom
- SA = South Africa
- JP = Japan
- OZ = Australia
- BR = Brazil

Features

- Supports IPv4/IPv6 dual protocol stack
- Supports Jumbo Frames up to 9K bytes
- Authentication: RADIUS 802.1x, TACACS+
- Security: Supports SSH/SSL
- Port based or tagged (802.1Q) VLAN, MAC based VLAN, Management VLAN and Private VLAN Edge
- DHCP Relay including option 82
- L2/L3/L4 ACLs Supports MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security

Device Management System (DMS)

- Graphical Monitoring – Topology View, Floor view, Map view
- Traffic Monitoring
- Troubleshooting – Network diagnostic, protection mechanism, performance and link management

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
Connectors	(1) RJ Console Port (20) 100/1000 SFP slots (4) 100/1000 SFP/RJ-45 Combo ports
MAC Addresses	32K MAC address table
Backplane	48Gbps
Dimensions	Width: 17.4" [442 mm] Depth: 8.31" [211 mm] Height: 1.73" [44 mm]
Power Consumption	12 Watts
Power Input	100 - 240 VAC 24 - 54 VDC
Environment	Operating: -20°C to +60°C Humidity: 5% to 90% (non-condensing)
Weight	6.83 lbs. [3.1 kg]
Compliance	Safety: IEC60950; EMI: FCC Class A, CE Mark
Warranty	Lifetime

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk
- IGMP: Supports IGMP Snooping V1/V2/V3, GVRP, IGMP Proxy, and IGMP Querier
- Quality of Service: Supports 8 egress queues per port enable differentiated management of up to 8 traffic types across the stack. Strict priority and WRR
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC-based VLAN, Private VLAN, Guest VLAN, Voice VLANs and Management VLAN
- IPv4 / IPv6 Static Routing
- Firmware Update, configure backup/restore through TFTP and HTTP
- AC/DC Dual Power Supply

Switches

SM12DP2XA

Managed Gigabit Ethernet Fiber Switch

**(12) 100/1000Base-X SFP Slots + (2) 1G/10GBase-X SFP+ Slots +
(2) 10/100/1000Base-T RJ-45 Ports**



This switch is a next generation fully managed fiber switch with 68Gbps switching capacity. It provides (12) 100/1000 dual speed SFP slots, (2) 1G/10G SFP+ slots and 2 additional Gigabit RJ-45 ports.

Ordering Information

SM12DP2XA
Managed Fiber Switch
(12) 100/1000Base-X SFP Slots
+ (2) 1G/10GBase-X SFP+ Slots
+ (2) 10/100/1000Base-T RJ-45 Ports

Optional Accessories (sold separately)

SFP Modules

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM24TBT2DPA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, SSH, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk
- Multicast: Support IGMP Snooping V1/V2/V3, IGMP Proxy, IGMP Querier, MVR, and MLD Snooping V1/V2
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC-based VLAN, Private VLAN, Voice VLANs and Management VLAN
- Quality of Service: Supports 8 hardware queues
 - Scheduling: Strict priority and WRR, Queue assignment based DSCP and class of service
 - Classification: Port based, 802.1p VLAN priority based, IPv4/IPv6 precedence/DSCP based, DiffServ, Classification and re-marking
 - Rate Limiting: Ingress policer, Egress shaping, rate control and per port
- IPv4/IPv6 Static Routing
- Device management System: Graphic Monitoring, Grouping, Traffic Monitoring

Features

- IPv6 Management
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS, TACACS+
- IEEE 802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions
- DHCP Relay, DHCP Option 82, DHCP Snooping, DHCP Server
- L2/L3/L4 ACLs Support MAC, VLAN ID or IP, protocol, port, DSCP/IP precedence/TCP.UDP, Ether Type, ICMP, TCP flag
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security
- Port Mirroring
- Firmware Update through TFTP/HTTP and console
- Syslog

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB
Connectors	(12) 100/1000 SFP (2) 1G/10G SFP+ (2) 10/100/1000 RJ-45 Ports
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
MAC Address	32K MAC address table
Backplane	68 Gbps
Dimensions	Width: 11.02" [280 mm] Depth: 5.28" [134 mm] Height: 1.73" [44 mm]
Power Input	100-240VAC (on the front) or 24/48VDC
Power Consumption	24 Watts (max)
Environment	Operating: -20°C to +60°C Humidity: 10% to 90% (non-condensing)
Weight	2.2 lbs. [1.0 kg]
Compliance	FCC Class A, CE Safety: UL Listed
Warranty	Lifetime

S4224 Series

Managed 10 Gigabit Ethernet Access/Aggregation Switch

(24) 100/1000Base-X SFP Slots + (4) 1000Base/10GBase-X SFP+ Slots



Transition Networks' Carrier Ethernet solution delivers the promise of simplicity deployed. This comprehensive solution includes CE 2.0 compliant demarcation devices, access switches, and the Converge™ element and service management platform.

With the goal of enabling new service generating revenue, Transition Networks' S4224 access switch with (24) 100/1000Base SFP slots and (4) 1000Base/10G uplinks is designed to support a wide range of MEF-based Carrier Ethernet services for Mobile Backhaul, Business Ethernet, Cloud Assurance and Carrier Exchange E-Access Services.



Ordering Information

S4224

(24) 100/1000Base-X SFP slots with
(4) 1000Base/10GBase-X SFP+ slots
Includes 19" Rack Mount ears

Optional Accessories (sold separately)

SFP Modules

SFPs, copper Ethernet cables and fiber patch cables

Power Supplies

CES-PSU-AC

AC power supply for S4140 and S4224
(100-250 VAC)

CES-PSU-DC

DC power supply for S4140 and S4224
-21VDC to -72VDC / +21VDC to +72VDC

Features

- (24) 100/1000Base SFP slots
- (4) 1000/10GBase Dual Speed SFP+ slots; Any port can be network or client
- E-Line (EPL and EVPL)
E-LAN (EP-LAN and EVP-LAN)
E-Access (Access EPL and EVPL)
- Blended Ethernet Service Activation testing supporting RFC2544 and "services" testing via EVC bandwidth policies or CoS ingress and egress tags with 1-way delay measurements reported in 1-milliseconds
- Hardware based Precision Time Protocol 1588v2 with clock off-set reporting and monitoring between grandmaster and slave with nanosecond accuracy.
- Multi-CoS 802.1p and IPv4/IPv6 DiffServ/TOS to ensure any level of service between operator and customer networks
- Hardware based Service OAM (IEEE 802.1ag) and Performance Monitoring (ITU Y.1731) ensure accurate service performance delivery with two and one-way delay measurement reporting.

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3ah IEEE 802.1ag IEEE 1588-2008 ITU G.8261 ITU Y.1731 PM
Data Rate	100/1000Mbps and 10G
Max MAC Address	32K
Max Frame Size	10,056bytes
Status LEDs	Power, Port Activity, Port Duplex
Dimensions	Width: 17.38" [441.33 mm] Depth: 10" [254 mm] Height: 2.63" [66.68 mm]
Power Supply	Redundant, hot-swappable AC 100-250 VAC DC 21-72 VDC
Environment	Operating: 0°C to 50°C
Compliance	Safety: UL listed EMI: EN55022 Class A, CE
Warranty	5 Years Hardware

Features Continued

- Bandwidth policies enforced by rate limiting the port, VLAN ID or EVC with configurable CIR, CBS, EIR, EBS, with real-time green/yellow/red/discarded frame monitoring
- ITU G.8031 linear APS and G.8032 (v1 and v2) rings offer sub 50ms failover
- Strong security authentication/verification including SSH/SSL RSA/DSA certificate generation, TACACS+, RADIUS, HTTPs, SNMP v1, v2c and v3, up to 15 different levels of user administrative access rights
- IPv6 and IPv4 dual-stack addressing
- Dual firmware banks/images
- Configuration backup/restore
- Dying / Last gasp
- Industry Standard CLI
- InterVLAN routing



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SM8TAF2DPA

Managed Gigabit Ethernet PoE+ Switch

(8) 10/100/1000Base-T Ports + (2) 100/1000Base-X Dual Speed SFP Slots



The SM8TAF2DPA is a (10) port Gigabit Ethernet smart switch providing (8) 10/100/1000 Base-T ports with IEEE 802.3at Power-over-Ethernet capability and (2) additional dual speed SFP slots.



Ordering Information

SM8TAF2DPA

(8) 10/100/1000Base-T PoE+ Ports
+ (2) 100/1000Base-X SFP slots
Includes 19" Rack Mount ears

Optional Accessories (sold separately)

SFP Modules

Features

- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS 802.1x
- Security - Support SSH/SSL
- Port based or tagged (802.1Q) VLAN
- Bandwidth Allocation
- DHCP Snooping including option 82
- LLDP (Link Layer Discovery Protocol)
- Port Mirroring
- Port Security, MAC Filter/IP Filter
- Loop detection and prevention
- Web Management, Telnet, SNMP V1/V2c/V3
- Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP). The trunk group up to 5 and maximum trunk port member up to 8 ports.
- Support IGMP Snooping V1/V2/V3, IGMP immediate leave
- Supports 8 egress queues per port enable differentiated management of up to 8 traffic types. Strict scheduling and WRR
- Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP
- Port Based VLAN, IEEE 802.1Q tag-based, QinQ, 4094 VLAN entries, Voice VLAN, Private VLAN
- Firmware Update, configure backup/restore through Web GUI
- Supports IPv4/IPv6 dual protocol stack

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at
Connectors	(8) 10/100/1000 RJ-45 ports (2) 100/1000 SFP slots
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
MAC Address	8K MAC address table
Backplane	20 Gbps
Dimensions	Width: 12.99" [330 mm] Depth: 8.03" [204 mm] Height: 1.69" [43 mm]
Power Input	Internal power: 100-240VAC
Power-over-Ethernet	Max PoE power budget 75 Watts Max output power per port up to 30 Watts Data-pairs mode Max current: 1.7A Provide power on all 8 copper ports
Environment	Operating: 0°C to 50°C Humidity: 10% to 90% (non-condensing)
Weight	9 lbs. [4.82 kg]
Compliance	Safety: CSA certified Emissions: FCC Class A, CE
Warranty	Lifetime

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM8TAF2DPA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- Supplier 53 – 58VDC power to PD
- Provide up to 30 Watts output for (2) ports or up to 15 Watts output for (4) ports or up to 7.5 Watts for (8) ports
- Power Management:
 - Enable/Disable per port
 - Priority setting per port
 - Overloading Protection per port
 - Power Level setting per port

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SM8TAT2SA

Smart Managed Gigabit Ethernet PoE+ Switch

(8) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots



This switch is a next generation smart managed switch with 20Gbps switching capacity. It provides (8) 10/100/1000Base-T copper ports with IEEE 802.3at PoE+ capability and (2) additional 100/1000 dual speed SFP slots. The embedded Device Management System (DMS) software provides the benefits of ease of use in the IP surveillance, Wireless Access Point and other applications. The DMS capability built into the switches provides time-saving features enabling security integrators or network administrators to establish and document a baseline deployment, automatically discover and remotely configure attached IP-powered devices (PDs).

Features

- IPv6 Access Management
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS, TACACS+
- DHCP Relay, DHCP Snooping, DHCP Server
- L2/L3/L4 ACLs Support MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security
- Syslog

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- PoE configuration
- Auto Power Reset (APR)

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at
Connectors	(8) 10/100/1000 RJ-45 (2) 100/1000 SFP
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
MAC Address	8K MAC address table
Backplane	20 Gbps
Dimensions	Width: 8.66" [220 mm] Depth: 9.53" [242 mm] Height: 1.73" [44 mm]
Power Input	100-240VAC
Power Consumption	147 Watts (full load with PoE)
Power-over-Ethernet	Max PoE budget 130 Watts 30 Watts for (4) ports simultaneously 15.4 Watts for (8) ports simultaneously
Surge Protection	6KV
Environment	Operating: 0°C to +50°C Humidity: 10% to 90% (non-condensing)
Weight	4.4 lbs. [2.0 kg]
Compliance	FCC Class A, CE Safety: IEC60950, UL Listed
Warranty	Lifetime

Ordering Information

SM8TAT2SA

(8) 10/100/1000Base-T Ports
+ (2) 100/1000Base-X SFP Slots
(includes 19" rack mount brackets)

Optional Accessories (sold separately)

SFP Modules

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM8TAT2SA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk.
- Multicast: Support IGMP Snooping V1/V2, MVR, MLD Snooping V1/V2
- Quality of Service: Supports 8 hardware queues. Strict priority and WRR, Ingress policer, Egress shaping and per port rate limiting
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC based VLAN, Private VLAN
- Firmware Update through TFTP and HTTP
- Device Management System (DMS)
 - Graphical Monitoring: Topology view, Floor view, Map View
 - Grouping, Batch update
 - Find my switch
 - Traffic Monitoring

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SM16TAT2SA

Smart Managed Gigabit Ethernet PoE+ Switch

(16) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots



This switch is a next generation smart managed switch with 36Gbps switching capacity. It provides (16) 10/100/1000Base-T copper ports with IEEE 802.3at PoE+ capability and (2) additional 100/1000 dual speed SFP slots. The embedded Device Management System (DMS) software provides the benefits of ease of use in the IP surveillance, Wireless Access Point and other applications. The DMS capability built into the switches provides time-saving features enabling security integrators or network administrators to establish and document a baseline deployment, automatically discover and remotely configure attached IP-powered devices (PDs).

Ordering Information

SM16TAT2SA

(16) 10/100/1000Base-T Ports
+ (2) 100/1000Base-X SFP Slots
(includes 19" rack mount brackets)

Optional Accessories (sold separately)

SFP Modules

Features

- IPv6 Access Management
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS, TACACS+
- DHCP Relay, DHCP Snooping, DHCP Server
- L2/L3/L4 ACLs Support MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security
- Syslog

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- PoE configuration
- Auto Power Reset (APR)

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at
Connectors	(16) 10/100/1000 RJ-45 (2) 100/1000 SFP
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
MAC Address	8K MAC address table
Backplane	36 Gbps
Dimensions	Width: 17.4" [442 mm] Depth: 8.3" [211 mm] Height: 1.73" [44 mm]
Power Input	100-240VAC
Power Consumption	296 Watts (full load with PoE)
Power-over-Ethernet	Max PoE budget 250 Watts 30 Watts for (8) ports simultaneously 15.4 Watts for (16) ports simultaneously
Surge Protection	6KV
Environment	Operating: 0°C to +50°C Humidity: 10% to 90% (non-condensing)
Weight	6.6 lbs. [3.0 kg]
Compliance	FCC Class A, CE Safety: IEC60950, UL listed
Warranty	Lifetime

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM16TAT2SA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk.
- Multicast: Support IGMP Snooping V1/V2, MVR, MLD Snooping V1/V2
- Quality of Service: Supports 8 hardware queues. Strict priority and WRR, Ingress policer, Egress shaping and per port rate limiting
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC based VLAN, Private VLAN
- Firmware Update through TFTP and HTTP
- Device Management System (DMS)
 - Graphical Monitoring: Topology view, Floor view, Map View
 - Grouping, Batch update
 - Find my switch
 - Traffic Monitoring

SM24TAT2SA

Smart Managed Gigabit Ethernet PoE+ Switch

(24) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots



This switch is a next generation smart managed switch with 52Gbps switching capacity. It provides (24) 10/100/1000Base-T copper ports with IEEE 802.3at PoE+ capability and (2) additional 100/1000 dual speed SFP slots. The embedded Device Management System (DMS) software provides the benefits of ease of use in the IP surveillance, Wireless Access Point and other applications. The DMS capability built into the switches provides time-saving features enabling security integrators or network administrators to establish and document a baseline deployment, automatically discover and remotely configure attached IP-powered devices (PDs).

Features

- IPv6 Access Management
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS, TACACS+
- DHCP Relay, DHCP Snooping, DHCP Server
- L2/L3/L4 ACLs Support MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security
- Syslog

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- PoE configuration
- Auto Power Reset (APR)

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at
Connectors	(24) 10/100/1000 RJ-45 (2) 100/1000 SFP
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
MAC Address	8K MAC address table
Backplane	52 Gbps
Dimensions	Width: 17.4" [442 mm] Depth: 8.3" [211 mm] Height: 1.73" [44 mm]
Power Input	100-240VAC
Power Consumption	438 Watts (full load with PoE)
Power-over-Ethernet	Max PoE budget 370 Watts 30 Watts for (12) ports simultaneously 15.4 Watts for (24) ports simultaneously
Surge Protection	6KV
Environment	Operating: 0°C to +50°C Humidity: 10% to 90% (non-condensing)
Weight	6.6 lbs. [3.0 kg]
Compliance	FCC Class A, CE Safety: IEC60950, UL listed
Warranty	Lifetime

Ordering Information

SM24TAT2SA

(24) 10/100/1000Base-T Ports
+ (2) 100/1000Base-X SFP Slots
(includes 19" rack mount brackets)

Optional Accessories (sold separately)

SFP Modules

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM24TAT2SA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk.
- Multicast: Support IGMP Snooping V1/V2, MVR, MLD Snooping V1/V2
- Quality of Service: Supports 8 hardware queues. Strict priority and WRR, Ingress policer, Egress shaping and per port rate limiting
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC based VLAN, Private VLAN
- Firmware Update through TFTP and HTTP
- Device Management System (DMS)
 - Graphical Monitoring: Topology view, Floor view, Map View
 - Grouping, Batch update
 - Find my switch
 - Traffic Monitoring

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SM8TAT2DPB

Managed Layer 2 Gigabit Ethernet PoE+ Switch

(8) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP/RJ-45 Combo Ports



This switch is a high performance Layer 2 managed switch with 20Gbps switching capacity. It provides (8) 10/100/1000Base-T copper ports with IEEE 802.3at PoE+ capability and (2) additional 100/1000 dual speed SFP/RJ-45 Combo ports.



Ordering Information

SM8TAT2DPB

(8) 10/100/1000Base-T
+ (2) 100/1000Base-X SFP/RJ-45 Combo
Ports (includes 19" rack mount brackets)

Optional Accessories (sold separately)

SFP Modules

Features

- Support IPv4/IPv6 dual protocol stack
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS, TACACS+
- Security - Support SSH v1/SSH v2/SSL
- Port based or tagged (802.1Q) VLAN, MAC based, Management VLAN and Private VLAN Edge
- DHCP Relay, DHCP Server
- L2/L3/L4 ACLs Support MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- 802.1AB LLDP-MED Configuration
- PoE configuration
- PoE Scheduling
- Auto Power Reset (APR)
- DHCP per Port

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at
Connectors	(1) RJ Console Port (8) 10/100/1000 RJ-45 (2) 100/1000 SFP/RJ-45 Combo
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
MAC Address	8K MAC address table
Backplane	20 Gbps
Dimensions	Width: 8.66" [220 mm] Depth: 9.53" [242 mm] Height: 1.73" [44 mm]
Power Input	100-240VAC
Power-over-Ethernet	Max PoE budget 130 Watts 30 Watts for (4) ports simultaneously 15.4 Watts for (8) ports simultaneously
Surge Protection	6KV
Environment	Operating: 0°C to +45°C Humidity: 10% to 90% (non-condensing)
Weight	5.1 lbs. [2.3 kg]
Compliance	FCC Class A, CE Safety: IEC60950
Warranty	5 Years

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM8TAT2DPB-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk.
- IGMP: Support IGMP Snooping V1/V2/V3, GVRP, IGMP Proxy, and IGMP Querier
- Quality of Service: Supports 8 hardware queues. Strict priority and WRR
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC based VLAN, Private VLAN, Voice VLANs and Management VLAN
- Firmware Update, configure backup/restore through TFTP and HTTP
- Device Management System: Graphic Monitoring, Grouping, Traffic Monitoring
- Static Routing

SM16TAT2DPA

Managed Layer 2 Gigabit Ethernet PoE+ Switch

(16) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP/RJ-45 Combo Ports



This switch is a high performance Layer 2 managed switch with 36Gbps switching capacity. It provides (16) 10/100/1000Base-T copper ports with IEEE 802.3at PoE+ capability and (2) additional 100/1000 dual speed SFP/RJ-45 Combo ports.



Ordering Information

SM16TAT2DPA

(16) 10/100/1000Base-T Ports
+ (2) 100/1000Base-X SFP/RJ-45 Combo ports
(includes 19" rack mount brackets)

Optional Accessories (sold separately)

SFP Modules

Features

- Support IPv4/IPv6 dual protocol stack
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS, TACACS+
- Security - Support SSH v1/SSH v2/SSL
- Port based or tagged (802.1Q) VLAN, MAC based, Management VLAN and Private VLAN Edge
- DHCP Relay, DHCP Server
- L2/L3/L4 ACLs Support MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security
- Single IP management

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- 802.1AB LLDP-MED Configuration
- PoE configuration
- PoE Scheduling
- Auto Power Reset (APR)
- DHCP per Port

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at
Connectors	(1) RJ Console Port (16) 10/100/1000 RJ-45 ports (2) 100/1000 SFP/RJ-45 Combo ports
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
MAC Address	8K MAC address table
Backplane	36 Gbps
Dimensions	Width: 17.4" [442 mm] Depth: 8.31" [211 mm] Height: 1.73" [44 mm]
Power Input	100-240VAC
Power-over-Ethernet	Max PoE budget 370 Watts 30 Watts for (12) ports simultaneously 30 Watts for (8) ports and 15.4 Watts for (8) ports simultaneously
Environment	Operating: 0°C to +40°C Humidity: 10% to 90% (non-condensing)
Compliance	FCC Class A, CE Safety: LVD
Warranty	Lifetime

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM16TAT2DPA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk.
- IGMP: Support IGMP Snooping V1/V2/V3, GVRP, IGMP Proxy, and IGMP Querier
- Quality of Service: Supports 8 hardware queues. Strict priority and WRR
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC based VLAN, Private VLAN, Voice VLANs and Management VLAN
- Firmware Update, configure backup/restore through TFTP and HTTP
- Device Management System: Graphic Monitoring, Grouping, Traffic Monitoring, Zero Touch Upgrade, Batch Upgrade
- Static Routing

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SM24TAT2DPA

Managed Layer 2 Gigabit Ethernet PoE+ Switch

(24) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP/RJ-45 Combo Ports



This switch is a high performance Layer 2 managed switch with 52Gbps switching capacity. It provides (24) 10/100/1000Base-T copper ports with IEEE 802.3at PoE+ capability and (2) additional 100/1000 dual speed SFP/RJ-45 Combo ports.

Ordering Information

SM24TAT2DPA

(24) 10/100/1000Base-T ports
+ (2) 100/1000Base-X SFP/RJ-45 Combo ports
(includes 19" rack mount brackets)

Optional Accessories (sold separately)

SFP Modules

Features

- Support IPv4/IPv6 dual protocol stack
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS, TACACS+
- Security - Support SSH v1/SSH v2/SSL
- Port based or tagged (802.1Q) VLAN, MAC based, Management VLAN and Private VLAN Edge
- DHCP Relay, DHCP Server
- L2/L3/L4 ACLs Support MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security
- Rate Limiting: Ingress Policer, Egress shaping and rate control, per port

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- 802.1AB LLDP-MED Configuration
- PoE configuration
- PoE Scheduling
- Auto Power Reset (APR)
- DHCP per Port

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at
Connectors	(1) RJ Console Port (24) 10/100/1000 RJ-45 ports (2) 100/1000 SFP/RJ-45 Combo ports
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
MAC Address	8K MAC address table
Backplane	52 Gbps
Dimensions	Width: 17.4" [442 mm] Depth: 8.31" [211 mm] Height: 1.73" [44 mm]
Power Input	100-240VAC
Power-over-Ethernet	Max PoE budget 370 Watts 30 Watts for (12) ports simultaneously 15.4 Watts for (24) ports simultaneously
Surge Protection	6KV
Environment	Operating: 0°C to +45°C Humidity: 10% to 90% (non-condensing)
Weight	5.9 lbs. [3.3 kg]
Compliance	FCC Class A, CE Safety: IEC60950
Warranty	5 Years

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM24TAT2DPA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk.
- IGMP: Support IGMP Snooping V1/V2/V3, GVRP, IGMP Proxy, and IGMP Querier
- Quality of Service: Supports 8 hardware queues. Strict priority and WRR
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC based VLAN, Private VLAN, Voice VLANs and Management VLAN
- Firmware Update, configure backup/restore through TFTP and HTTP
- Device Management System: Graphic Monitoring, Grouping, Traffic Monitoring
- Static Routing

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SM24TBT2DPA

Managed Gigabit Ethernet PoE++ Switch

(24) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP/RJ-45 Combo Ports



Features

- Hot-swappable dual power supply modules
- Support IPv4/IPv6 dual protocol stack
- Support Jumbo Frame up to 9K bytes
- Authentication – RADIUS, TACACS+
- Security - Support SSH v1/SSH v2/SSL
- Port based or tagged (802.1Q) VLAN, MAC based, Management VLAN and Private VLAN Edge
- DHCP Relay, DHCP Server
- L2/L3/L4 ACLs Support MAC ACL, IP standard/extended ACL
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security

PoE Features

- Compliant with IEEE 802.3bt PoE++
- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- 802.1AB LLDP-MED Configuration
- PoE Configuration
- PoE Scheduling
- Auto Power Reset
- DHCP per Port
- Soft Boot

This switch is a high performance Layer 2 managed switch with 52 Gbps switching capacity. It provides (24) 10/100/1000 copper ports with IEEE 802.3bt PoE ++ capability and (2) additional 100/1000 dual speed SFP/RJ-45 Combo ports. The SM24TBT2DPA complies with the latest IEEE 802.3bt PoE++ standard and supplies up to 90 Watts per port. It can provide up to 1560 Watts PoE output with equipped the dual hot-swappable power supplies.

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at IEEE 802.3bt
Connectors	(1) RJ Console Port (24) 10/100/1000 RJ-45 ports (2) 100/1000 SFP/RJ-45 Combo ports
Protocols	CSMA/CD
Technology	Store-and-Forward switching architecture
MAC Address	8K MAC address table
Backplane	52 Gbps
Dimensions	Width: 17.4" [442 mm] Depth: 11.8" [300 mm] Height: 1.73" [44 mm]
Power Input	100-240VAC
Power Consumption	Maximum Power Consumption without PoE 79 Watts with dual AC power modules 52 Watts with single AC power module
Power-over-Ethernet	Max 90 Watts output per port Max PoE Budget 1560 Watts with dual power supply 60 Watts for (24) ports simultaneously 90 Watts for (16) ports simultaneously Max PoE budget 780 Watts with single power supply 30 Watts for (24) ports simultaneously 60 Watts for (12) ports simultaneously 90 Watts for (8) ports simultaneously
Environment	Operating: 0°C to +40°C Humidity: 10% to 90% (non-condensing)
Weight	10.47 lbs. [4.75 kg]
Compliance	FCC Class A, CE Safety: IEC60950-1
Warranty	Lifetime



Ordering Information

SM24TBT2DPA

(24) 10/100/1000Base-T
+ (2) 100/1000Base-X SFP/RJ-45 Combo ports
(includes (1) AC power supply and 19" rack mount brackets)

Optional Accessories (sold separately)

SFP Modules

Power Supplies (sold separately)

PS-AC-920

Secondary AC Power Supply (920 Watts)
Warranty: 5 Years

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM24TBT2DPA-NA

-NA = Country Code

-NA = North America
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-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Software Features

- Management: Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP) and static trunk
- IGMP: Support IGMP Snooping V1/V2/V3, GVRP, IGMP Proxy, and IGMP Querier
- Quality of Service: Supports 8 hardware queues. Strict priority and WRR
- Spanning Tree: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC-based VLAN, Private VLAN, Voice VLANs and Management VLAN
- Firmware Update, configure backup/restore through TFTP and HTTP
- Device management System: Graphic Monitoring, Grouping, Traffic Monitoring

SM24TAT4XA



Managed Gigabit Ethernet PoE+ Switch

(24) 10/100/1000Base-T Ports + (4) 1000/10GBase-X SFP+ Slots



This SM24TAT4XA is a high performance managed switch with 128 Gbps switching capacity. It provides (24) 10/100/1000 copper ports with IEEE 802.3at PoE+ capability, and it has additional (4) 1000/10GBase dual speed SFP+ slots to support up to (4) 10G uplinks.

Ordering Information

SM24TAT4XA

(24) 10/100/1000Base-T ports
+ (4) 1000/10GBase-X SFP+ slots
(includes 19" Rack Mount ears)

Optional Accessories (sold separately)

SFP and SFP+ Modules

Mounting Brackets

BRSM24-01

Wall Mount Bracket

Features

- Supports Jumbo Frame up to 9K bytes
- Authentication – RADIUS 802.1x, TACACS+
- Security - Supports SSH V1/ V2/SSL
- Rate limiting: Ingress policer, egress shaping and rate control; per VLAN, per port and flow based
- DHCP Relay including option 82
- ACL: based on source and destination MAC / VLAN ID/ IP address / Protocol / port / DSCP / IP Precedence / TCP/UDP source and destination ports / 802.1p / Ethernet type / ICMP packets / IGMP packets / TCP flag
- LLDP (Link Layer Discovery Protocol)
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- 802.1AB LLDP-MED Configuration
- Power delay and PoE Scheduling
- Auto Power Reset (APR)

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1v IEEE 802.1p IEEE 802.1ad IEEE 802.1AB IEEE 802.3af IEEE 802.3at
Connectors	(1) DB-9 Console Port (24) 10/100/1000 RJ-45 ports (4) 1G/10G SFP+ slots
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
MAC Address	32K MAC address table
Memory Buffer	4Mbits
Backplane	128 Gbps
Dimensions	Width: 17.4" [442 mm] Depth: 15.15" [385 mm] Height: 1.73" [44 mm]
Power Consumption	50 Watts (max without PoE)
Power Input	Internal Power: 100 - 240VAC
Power-over-Ethernet	Max PoE budget 370 Watts 30 Watts for (12) ports simultaneously 15.4 Watts for (24) ports simultaneously
Environment	Operating: 0°C to 40°C Humidity: 10% to 90% (non-condensing)
Weight	9.6 lbs. [4.35 kg]
Compliance	Safety: LVD Emissions: FCC Class A, CE Mark
Warranty	Lifetime

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SM24TAT4XA-NA

-NA = Country Code

-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-OZ = Australia
-BR = Brazil

Features (Continued)

- Web Management, SNMP V1/V2c/V3, Telnet, CLI
- Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP). Supports up to 14 groups with (8) ports per group.
- Supports IGMP Snooping V1/V2/V3, GVRP, IGMP Proxy, IGMP Querier and MLD snooping V1/V2
- Supports 8 hardware queues, Strict priority and WRR. Queue assignment based on DSCP and 802.1p CoS; IPv4/IPv6 precedence/ Type of Service / DiffServ / classification and remarking ACLs, trusted QoS
- IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, QinQ, MAC-based VLAN, Private VLAN Edge, Management VLAN, Voice VLANs
- Firmware Update, configure backup/restore through HTTP/TFTP/Console
- Supports IPv4/IPv6 dual protocol stack
- Hardware stacking capability with 10G SFP+ cable

Switching Brackets

Wall Mount Accessories & Rack Mount Assembly



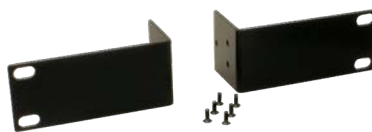
The Transition Networks portfolio of switches have the power and design to operate in multiple environments; as a desktop, workgroup or departmental switch.

In order to meet the demands of various operating environments, these products have been designed to accommodate switch mounting accessories to allow for wall or rack mounting of the devices.

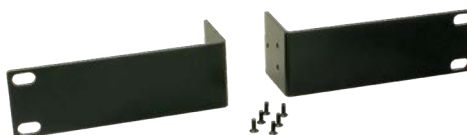
Features

- Flexibility in design and deployment
- Securely fasten to wall or desk
- 19" rack mount options
- Lifetime Warranty

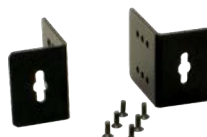
RMSM8-01



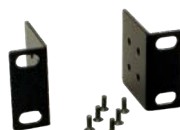
RMSM4-01



BRSM8-01



BRSM24-01



Ordering Information

RMSM8-01

19" Rack Mount Bracket for SM10T2DPA, SM8TAT2DPA

RMSM4-01

19" Rack Mount Bracket for SM4T4DPA

BRSM8-01

Wall Mount Bracket for SM10T2DPA, SM8TAT2DPA, SM4T4DPA

BRSM24-01

Wall Mount Bracket for SM24TAT4XA, SM24TAT4GPA

WMBH-01

Wall Mount Bracket for SISPM1040-384-LRT-C, SISPM1040-362-LRT

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SISTF1010-2x0-LRT

Unmanaged Hardened Fast Ethernet Switch

(5) 10/100Base-TX Ports or (8) 10/100Base-TX Ports



SISTF1010-250-LRT

SISTF1010-280-LRT

Ordering Information

SISTF1010-250-LRT
(5) 10/100Base-TX (RJ-45)
[100 m/328 ft.]

SISTF1010-280-LRT
(8) 10/100Base-TX (RJ-45)
[100 m/328 ft.]

Optional Accessories (sold separately)

External AC/DC Power Supply

SPS-UA12DHT
Input: 90 ~ 240 VAC
Output: 12 VDC, 1.3A, 18 Watts

25083
Input: 85-264 VAC, 120-370VDC
Output: 10.8 ~ 13.2 VDC, 2A, 24 Watts

Features

- Auto-Negotiation
- Auto-MDI/MDIX
- Store-and-Forward Switching Architecture with MAC Address Table
- Extended operating temperature (-40°C to 75°C)
- Dry Contact Relay Alarm Output
- Dual, Redundant DC Power Inputs
- DIN Rail Mounting and Wall Mount Brackets Included
- Reverse Polarity Power Input Protection
- Overload Current Protection
- Barrel connector interface cable included for connecting external AC/DC power supply
- Class 1, Div 2 Certified

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3x
Status LEDs	PWR 1 (Power): ON = primary power connected PWR 2 (Power): ON = backup power connected FAULT, per port: LNK/ACT, FDX/COL
Dimensions	Width: 1.2" [30 mm] Depth: 3.7" [95 mm] Height: 5.5" [140 mm]
Power Consumption	2.93 Watts (-250 model) 4.71 Watts (-280 model)
Power Input	12 - 48 VDC; redundant power with reverse polarity protection and removable terminal block
Ingress Protection	IP30
Environment	Operating: -40°C to 75°C Storage: -40° to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 - 10,000 ft.
Weight	1.4 lbs. [0.64 kg]
Compliance	Safety: UL, cUL, CE/EN60950-1 UL Class 1, Div 2 for hazardous environments CISPR22/EN55022, EN60950 Class A, FCC Class A, CE Mark, CE EN61000-4-2, CE EN61000-4-3, CE EN-61000-4-4, CE EN61000- 4-5, CE EN61000-4-6, CE EN61000-4-8, CE EN61000-4-11, CE EN61000-4-12, CE EN61000-6-2, CE EN61000-6-4, IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration), IEC60068-2-3, IEC60068-2-30, IEC60068-2-31
Warranty	Lifetime

SISTG1040-282-LRT

Unmanaged Hardened Gigabit Ethernet Switch

(8) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots



This switch is an unmanaged full Gigabit Ethernet hardened switch that has (8) 10/100/1000Base-T ports with two 100/1000 dual speed SFP slots. The SISTG1040-282-LRT can be used at the edge of a hardened network to provide Gigabit Ethernet connections in hazardous locations. The two fiber uplink ports can also be used in a daisy chain for maximum network reliability. It has redundant input power connections to ensure safe reliable operation in temperatures between -40°C and +75°C. Transition Networks' hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other hazardous environments.

Ordering Information

SISTG1040-282-LRT
(8) 10/100/1000Base-T [100 m/328 ft.]
with (2) 100/1000Base-X SFP slots

Optional Accessories (sold separately)

SFP Modules

Industrial Power Supplies:

25135
Input: 85 -264VDC, 120-370VDC
Output: 24VDC, 10Watts, -20°C to +70°C

25130
Input: 88 -264VDC, 120-370VDC
Output: 48VDC, 39.8Watts, -20°C to +70°C

Features

- Support Jumbo Frame up to 9K bytes
- Layer 2 wire-speed switching engine
- Ruggedized metal closure
- IEEE 802.3az Energy Efficient Ethernet
- Fan-less design
- Wide operating temperature range (-40°C to +75°C)
- Dual Power input
- Din Rail and Wall Mount options

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.1p IEEE 802.3az
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
Switching Capacity	20 Gbps
Connectors	(8) 10/100/1000Base-T RJ-45 (2) 100/1000Base-X SFP
MAC Address	4K MAC address table
Status LEDs	System, Power1, Power2, Port Status
Dimensions	Width: 5.3" [135 mm] Depth: 5.4" [130 mm] Height: 1.7" [44 mm]
Reset button	Reset the switch
Power Input	12 - 48 VDC; Redundant input; reverse power protection
Power Consumption	5.8 Watts
Ingress Protection	IP30
Environment	Operating: -40°C to +75°C Humidity: 5% to 95% (non-condensing)
Weight	0.86 lbs. [0.39 kg]
Compliance	UL Class 1 / Div 2; EMI: CE, FCC Part 15; Safety: EN60950
Compliant	EN50121-4, EN50155, NEMA TS-2, IEC61850-3, IEEE1613
Warranty	5 Years

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SISTG1040-242-LRT

Unmanaged Hardened Gigabit Ethernet Switch

(4) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots



This switch is an unmanaged full Gigabit Ethernet hardened switch that has (4) 10/100/1000Base-T ports with two 100/1000 dual speed SFP slots. The SISTG1040-242-LRT can be used at the edge of a hardened network to provide Gigabit Ethernet connections in hazardous locations. The two fiber uplink ports can also be used in a daisy chain for maximum network reliability. It has redundant input power connections to ensure safe reliable operation in temperatures between -40°C and +75°C. Transition Networks' hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other hazardous environments.



Ordering Information

SISTG1040-242-LRT

(4) 10/100/1000Base-T [100 m/328 ft.]
with (2) 100/1000Base-X SFP slots

Optional Accessories (sold separately)

SFP Modules

Industrial Power Supplies:

25135

Input: 85 -264VDC, 120-370VDC
Output: 24VDC, 10Watts, -20°C to +70°C

25130

Input: 88 -264VDC, 120-370VDC
Output: 48VDC, 39.8Watts, -20°C to +70°C

Features

- Support Jumbo Frame up to 9K bytes
- Layer 2 wire-speed switching engine
- Ruggedized metal closure
- IEEE 802.3az Energy Efficient Ethernet
- Fan-less design
- Wide operating temperature range (-40°C to +75°C)
- Dual Power input
- Din Rail and Wall Mount options

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.1p IEEE 802.3az
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
Switching Capacity	12 Gbps
Connectors	(4) 10/100/1000Base-T RJ-45 (2) 100/1000Base-X SFP
MAC Address	4K MAC address table
Status LEDs	System, Power1, Power2, Port Status
Dimensions	Width: 5.3" [135 mm] Depth: 5.4" [130 mm] Height: 1.7" [44 mm]
Reset button	Reset the switch
Power Input	12 - 48 VDC; Redundant input; reverse power protection
Power Consumption	4.4 Watts
Ingress Protection	IP30
Environment	Operating: -40°C to +75°C Humidity: 5% to 95% (non-condensing)
Weight	0.79 lbs. [0.36 kg]
Compliance	UL Class 1 / Div 2; EMI: CE, FCC Part 15; Safety: EN60950
Compliant	EN50121-4, EN50155, NEMA TS-2, IEC61850-3, IEEE1613
Warranty	5 Years

SISTF101x-241-LRT

Unmanaged Hardened Fast Ethernet Switch

(4) 10/100Base-TX Ports + (1) 100Base-FX Port



SISTF1013-241-LRT

Features

- Auto-Negotiation
- Auto-MDI/MDIX
- DIN Rail Mounting and Wall Mount Brackets Included
- Extended operating temperature (-40°C to 75°C)
- Dual Auto-Sensing Redundant DC Power Inputs
- Barrel connector interface cable included for connecting external AC/DC power supply
- Class 1, Div 2 Certified

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3x
Dip Switches	1: Full-Duplex Fiber/Half-Duplex Fiber
Status LEDs	PWR (Power): ON = Unit has power connected PWR 1 (Power): ON = primary power connected PWR 2 (Power): ON = backup power connected Fault: ON = Power failure or port link failure LNK/ACT (fiber): ON = Link; Flashing = data transmitting FDX/COL (fiber): ON = Full-duplex mode; Flashing = collisions occurring RJ-45 (Ports 1 – 4): ON orange = Full-duplex mode; Flashing orange = collisions occurring; ON green = UTP link; Flashing green = data transmitting
Dimensions	Width: 1.2" [30 mm] Depth: 3.7" [95 mm] Height: 5.5" [140 mm]
Power Input	12 to 48 VDC, 18 to 30 VAC, 0.2A-0.7A, redundant inputs with reverse polarity protection; Additional barrel connector
Power Consumption	3.3 Watts
Ingress Protection	IP30
Environment	Operating: -40°C to 75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	2 lbs. [0.90 kg]
Compliance	Safety: UL 60950, UL508, CSA C22.2 no 60950 UL Class 1 Div 2 for hazardous environments CISPR/EN55022, EN60950 Class A, FCC Class A, CE Mark, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)
Warranty	Lifetime

Ordering Information

SISTF1011-241-LRT
(4) 10/100Base-TX (RJ-45) [100 m/328 ft.]
+ (1) 100Base-FX 1300nm multimode (ST)
[2 km/1.2 mi.] Link Budget: 11.0 dB

SISTF1013-241-LRT
(4) 10/100Base-TX (R -45) [100 m/328 ft.]
+ (1) 100Base-FX 1300nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 11.0 dB

SISTF1014-241-LRT
(4) 10/100Base-TX (RJ-45) [100 m/328 ft.]
+ (1) 100Base-FX 1310nm single mode (SC)
[20 km/2.4 mi.] Link Budget: 17.0 dB

Optional Accessories (sold separately)

External AC/DC Power Supply

25135
Input: 85-264 VAC, 120-370VDC
Output: 24VDC, .42A, 10 Watts

25083
Input: 85-264 VAC, 120-370VDC
Output: 10.8 ~ 13.2 VDC, 2A, 24 Watts

SISTF1013-x62-LRT

Unmanaged Hardened Fast Ethernet Switch

(6) 10/100Base-TX Ports + (1 or 2) 100Base-FX Port



The SISTF1013-x62-LRT switch family contains simple “Plug-and-Play” multi-port switches designed specifically for use in hazardous environments. The switches comply with Class 1, Div 2, ATEX, IECEx regulations, are Optically Intrinsically safe, and are used at the edge of a hardened network to connect devices in hazardous locations. Depending on the model, these switches provide multimode fiber connections with SC connectors; have redundant input power connections, and a fault alarm relay to ensure safe reliable operation in temperatures between -40°C and +75°C.

Transition Networks’ hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other hazardous environments.

Applications include: Offshore Oil Rigs, Natural Gas distribution centers, Oil Refineries, and Petrochemical plants.

Ordering Information

- SISTF1013-262-LRT**
(6) 10/100Base-TX [100 m/328 ft.] +
(2) 100BaseFX multimode SC
- SISTF1013-162-LRT**
(6) 10/100Base-TX [100 m/328 ft.] +
(1) 100BaseFX multimode SC

Optional Accessories (sold separately)

External AC/DC Power Supply

- 25083**
Input: 85-264 VAC, 120-370VDC
Output: 10.8 ~ 13.2 VDC, 2A, 24 Watts

Features

- Class 1, Div 2, ATEX, IECEx compliant for harsh environments
- Redundant DC power inputs on terminal block
- Auto-Negotiation
- Auto-MDI/MDIX
- Extended operating temperature (-40°C to 75°C)
- Store-and-forward transmission
- Supports flow control
- Rigid IP30 housing design
- DIN Rail and wall mounting enabled

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3z IEEE 802.3x
Data Rate Fiber	(1) 100 Mbps FX
Filtering	8192 MAC Addresses, 4 Priority Queues
Status LEDs	Power, Fault, Port Link/Act
Dimensions	Width: 2.05" [52 mm] Depth: 4.1" [106.1 mm] Height: 5.68" [144.3 mm]
Power Consumption	8 Watts
Power Input	12~48 VDC; redundant inputs 6-PIN Terminal Block Overload Current Protection
Fault Relay	1A at 24 VDC capacity
Ingress Protection	IP30
Environment	Operating: -40°C to 75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1.49 lbs. [0.68 kg]
Compliance	Safety: EN60950-1 UL508 (E331061) UL/cUL Class 1 Div 2 Group A/B/C/D ATEX Class 1 Zone 2 IEXEC Optically Intrinsically Safe Emissions: FCC Part 15, CISPR22/EN55022 Class A, Immunity: EN61000-4-2, EN61000-4-3, EN-61000-4-4, EN61000- 4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Warranty	Lifetime

SISTP101x-141-LRT

Unmanaged Hardened Fast Ethernet PoE Switch

(4) 10/100Base-TX Ports + (1) 100Base-FX Port



The SISTP101x-141-LRT switch family contains simple “Plug-and-Play” multi-port switches used at the edge of a hardened network to provide connections for PoE devices. Depending on the model, these switches can provide multimode or single mode fiber connections with SC or ST connectors for extended distance communications up to 30 kilometers. These switches provide 15.4 Watts per port on all ports simultaneously, have redundant input power connections, and a fault alarm relay to ensure safe reliable operation in temperatures between -40°C and +75°C.

Transition Networks’ hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other challenging environments.

Ordering Information

- SISTP1011-141-LRT**
(4) 10/100Base-TX (RJ-45) [100 m/328 ft.]
to 100Base-FX 1310nm multimode (ST)
[2 km/1.2 mi.] Link Budget: 11.0 dB
- SISTP1013-141-LRT**
(4) 10/100Base-TX (RJ-45) [100 m/328 ft.]
to 100Base-FX 1310nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 11.0 dB
- SISTP1014-141-LRT**
(4) 10/100Base-TX (RJ-45) [100 m/328 ft.]
to 100Base-FX 1310nm single mode (SC)
[30 km/18.64 mi.] Link Budget: 17.0 dB

Optional Accessories (sold separately)

External AC/DC Power Supply

- 25080**
Input: 88-132 VAC, 176-264VAC, 248-370VDC
by switch
Output: 48 ~ 53 VDC, 2.5A, 120 Watts

Features

- Auto-Negotiation
- Auto-MDI/MDIX
- Full Wire Speed Performance with 1 Gbps Backplane
- (4) port integrated PoE injector with full 15.4 Watts per port on data pairs
- IEEE 802.3af Power-over-Ethernet Compliant
- Extended operating temperature (-40°C to 75°C)
- Dry Contact Relay Alarm Output
- Dual, Redundant 48 VDC Power Inputs
- Reverse Polarity Power Input Protection
- Overload Current Protection
- DIN Rail Mounting and Wall Mount Brackets Included
- Store-and-Forward Architecture

Specifications

Standards	IEEE 802.3 IEEE 802.3af IEEE 802.3u IEEE 802.3x
Status LEDs	PWR 1 (Power): ON = primary power connected PWR 2 (Power): ON = backup power connected FAULT: ON = power input failure on PWR1 or PWR2 PWR FWD (ports 1-4): ON = PoE power output LNK/ACT (ports 1-5): ON = Link; FLASHING = data transmitting FDX/COL (ports 1-4): ON = Full-duplex mode; FLASHING = collisions occurring
Dimensions	Width: 1.2" [30 mm] Depth: 3.7" [95 mm] Height: 5.5" [140 mm]
Power Consumption	4.6 Watts (without PoE); 66 Watts (Full load with PoE)
Power Input	48 VDC; redundant inputs (removable terminal block), additional barrel connector
Ingress Protection	IP30
Environment	Operating: -40°C to 75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1.4 lbs. [0.64 kg]
Compliance	Safety: UL, cUL, CE/EN60950-1 Emissions: CISPR22/EN55022, EN60950 Class A, FCC ClassA, CE Mark, CE Immunity: EN61000-4-2, CE EN61000-4-3, CE EN- 61000-4-4, CE EN61000-4-5, CE EN61000-4-6, CE EN61000-4-8, CE EN61000-4-11, CE EN61000- 6-2, CE EN610006-4, Environmental: IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Warranty	Lifetime

SISTF1040-162D-LRT

Unmanaged Hardened Fast Ethernet Switch



(16) 10/100Base-TX Ports + (2) 10/100/1000Base-X SFP/RJ-45 Combo Ports



The SISTF1040-162D-LRT is a high port density switch suitable for use as an aggregation switch in a challenging environment. The two gigabit speed combo ports provide the ultimate flexibility by allowing copper or fiber SFP uplink ports. The two uplink ports can also be used in a redundant ring for maximum network reliability. The switch has redundant input power connections, and a fault alarm relay to ensure safe reliable operation in temperatures between -40°C and +75°C.

Transition Networks’ hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other challenging environments.

Ordering Information

SISTF1040-162D-LRT
(16) 10/100Base-TX (RJ-45)
[100 m/328 ft.] with (2) 10/100/1000Base-T (RJ-45) or 100/1000Base-X SFP Combo ports

Optional Accessories (sold separately)

SFP Modules

External AC/DC Power Supply

SPS-UA12DHT
Input: 90 ~ 240 VAC
Output: 12 VDC, 1.3A, 18 Watts

25083
Input: 85-264 VAC, 120-370VDC
Output: 10.8 ~ 13.2 VDC, 2A, 24 Watts

Features

- Auto-Negotiation
- Auto-MDI/MDIX
- Full Wire Speed Performance with 7 Gbps Backplane
- Combo SFP ports support
 - 100Base-FX
 - 1000Base-X SFPs
- Combo RJ-45 ports support 10/100/1000Base-T
- Extended Operating Temperature (-40°C to 75°C)
- Dry Contact Relay Alarm Output
- Dual, Redundant, Auto-Sensing 12-48 VDC Power Inputs
- Reverse Polarity Power Input Protection
- Overload Current Protection
- DIN Rail Mounting and Wall Mount Brackets Included

Specifications

Standards	IEEE 802.3 IEEE 802.3ab IEEE 802.3u IEEE 802.3z IEEE 802.3x
Status LEDs	PWR 1 (Power): ON = primary power connected PWR 2 (Power): ON = backup power connected FAULT: ON = power input failure on PWR1 or PWR2 LNK/ACT: ON = Link; FLASHING = data transmitting FDX/COL: ON = Full-duplex mode; FLASHING = collisions occurring
Dimensions	Width: 2.8" [72 mm] Depth: 4.1" [105 mm] Height: 6" [152 mm]
Power Consumption	9 Watts
Power Input	12 to 48 VDC; redundant inputs with reverse polarity protection
Ingress Protection	IP30
Environment	Operating: -40°C to 75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 ~ 10,000 ft.
Weight	3 lbs. [1.36 kg]
Compliance	Safety: UL, cUL, CE/EN60950-1 CISPR22/EN55022, EN60950 Class A, FCC Class A, CE Mark, CE EN61000-4-2, CE EN61000-4-3, CE EN-61000-4-4, CE EN61000-4-5, CE EN61000-4-6, CE EN61000-4-8, CE EN61000-4-11, CE EN61000-4-12, CE EN61000-6-2, CE EN61000-6-4 IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Warranty	Lifetime

SISTP1040-382-LRT

Unmanaged Hardened Gigabit Ethernet PoE+ Switch

(8) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots



This switch is an unmanaged full Gigabit Ethernet hardened PoE+ switch that complies with IEEE 802.3at and IEEE 802.3af. The switch has (8) 10/100/1000Base-T PoE+ ports with two 100/1000 dual speed SFP slots. It can deliver up to 30 Watts on each PoE+ port simultaneously. The SISTP1040-382-LRT can be used at the edge of a hardened network to provide connections for PoE devices in hazardous locations. The two fiber uplink ports can also be used in a daisy chain for maximum network reliability. It has redundant input power connections to ensure safe reliable operation in temperatures between -40°C and +75°C. Transition Networks' hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other hazardous environments.

Ordering Information

SISTP1040-382-LRT

(8) 10/100/1000Base-T PoE+ [100 m/328 ft.]
with (2) 100/1000Base-X SFP slots

Optional Accessories (sold separately)

SFP Modules

Industrial Power Supplies:

25104

Input: 85-264 VAC, 124-370 VDC
Output: 48~55 VDC, 5.0A, 240 Watts

25105

Input: 85-264 VAC, 124-370 VDC
Output: 48~55 VDC, 2.5A, 120 Watts

Features

- Support Jumbo Frame up to 9K bytes
- Layer 2 wire-speed switching engine
- Ruggedized metal closure
- IEEE 802.3az Energy Efficient Ethernet
- Fan-less design
- Wide operating temperature range (-40°C to +75°C)
- Dual Power input
- Din Rail and Wall Mount options

PoE Features

- IEEE 802.3at compliant
- IEEE 802.3af compliant
- PoE Budget: 240 Watts
- 30 Watts output on all 8 ports simultaneously

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE802.3ae IEEE 802.3x IEEE 802.1p IEEE 802.3az IEEE 802.3af IEEE 802.3at
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
Switching Capacity	20 Gbps
Connectors	(8) 10/100/1000Base-T RJ-45 (2) 100/1000Base-X SFP
MAC Address	4K MAC address table
Status LEDs	System, Power1, Power2, Port Status
Dimensions	Width: 5.3" [135 mm] Depth: 5.4" [130 mm] Height: 1.7" [44 mm]
Reset button	Reset the switch
Power Input	48-57 VDC; Redundant input; reverse power protection
Ingress Protection	IP30
Environment	Operating: -40°C to +75°C Humidity: 5% to 95% (non-condensing)
Weight	1.01 lbs. [0.46 kg]
Compliance	UL Class 1 / Div 2; EMI: CE, FCC Part 15; Safety: EN60950
Compliant	EN50121-4, EN50155, NEMA TS-2, IEC61850-3, IEEE1613
Warranty	5 Years

SISTP1040-342-LRT

Unmanaged Hardened Gigabit Ethernet PoE+ Switch

(4) 10/100/1000Base-T Ports + (2) 100/1000Base-X SFP Slots



This switch is an unmanaged full Gigabit Ethernet hardened PoE+ switch that complies with IEEE 802.3at and IEEE 802.3af. The switch has (4) 10/100/1000Base-T PoE+ ports with two 100/1000 dual speed SFP slots. It can deliver up to 30 Watts on each PoE+ port simultaneously. The SISTP1040-342-LRT can be used at the edge of a hardened network to provide connections for PoE devices in hazardous locations. The two fiber uplink ports can also be used in a daisy chain for maximum network reliability. It has redundant input power connections to ensure safe reliable operation in temperatures between -40°C and +75°C. Transition Networks' hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other hazardous environments.

Ordering Information

SISTP1040-342-LRT
(4) 10/100/1000Base-T PoE+ [100 m/328 ft.]
with (2) 100/1000Base-X SFP slots

Optional Accessories (sold separately)

SFP Modules

Industrial Power Supplies:

25105
Input: 85-264 VAC, 124-370 VDC
Output: 48~55 VDC, 2.5A, 120 Watts

25080
Input: 88-132 VAC, 176-264VAC, 248-370VDC
by switch
Output: 48 ~ 53 VDC, 2.5A, 120 Watts

Features

- Support Jumbo Frame up to 9K bytes
- Layer 2 wire-speed switching engine
- Ruggedized metal closure
- IEEE 802.3az Energy Efficient Ethernet
- Fan-less design
- Wide operating temperature range (-40°C to +75°C)
- Dual Power input
- Din Rail and Wall Mount options

PoE Features

- IEEE 802.3at compliant
- IEEE 802.3af compliant
- PoE Budget: 120 Watts
- 30 Watts output on all 4 ports simultaneously

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ae IEEE 802.3x IEEE 802.1p IEEE 802.3az IEEE 802.3af IEEE 802.3at
Protocols	CSMA/CD
Technology	Store-and-forward switching architecture
Switching Capacity	12 Gbps
Connectors	(4) 10/100/1000Base-T RJ-45 (2) 100/1000Base-X SFP
MAC Address	4K MAC address table
Status LEDs	System, Power1, Power2, Port Status
Dimensions	Width: 5.3" [135 mm] Depth: 5.4" [130 mm] Height: 1.7" [44 mm]
Reset button	Reset the switch
Power Input	48-57 VDC; Redundant input; reverse power protection
Power Consumption	4.4 Watts (without PoE)
Ingress Protection	IP30
Environment	Operating: -40°C to +75°C Humidity: 5% to 95% (non-condensing)
Weight	0.95 lbs. [0.43 kg]
Compliance	UL Class 1 / Div 2; EMI: CE, FCC Part 15; Safety: EN60950
Compliant	EN50121-4, EN50155, NEMA TS-2, IEC61850-3, IEEE1613
Warranty	5 Years

SISGM-CHAS-L2

Modular Rack Mount Hardened Layer 2 Switch



Features

- IEC 62439-2 MRP Media Redundancy Protocol
- IEEE 1588v2 PTP clock Synchronization
- IPv4/IPv6 internet protocols
- 8K MAC Table
- HTTPS/SSH network security
- SMTP client
- IP-based bandwidth management
- Application-based QoS management
- Device Binding security function
- DOS/DDOS auto prevention
- IGMP v2/v3 IGMP snooping
- SNMP v1/v2c/v3
- RMON
- 4096 VLANs Network Management
- VLAN tagging (256 VLANs)
- Voice VLAN
- User Authentication for security
- RADIUS/TACACS+
- GRE Support
- ACL
- Supports 9.6K Bytes Jumbo Frames
- LLDP Protocol
- G.8032 V2
- MRP - Multiple Registration Protocol
- VRRP Virtual Router Redundancy Protocol
- LACP - 14 Groups
- MSTP (RSTP/STP compatible)
- TOS/DiffServ supported
- IGMP v2/v3 Snooping - 128 Groups/VLAN
- IP-based bandwidth management
- DHCP Server/Client/Relay
- DNS client proxy
- Web-based, Telnet, Console (CLI) configuration

IEC61850-3 compliant managed Ethernet switch with complete support of MRP Ethernet Redundancy protocol and MSTP (RSTP/STP compatible), the switch can protect your mission-critical applications from network interruptions with its fast recovery technology. Supporting a wide operating temperature from -40°C to +65°C, the switch is suitable for use in challenging environments. Remote management can be accomplished through the web-based interface and Telnet, with local management available using the console port CLI.

Modular design features: 3 Full size bays that accommodate (8) port 100/1000Base modules, 1 Half size bay that accommodates (2) or (4) port 1000/10Gb SFP modules, and 2 Power supply bays.

Specifications

Standards	IEEE 802.1p COS IEEE 802.1D IEEE 802.1s IEEE 802.1AB IEEE 802.3u IEEE 802.z IEEE 802.3x IEEE 802.3az	IEEE 802.1Q IEEE 802.1w RSTP IEEE 802.1x IEEE 802.3 IEEE 802.3ab IEEE 802.3ae IEEE 802.3ad
Port Configurations	3 Full size (8) Port Bays 1 Half size (2/4) Port Bay 2 Power Supply Bays (1) RJ-45 Console Serial Port	
Network Redundancy	O-Ring, Open-Ring, Multi-Ring, MRP – Media Redundancy Protocol, MSTP (RSTP, STP Compatible)	
Dimensions	Width: 17.32" [440 mm] Depth: 12.8" [325 mm] Height: 1.73" [44 mm] 19" Rack Mountable, 1U Requires 1U open space above and below for cooling	
Power Consumption	46 Watts (max)	
Power Input (Redundant)	VDC 48 (24 ~ 72VDC) Dual Inputs VAC 100~240VAC/100~370VAC Dual Inputs Current Overload Protection	
Fault Output	Fault Relay 1A@24VDC	
Ingress Protection	IP30	
Environment	Operating with Extended Temperature 1G or 10G SFPs: -40°C to +55°C Operating with Extended Temperature 1G SFPs only: -40°C to +65°C Humidity: 5% to 95% (non-condensing)	
Weight	14.52 lbs. [6.58 kg]	
Substation Automation	IEC61850-3, IEEE1613	
Compliance	EMI: FCC Part 15' CISPR (EN 55022) Class A, EN61000-3-2, EN61000-3-3 Environmental: EN55024, EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11	
Warranty	5 Years	

Note: Layer 2 switch is NOT upgradeable to Layer 3

Ordering Information

SISGM-CHAS-L2

- 3 Full size bays - accommodates (8) port 100/1000Base modules
- 1 Half size bay - accommodates (2) or (4) port 1000/10Gb SFP module
- 2 Power supply bays

Optional Accessories (sold separately)

Power Supplies

SISGM-PWR-LVC

- 1 Power module, with cooling fans, supporting 24~72VDC

SISGM-PWR-HVC

- 1 Power module, with cooling fans, supporting 100 ~ 240VAC or 100 ~ 370VDC

Network Port Modules

SISGM-2P-10G-SFP

- (2) Port Dual Speed 1000/10G SFP Module
Installs in Chassis Half Size Bay (1 per Chassis)

SISGM-4P-10G-SFP

- (4) Port Dual Speed 1000/10G SFP Module
Installs in Chassis Half Size Bay (1 per Chassis)

SISGM-8P-1G-TX

- (8) Port 10/100/1000Base-TX RJ-45 Module
Installs in Chassis Full Size Bay (3 per Chassis)

SISGM-8P-1G-SFP

- (8) Port 100/1000Base-X SFP Module
Installs in Chassis Full Size Bay (3 per Chassis)



SISGM-2P-10G-SFP



SISGM-4P-10G-SFP



SISGM-8P-1G-SFP



SISGM-8P-1G-TX

Note: Product is shipped as separate modules allowing assembly and configuration during installation.

SISGM-CHAS-L3

Modular Rack Mount Hardened Layer 3 Switch



Features

- Hardware routing, RIP V2.0 and static routing
- IEC 62439-2 MRP Media Redundancy Protocol
- IEEE 1588v2 PTP clock Synchronization
- IPv4/IPv6 internet protocols
- 8K MAC Table
- HTTPS/SSH network security
- SMTP client
- IP-based bandwidth management
- Application-based QoS management
- Device Binding security function
- DOS/DDOS auto prevention
- IGMP v2/v3 IGMP snooping
- SNMP v1/v2c/v3
- RMON
- 4096 VLANs Network Management
- VLAN tagging (256 VLANs)
- Voice VLAN
- User Authentication for security
- RADIUS/TACACS+
- GRE Support
- ACL
- Supports 9.6K Bytes Jumbo Frames
- LLDP Protocol
- G.8032 V2
- MRP - Multiple Registration Protocol
- VRRP Virtual Router Redundancy Protocol
- LACP - 14 Groups
- MSTP (RSTP/STP compatible)
- TOS/DiffServ supported
- IGMP v2/v3 Snooping - 128 Groups/VLAN
- IP-based bandwidth management
- DHCP Server/Client/Relay
- DNS client proxy
- Web-based, Telnet, Console (CLI) configuration

IEC61850-3 compliant managed Ethernet switch with Layer 3 static routing and RIP V2.0. With complete support of MRP Ethernet Redundancy protocol and MSTP (RSTP/STP compatible), the switch can protect your mission-critical applications from network interruptions with its fast recovery technology. Supporting a wide operating temperature from -40°C to +65°C, the switch is suitable for use in challenging environments. Remote management can be accomplished through the web-based interface and Telnet, with local management available using the console port CLI.

Modular design features: 3 Full size bays that accommodate (8) port 100/1000Base modules, 1 Half size bay that accommodates (2) or (4) port 1000/10Gb SFP modules, and 2 Power supply bays.

Specifications

Standards	IEEE 802.1p COS IEEE 802.1D IEEE 802.1s IEEE 802.1AB IEEE 802.3u IEEE 802.z IEEE 802.3x IEEE 802.3az	IEEE 802.1Q IEEE 802.1w RSTP IEEE 802.1x IEEE 802.3 IEEE 802.3ab IEEE 802.3ae IEEE 802.3ad
Port Configurations	3 Full size (8) Port Bays 1 Half size (2/4) Port Bay 2 Power Supply Bays (1) RJ-45 Console Serial Port	
Network Redundancy	O-Ring, Open-Ring, Multi-Ring, MRP – Media Redundancy Protocol, MSTP (RSTP, STP Compatible)	
Dimensions	Width: 17.32" [440 mm] Depth: 12.8" [325 mm] Height: 1.73" [44 mm] 19" Rack Mountable, 1U Requires 1U open space above and below for cooling	
Power Consumption	46 Watts (max)	
Power Input (Redundant)	VDC 48 (24~72VDC) Dual Inputs VAC 100~240VAC/100~370VAC Dual Inputs Current Overload Protection	
Fault Output	Fault Relay 1A@24VDC	
Ingress Protection	IP30	
Environment	Operating with Extended Temperature 1G or 10G SFPs: -40°C to +55°C Operating with Extended Temperature 1G SFPs only: -40°C to +65°C Humidity: 5% to 95% (non-condensing)	
Weight	14.52 lbs. [6.58 kg]	
Substation Automation	IEC61850-3, IEEE1613	
Compliance	EMI: FCC Part 15' CISPR (EN 55022) Class A, EN61000-3-2, EN61000-3-3 Environmental: EN55024, EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11	
Warranty	5 Years	

Note: Layer 2 switch is NOT upgradeable to Layer 3

Note: Product is shipped as separate modules allowing assembly and configuration during installation.

Ordering Information

SISGM-CHAS-L3

- 3 Full size bays - accommodates (8) port 100/1000Base modules
- 1 Half size bay - accommodates (2) or (4) port 1000/10Gb SFP module
- 2 Power supply bays

Optional Accessories (sold separately)

Power Supplies

SISGM-PWR-LVC

- 1 Power module, with cooling fans, supporting 24~72VDC

SISGM-PWR-HVC

- 1 Power module, with cooling fans, supporting 100 ~ 240VAC or 100 ~ 370VDC

Network Port Modules

SISGM-2P-10G-SFP

- (2) Port Dual Speed 1000/10G SFP Module
Installs in Chassis Half Size Bay (1 per Chassis)

SISGM-4P-10G-SFP

- (4) Port Dual Speed 1000/10G SFP Module
Installs in Chassis Half Size Bay (1 per Chassis)

SISGM-8P-1G-TX

- (8) Port 10/100/1000Base-TX RJ-45 Module
Installs in Chassis Full Size Bay (3 per Chassis)

SISGM-8P-1G-SFP

- (8) Port 100/1000Base-X SFP Module
Installs in Chassis Full Size Bay (3 per Chassis)



SISGM-2P-10G-SFP



SISGM-4P-10G-SFP



SISGM-8P-1G-SFP



SISGM-8P-1G-TX

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SISTM1040-173D-LRT

Managed Hardened Fast Ethernet Switch

(7) 10/100Base-TX Ports + (3) 100/1000Base-X SFP/RJ-45 Combo Ports



The SISTM1040-173D-LRT is a hardened managed switch in a rugged enclosure used at the edge of a hardened network to provide Fast Ethernet connections. This switch has (7) 10/100Base-TX ports and (3) combo Gigabit RJ-45/SFP ports. The SFP slots will accept 100MB or Gigabit SFP modules to provide multimode or single mode fiber communications.

The SISTM1040-173D-LRT has redundant input power connections, and a fault alarm relay to ensure safe reliable operation in temperatures between -40°C and +70°C.

Ordering Information

SISTM1040-173D-LRT
(7) 10/100Base-TX Ports
+ (3) 100/1000Base-X SFP/RJ-45 Combo Ports

Optional Accessories (sold separately)

SFP Modules

Optional Accessories (sold separately)
Industrial Power Supplies

25083
10.8~13.2 VDC, 24 Watts

25130
48 VDC, 39.4 Watts

Features

- Auto-Negotiation
- Auto-MDI/MDIX
- IP30 Metal Enclosure
- DIN Rail Mounting and Wall Mount Brackets Included
- Dry Contact Relay Alarm Output
- Dual Auto-Sensing Redundant DC Power Inputs
- VLAN: Part based, 802.1Q, maximum 4096 VLAN groups, Q-in-Q
- DHCP server
- Management through Web GUI/CLI/ SNMP
- Port Security
- Port trunking
- SSH/SSL
- Radius/TACACS+ authentication
- 802.1x port based access control
- 802.1p Quality of Service; TOS/Diffserv
- STP/RSTP/MSTP
- PTP Client
- IGMP v2/v3
- SNMP v1/v2/v3
- LLDP
- RMON
- Event Monitoring
- Reverse Polarity Protection

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3x IEEE 802.3z IEEE 802.3ab IEEE 802.3ad IEEE 802.1D IEEE 802.1p IEEE 802.1Q IEEE 802.1w IEEE 802.1s IEEE 802.1x IEEE 802.1AB
Status LEDs	PWR (Power): ON = Unit has power connected PWR 1 (Power): ON = primary power connected PWR 2 (Power): ON = backup power connected Fault: ON = Power failure or port link failure LNK/ACT (All Ports): ON = Link Flashing = data transmitting Ring Master, O-ring Operation (Participant)
Network Redundancy	Redundant Ring, Multi-Ring, STP, RSTP, MSTP
Dimensions	Width: 2.93" [74.3 mm] Depth: 4.3" [109.2 mm] Height: 6.05" [153.6 mm]
Power Consumption	12 Watts
Power Input	12 to 48 VDC, Overload Current Protection
Fault Output	Relay output contacts, 1A@24VDC load capacity
Ingress Protection	IP30
Environment	Operating: -40°C to +70°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	2.29 lbs. [1.05 kg]
Compliance	Safety: EN 60950-1, UL-60950-1, CISPR/EN55022 Class A, FCC Part 15 Class A, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Warranty	Lifetime

SISTM1040-262D-LRT-B

Managed Hardened Fast Ethernet Switch

(16) 10/100Base-TX Ports + (2) 10/100/1000Base-X SFP/RJ-45 Combo Ports



The SISTM1040-262D-LRT-B switch is a (18) port managed hardened switch with (2) copper ports or (2) dual speed SFP slots supporting Fast Ethernet to Gigabit Ethernet speeds. The (2) SFP slots provide the ultimate flexibility by allowing SFP fiber connections at different speeds and at a variety of communication distances. The ports can also be used in a redundant ring for maximum network reliability

Transition Networks' managed Industrial Switches are hardened devices designed to reliably operate in harsh environments such as those found on factory floors, outdoor enclosures or other hazardous environments.

Features

- Auto-Negotiation
- Auto-MDI/MDIX
- Combo SFP ports support 100/1000Base-X SFPs
- Extended Operating Temperature (-40°C to 70°C)
- Dry Contact Relay Alarm Output
- Dual, Redundant, Auto-Sensing 12-48 VDC Power Inputs
- Overload Current Protection
- DIN Rail Mounting and Wall Mount Brackets Included
- PTP- Precision Timing Protocol
- RMON

Specifications

Standards	IEEE 802.3 IEEE 802.3ab IEEE 802.3u IEEE 802.1x IEEE 802.3ad IEEE 802.1d IEEE 802.1p IEEE 802.1Q IEEE 802.3z IEEE 802.3x IEEE 802.1W IEEE 802.1S IEEE 802.1AB
Status LEDs	PWR 1 (Power): ON = primary power connected PWR 2 (Power): ON = backup power connected FAULT: ON = power input failure on PWR1 or PWR2 LNK/ACT: ON = Link; FLASHING = data transmitting FDX/COL: ON = Full-duplex mode; FLASHING = collisions occurring RM: Ring Master
Dimensions	Width: 3.8" [96.4 mm] Depth: 4.27" [108.5 mm] Height: 6.06" [154 mm]
Power Consumption	12 Watts
Power Input	12 to 48 VDC; redundant inputs with over current protection
Ingress Protection	IP30
Environment	Operating: -40°C to +70°C Storage: -40°C to +85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	3.85 lbs. [1.75 kg]
Compliance	Safety: UL EN60950-1, Class 1/Div 2, Groups A, B, C, D, ATEX, FCC Class A, CE Mark, CE EN61000-4-2, CE EN61000-4-3, CE EN-61000-4-4, CE EN61000-4-5, CE EN61000-4-6, CE EN61000-4-8, CE EN61000-6-11, Environmental: IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Warranty	Lifetime



Ordering Information

SISTM1040-262D-LRT-B

(16) 10/100Base-TX (RJ-45)
[100 m/328 ft.] with (2) 10/100/1000Base-T (RJ-45) or (2) 100/1000Base-X SFP Combo slots

Optional Accessories (sold separately)

SFP Modules

External AC/DC Power Supply

25083

Input: 85-264 VAC, 120-370VDC
Output: 10.8 ~ 13.2 VDC, 2A, 24 Watts
-20° to +60°C operating temperature

SPS-UA12DHT

Input: 90 ~ 264 VAC
Output: 12 VDC, 1.3A, 18 Watts
0°C to +70°C operating temperature

Management Features

- Port Based VLAN (4096)
- IEEE 802.1Q Tag VLAN
- GVRP
- Port Trunk with LACP QoS (Quality of Service)
- IEEE 802.1p Class of Service, Per port provides priority queues
- Port Based, Tag Based and Type of Service Priority
- SSL V2, V3, TLS V1.0, SSH-V2
- Port Security: MAC address entries/filter
- IP Security: IP address security management to prevent unauthorized intruder
- Login Security: IEEE 802.1X/RADIUS Authentication IGMP Query mode for Multi-Media Application
- IGMP Multicast groups 1024
- Support 0-ring and multi-ring, STP, RSTP, MSTP
- Provide redundant backup feature and recovery time below 20ms.
- SNMP v1 v2c, v3/Web/Telnet/CLI
- DHCP Client/DHCP Server
- TFTP Firmware Upgrade
- TFTP Configuration Backup/Restore
- IPv4/IPv6 dual-stack

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SISGM1040-184D-LRT

Managed Hardened Gigabit Ethernet Switch

(8) 10/100/1000Base-TX Ports + (4) 100/1000Base-X SFP Slots



The SISGM1040-184D-LRT is a managed Gigabit switch suitable for connecting remote devices in hazardous environments. The (4) dual speed SFP slots provide the ultimate flexibility by allowing SFP fiber connections at Fast Ethernet or Gigabit Ethernet speeds at a variety of communication distances. The ports can also be used in a redundant ring for maximum network reliability. This switch has redundant input power connections and a fault alarm relay to ensure safe reliable operation in temperatures between -40°C and +75° C.

Ordering Information

SISGM1040-184D-LRT

(8) 10/100/1000Base-T +
(4) 100/1000 SFP Slots
(Including DIN rail and wall mount brackets)

Optional Accessories (sold separately)

SFP Modules

External AC/DC Power Supply

25083

Input: 85-264 VAC, 120-370VDC
Output: 10.8 ~ 13.2 VDC, 2A, 24 Watts

SPS-UA12DHT

Input: 90 ~ 264 VAC
Output: 12 VDC, 1.3A, 18 Watts

Features

- Wire speed / non-blocking switching
- IP30 metal enclosure
- Reset Button
- Ethernet isolation: 1500 VRMS / 1 minute
- SFP slots support 100/1000 Dual Mode
- Dry Contact Relay Alarm Output
- Wide-range Redundant Power Design
- Redundant ring V2; single & multiple rings supported, link loss recovery < 20ms
- IEEE 802.1w RSTP, IEEE802.1s MSTP, IEEE802.1D STP
- IEEE802.3x flow control and back-pressure
- IEEE 802.1ab Link Layer Discovery Protocol (LLDP)
- SSL/SSH
- DIN Rail Mounting and Wall Mount Brackets

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3z IEEE 802.3x IEEE 802.3ad IEEE 802.1d IEEE 802.1p IEEE 802.1Q IEEE 802.1x IEEE 802.1w
MAC Addresses	8K
Jumbo Frames	9K Bytes
Ports	(8) 10/100/1000Base-T ports (4) 100/1000Base-X SFP slots (1) RS-232 console port
Status LEDs	P1 (Power) P2 (Power) Alarm (Alarm Event) per port Link/Act, per port speed
Dimensions	Width: 2.36" [60 mm] Depth: 4.29" [109 mm] Height: 6.06" [154 mm]
Power Consumption	10.5 Watts (max)
Power Input	12 - 58 VDC redundant power with reverse polarity protection
Environment	Operating: -40°C to 75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 - 10,000 ft.
Weight	2.34 lbs. [1.06 kg]
MTBF	> 25 years
Vibration, Shock, & Freefall	IEC68-2-6, -27, -32
Compliance	Safety: UL60950-1, CE/FCC, EN50121-4, CSA C22, EN61010-1, CE FCC Part 15, CISPR 22(EN55022) Class A, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6
Warranty	5 Years

Features (Continued)

- Port Trunk with LACP
- IEEE 802.1p Class of Service, Per port provides 8 priority queues, port-based shaping, scheduling schemes: SPQ, WRR, SPQ + WRR
- VLAN groups up to 1024, port based, tag based, Q in Q
- Port Mirror
- Port Security: IP and MAC-based, IEEE 802.1x
- Access Control
- Login Security IEEE 802.1X/RADIUS/TACACS+
- IGMP v1/v2/v3; IGMP snooping and querying
- Syslog
- NTP/SNTP
- SNMP v1 v2c, v3/Web/Telnet/CLI
- DHCP Client/DHCP Server Relay, Snooping, Option 82
- Web-based Firmware Upgrade
- Web-based Configuration Backup/Restore
- IPv4/IPv6 dual-stack



INDURA™ is IEC 61850-3 certified, and offers advanced industrial Ethernet management, redundancy and security features coupled with rugged hardware performance for hardened or outdoor environment applications requiring high reliability and availability. Its Gigabit and 2.5 Gigabit SFP slots allow maximum flexibility in a wide range of fiber supported network architectures. INDURA™ supports IEEE 1588v2 Precision Time Protocol for real-time automation applications. IEEE 802.3ah / IEEE 802.1ag / ITU -T Y.1731 compliance makes INDURA™ an excellent choice for networks that need fault detection and fault isolation.

Transition Networks' INDURA™ series of hardened, managed switches provide fully-hardened solutions designed to operate reliably in harsh environments.

Applications include: Power Generation, Transmission & Distribution, Electrical Substation, Smart Grid, Oil & Gas, Petrochemical, Mining, Water/Wastewater Treatment Plants, Shipyards / Airports, Outdoor IP Video Surveillance, Intelligent Transportation Systems, Process and Factory Automation requiring Precision Time Protocol, High Availability Fiber-based Network Ring Architectures, and Cellular Backhaul.

Features

- Innovative passive cooling design to maintain operating temperature of SFPs
- Certified IEC 61850-3
- Extended operating temperature (-40°C to 75°C)
- Redundancy: ITU-T G.8032v2 (Ethernet Ring Protection Switching) with Recovery < 50 ms, STP/RSTP/MSTP
- Synchronization: IEEE 1588v2 PTP
- System Alarms: Fault Output Relay, SYSLOG, SNMP Traps
- Security: IEEE 802.1x User Authentication, RADIUS and TACACS+, SNMPv3
- IPv4 and IPv6 support
- Link Aggregation LACP
- OAM Support: Link OAM IEEE 802.3ah, Service OAM IEEE 802.1ag, ITU-T Y.1731
- Jumbo Frame Support (9.6K)
- Quality of Service (802.1p) for real-time traffic prioritization
- VLAN (802.1Q) with double tagging
- IGMP v2/v3
- Management via Web, CLI, Telnet, SSH, SSL, SNMPv1, v2c & v3
- IEC 62439 Media Redundancy Protocol (MRP), Parallel Redundancy Protocol (PRP) (In Development)
- DIN Rail Mount Options

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ab IEEE 802.3x IEEE 802.3ad IEEE 802.1D IEEE 802.1p IEEE 802.1Q IEEE 802.1w IEEE 802.1s IEEE 802.1x IEEE 802.1AB IEEE 802.3ah IEEE 802.3ag/Y.1731 IEEE 1588-2008 (v2)
Status LEDs	Power, Fault Relay Alarm. Port Activity, Duplex
Dimensions	Width: 5.05" [128.27 mm] Depth: 5.64" [143.256 mm] Height: 6.8" [178.72 mm]
Power Consumption	14 Watts (max)
Power Input	18-57 VDC; dual input power (-L model) 125-300 VDC, 100-250 VAC; single input power (-H model)
Environment	Operating: -40°C to 75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	6.75 lbs. [3.68 kg]
Compliance	Safety: UL 60950 IEC 61850-3, EN 60079-15:2005
Warranty	Lifetime

Ordering Information:

IND-3280-L

- (4) 10/100/1000 Mbps RJ-45 ports
- (2) 100/1000 Mbps SFP slots
- (2) 100/1000/2500 Mbps SFP slots
- L = 18-57 VDC dual input power

IND-3284-L

- (7) or (8) 10/100/1000 Mbps RJ-45 ports
- (1) or (2) 100/1000 Mbps SFP slots
- (2) 100/1000/2500 Mbps SFP slots
- L = 18-57 VDC dual input power

IND-3280-H

- (4) 10/100/1000 Mbps RJ-45 ports
- (2) 100/1000 Mbps SFP slots
- (2) 100/1000/2500 Mbps SFP slots
- H = 125-300 VDC, 100-250 VAC single input power

IND-3284-H

- (7) or (8) 10/100/1000 Mbps RJ-45 ports
- (1) or (2) 100/1000 Mbps SFP slots
- (2) 100/1000/2500 Mbps SFP slots
- H = 125-300 VDC, 100-250 VAC single input power

Optional Accessories (sold separately)

SFP Modules

IND-328x-x Mouse Guard Side Draft Vent Hood

External AC/DC Power Supply

25130

Input: 85-264 VAC, 120-370VDC
Output: 48 VDC, .83A, 39.8 Watts

25131

Input: 88 ~ 264 VAC, 124~370VDC
Output: 48-55 VDC, 1.6A, 76.8 Watts

SISPM1040-384-LRT-C

Managed Hardened Gigabit Ethernet PoE+ Switch

(8) 10/100/1000Base-T Ports + (4) 100/1000Base-X SFP Slots



The SISPM1040-384-LRT-C is a full managed PoE+ switch suitable for connecting and powering devices in hardened environments. The switch can supply up to 30 Watts per port on all eight ports simultaneously. The switch also includes the embedded Device Management System (DMS) software that provides the advanced tools necessary for total management of all IP addressable devices. The unique DMS provides security integrators with lower overall cost, less downtime and easier management of the entire PoE+ network.

Transition Networks' hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other challenging environments.



Ordering Information

SISPM1040-384-LRT-C
(8) 10/100/1000Base-T PoE+ [100 m/328 ft.]
with (4) 100/1000Base-X SFP slots

Optional Accessories (sold separately)

SFP Modules

Industrial Power Supplies:

25104

Input: 88-264 VAC, 124-370 VDC
Output: 48~55 VDC, 5.0A, 240 Watts

25105

Input: 88-264 VAC, 124-370 VDC
Output: 48~55 VDC, 2.5A, 120 Watts

Mounting Brackets

WMBH-01

Wall Mount Bracket

Features (Continued)

- ACL - up to 256 entries, Drop or Rate limiting based on: Source and Destinations MAC, VLAN ID and IP address, protocol, port, DSCP/ IP precedence, TCP/UDP source and destination ports, 802.1p priority, Ethernet type, ICMP packets and TCP flag
- Loop Protection
- Quality of Service
 - Supports 8 hardware queues
 - Scheduling: strict priority and WRR, Queue assignment based on DSCP and class of service
 - Classification: Port based, 802.1p VLAN priority based, IPv4/IPv6 precedence / DSCP based, DiffServ, Classification and re-marking ACLs
 - Rate limiting: Ingress policer, Egress shaping and rate control, per port
- IPv4/IPv6 dual stacks and static routing
- Port Security, IP Source Guard
- System Alarms via SYSLOG / SNMP Trap
- DHCP Client/Server, DHCP relay, Option 82
- Port based network access control (802.1x)
- Web / SNMP v1,v2c,v3 / Telnet / CLI management
- Device Management System (DMS)
 - Graphical Monitoring - Topology View, Floor view, Map view
 - Find my Switch
 - Traffic Monitoring
 - Trouble shooting - Network diagnostic, protection mechanism, performance and Link Management

Features

- Store-and-Forward Architecture with 24 Gbps Switching Bandwidth
- Supports Jumbo frames up to 9.6K Bytes
- Ring Protections
 - Industry standard G.8032 Ethernet Ring Protection Switching (ERPS)
 - Support G.8031 Ethernet Linear Protection Switching (EPS)
 - Rapid Ring with recovery time less than 20ms
- Radius, TACACS+, User Authentication
- Supports LLDP Protocol
- HTTPS/SSH v1/v2 Network Security
- Temperature Detection and Alarm
- Support HW Watchdog to resume operation from CPU hang up
- IEEE 1588 v2 PTP
- Port Mirroring
- Power-over-Ethernet
 - Port Configuration
 - Auto Power Reset (APR)
 - DHCP per Port
 - PoE Scheduling
 - Complies to IEEE 802.3at, IEEE802.3af
 - 240 Watts PoE budget
 - 30 Watts output on all 8 ports
- IEEE 802.3ad LACP, up to 6 groups and up to 4 ports per group
- Up to 4K VLAN groups, Port based, 802.1Q tag, Q-in-Q, MAC based VLAN, Management VLAN, Private VLAN Edge, Voice VLAN, GVRP

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ab IEEE 802.3x IEEE 802.3ad IEEE 802.1p IEEE 802.1Q IEEE 802.1w IEEE 802.1s IEEE 802.1x IEEE 802.1AB IEEE 802.3ad IEEE 802.3af IEEE 802.3at IEEE 802.3ah IEEE 802.1ag IEEE 1588 v2 ITU-T Y.1731 ITU-T G.8031 ITU-T G.8032
MAC Address	8K
Backplane	24Gbps
Serial Console	RJ-45
Status LEDs	System, Power1, Ring Master, Coupling, Power2, Alarm, Port Status
Dimensions	Width: 2.4" [62 mm] Depth: 5.3" [135 mm] Height: 5.4" [130 mm]
DIP Switch (2-pin)	Rapid Ring setting
Reset button	Reset the switch, Restore Factory default
Digital output (relay)	24VDC/1A
Digital input	Level 0 (Low): 0V to 6V Level 1 (High): 10V to 24V
Power Input	48 - 57VDC; redundant inputs
Power Consumption Without PoE	11.1 Watts
Ingress Protection	IP30
Environment	Operating: -40°C to +75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 - 10,000 ft.
Weight	2.2 lbs. [1 kg]
Compliance	EMI: CE, FCC Part 15, EN61000-4-2, EN61000-4-3, EN-61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration), NEMA TS-2 Safety: IEC60950-1, UL Class 1/Div 2
Compliant	EN50155, EN50121-4, DNV, IEC61850-3, IEEE1613
Warranty	5 Years

SISPM1040-362-LRT

Managed Hardened Gigabit Ethernet PoE+ Switch

**(4) 10/100/1000Base-T PoE+ Ports + (2) 10/100/1000Base-T RJ-45
+ (2) 100/1000Base-X SFP Slots**



The SISPM1040-362-LRT is a full managed PoE+ switch suitable for connecting and powering devices in hardened environments. The switch can supply up to 30 Watts per port on all four PoE ports simultaneously. The switch also includes the embedded Device Management System (DMS) software that provides the advanced tools necessary for total management of all IP addressable devices. The unique DMS provides security integrators with lower overall cost, less downtime and easier management of the entire PoE+ network.

Transition Networks' hardened switches are certified to operate reliably in harsh environments such as those found on factory floors, outdoor enclosures or other challenging environments.

Features

- Store-and-Forward Architecture with 16 Gbps Switching Bandwidth
- Supports Jumbo frames up to 9.6K Bytes
- Ring Protections
 - Industry standard G.8032 Ethernet Ring Protection Switching (ERPS)
 - Support G.8031 Ethernet Linear Protection Switching (EPS)
 - Rapid Ring with recovery time less than 20ms
- Radius, TACACS+, User Authentication
- Supports LLDP Protocol
- HTTPS/SSH v1/v2 Network Security
- Temperature Detection and Alarm
- Support HW Watchdog to resume operation from CPU hang up
- IEEE 1588 v2 PTP
- Port Mirroring
- Power-over-Ethernet
 - Port Configuration
 - Auto Power Reset (APR)
 - DHCP per Port
 - PoE Scheduling
 - Complies to IEEE 802.3at, IEEE802.3af
 - 120 Watts PoE budget
 - 30 Watts output on all 4 PoE+ ports
- IEEE 802.3ad LACP, up to 6 groups and up to 4 ports per group
- Up to 4K VLAN groups, Port based, 802.1Q tag, Q-in-Q, MAC based VLAN, Management VLAN, Private VLAN Edge, Voice VLAN, GVRP

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3z IEEE 802.3ab IEEE 802.3x IEEE 802.3ad IEEE 802.1p IEEE 802.1Q IEEE 802.1w IEEE 802.1s IEEE 802.1x IEEE 802.1AB IEEE 802.3ad IEEE 802.3af IEEE 802.3at IEEE 802.3ah IEEE 802.1ag IEEE 1588 v2 ITU-T Y.1731 ITU-T G.8031 ITU-T G.8032
MAC Address	8K
Backplane	16Gbps
Serial Console	RJ-45
Status LEDs	System, Power1, Ring Master, Coupling, Power2, Alarm, Port Status
Dimensions	Width: 2.4" [62 mm] Depth: 5.3" [135 mm] Height: 5.4" [130 mm]
DIP Switch (2-pin)	Rapid Ring setting
Reset button	Reset the switch, Restore Factory default
Digital output (relay)	24VDC/1A
Digital input	Level 0 (Low): 0V to 6V Level 1 (High): 10V to 24V
Power Input	48 - 57VDC; redundant inputs with reverse polarity protection and overload current protection
Power Consumption Without PoE	8.2 Watts
Ingress Protection	IP30
Environment	Operating: -40°C to +75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 - 10,000 ft.
Weight	2 lbs. [0.9 kg]
Compliance	EMI: CE, FCC Part 15, EN61000-4-2, EN61000-4-3, EN-61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration), NEMA TS-2 Safety: IEC60950-1, UL Class 1/Div 2
Compliant	EN50155, EN50121-4, DNV, IEC61850-3, IEEE1613
Warranty	5 Years

Ordering Information

SISPM1040-362-LRT
(4) 10/100/1000Base-T PoE+
with (2) 10/100/1000Base-T RJ-45
+ (2) 100/1000Base-X SFP slots

Optional Accessories (sold separately)

SFP Modules

Industrial Power Supplies:

25104
Input: 85-264 VAC, 124-370 VDC
Output: 48~55 VDC, 5.0A, 240 Watts

25105
Input: 85-264 VAC, 124-370 VDC
Output: 48~55 VDC, 2.5A, 120 Watts

Mounting Brackets

WMBH-01
Wall Mount Bracket

Features (Continued)

- ACL - up to 256 entries, Drop or Rate limiting based on: Source and Destinations MAC, VLAN ID and IP address, protocol, port, DSCP/ IP precedence, TCP/UDP source and destination ports, 802.1p priority, Ethernet type, ICMP packets and TCP flag
- Loop Protection
- Quality of Service
 - Supports 8 hardware queues
 - Scheduling: strict priority and WRR, Queue assignment based on DSCP and class of service
 - Classification: Port based, 802.1p VLAN priority based, IPV4/IPV6 precedence / DSCP based, DiffServ, Classification and re-marking ACLs
 - Rate limiting: Ingress policer, Egress shaping and rate control, per port
- IPv4/IPV6 dual stacks and static routing
- Port Security, IP Source Guard
- System Alarms via SYSLOG / SNMP Trap
- DHCP Client/Server, DHCP relay, Option 82
- Port based network access control (802.1x)
- Web / SNMP v1,v2c,v3 / Telnet / CLI management
- Device Management System (DMS)
 - Graphical Monitoring - Topology View, Floor view, Map view
 - Find my Switch
 - Traffic Monitoring
 - Trouble shooting - Network diagnostic, protection mechanism, performance and Link Management

25130

Industrial DIN Rail Mounted Power Supply



25130

Features

- Variable AC input range
- Protected against: Overload and Over Voltage
- Convection air cooling
- DIN rail mountable
- UL 508 approved
- Full load burn in test
- RoHS Compliant
- MTBF 301.7Khrs

Specifications

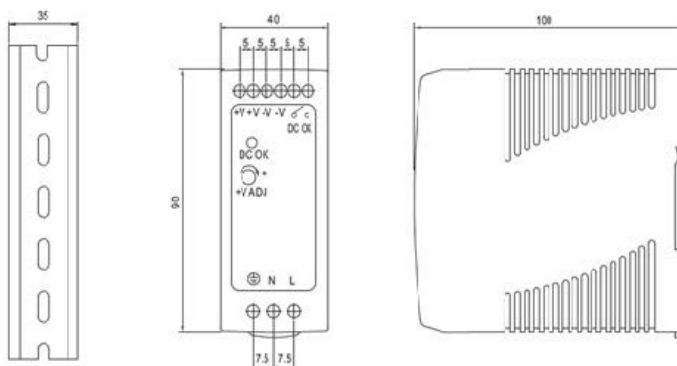
Output	Output Voltage: 48VDC Current Rating: 0.83A Power Rating: 39.8 Watts Ripple & Noise Max: 200mVp-p Voltage Range: 48~56VDC Voltage Tolerance: $\pm 1.0\%$ Line Regulation: $\pm 1.0\%$ Load Regulation: $\pm 1.0\%$ Setup, Rise Time: 500ms, 30ms Hold Up Time: 20ms/115VAC
Input	Voltage Range Switch Selectable: 88~264VAC, 120~370VDC Frequency Range: 47~63Hz Efficiency: 88% AC Current (Typical): 1.1A@115VAC, 0.7A@230VAC Inrush Current (Cold): 30A@115VAC, 60A@230VAC Leakage Current: <1mA@240VAC
Protection	Overload: 105~150% Overvoltage: 57.6~64.8V
Dimensions	Width: 1.57" [40 mm] Depth: 3.94" [100 mm] Height: 3.54" [90 mm]
Environment	Operating: -20°C to +70°C Storage: -40°C to +85°C Humidity: 20% to 90% (non-condensing)
Weight	0.66 lbs. [0.3 kg]
Compliance	Safety: UL508, TUV EN60950-1, NEC Class 2, LPS Compliant, UL60950-1, EN55011, EN55022, CISPR22, EN61204-3 Class B, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN55024, EN61000-6-2, EN50082-2, EN61204-3 A, IEC60068-2-6 (Vibration)
Warranty	Lifetime

Ordering Information

25130

Industrial DIN rail mounted power supply
48VDC, 39.8Watts

Switches



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25131

Industrial DIN Rail Mounted Power Supply



25131

Features

- Auto-Negotiation
- Variable AC input range
- Protected against:
 - Overload
 - Over Voltage
 - Over Temperature
- Convection air cooling
- DIN Rail mountable
- UL 508 approved
- Full load burn in test
- RoHS compliant
- MTBF 481.9Khrs

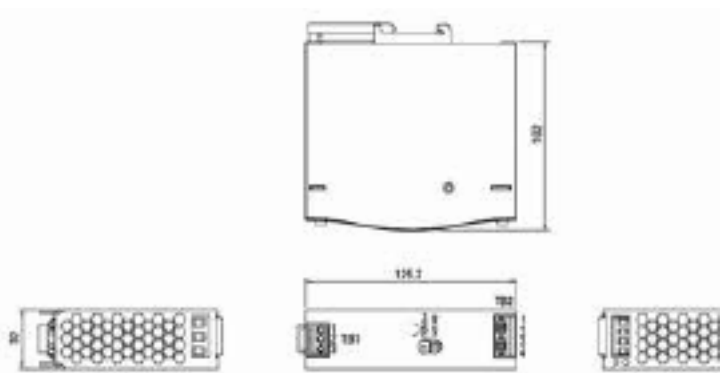
Specifications

Output	Output Voltage: 48VDC Current Rating: 1.6A Power Rating: 76.8 Watts Ripple & Noise Max: 120mVp-p Voltage Range: 48~55VDC Voltage Tolerance: $\pm 1.0\%$ Line Regulation: $\pm 0.5\%$ Load Regulation: $\pm 1.0\%$ Setup, Rise Time: 3000ms, 60ms Hold Up Time: 20ms/115VAC
Input	Voltage Range Switch Selectable: 88~264VAC, 124~370VDC Frequency Range: 47~63Hz Efficiency: 90% AC Current (Typical): 1.4A@115VAC, .85A@230VAC Inrush Current (Cold): 30A@115VAC, 50A@230VAC Leakage Current: <1mA@240VAC
Protection	Overload: 110~150% Overvoltage: 56~65.8V
Dimensions	Width: 1.26" [32 mm] Depth: 4.02" [102 mm] Height: 4.93" [125.2 mm]
Environment	Operating: -30°C to +70°C Storage: -40°C to +85°C Humidity: 20% to 95% (non-condensing)
Weight	1.12 lbs. [0.51 kg]
Compliance	Safety: UL508, TUV EN60950-1, IEC60068-2-6 (Vibration) EN55022, CISPR22, EN61204-3 Class B, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN55024, EN61000-6-2, EN50082-2, EN61204-3 A, IEC60068-2-6 (Vibration)
Warranty	Lifetime

Ordering Information

25131
Industrial DIN rail mounted power supply
48VDC, 76.8Watts

Switches



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Industrial DIN Rail Mounted Power Supply



Features

- Universal AC input range
- Protected against:
 - Overload
 - Over Voltage
- Convection air cooling
- DIN Rail mountable
- UL 508 approved
- Full load burn in test
- RoHS compliant
- MTBF 584Khrs
- Lifetime warranty

Specifications

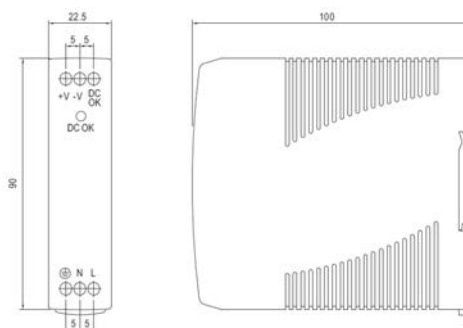
Output	Voltage: 24VDC Current Rating: .42A Power Rating: 10 Watts Ripple & Noise Max: 150mVp-p Voltage Tolerance: $\pm 2.0\%$ Line Regulation: $\pm 1.0\%$ Load Regulation: $\pm 2.0\%$ Setup, Rise Time: 1000ms, 30ms Hold Up Time: 25ms/115VAC
Input	Voltage Range: 85~264VAC, 120~370VDC Frequency Range: 47~63Hz Efficiency: 84% AC Current (Typical): .33A@115VAC .21A@230VAC Inrush Current (Cold): 35A@115VAC 70A@230VAC Leakage Current: <1mA@240VAC
Protection	Overload: 105% Rated Output Overvoltage: 27.6~32.4V
Dimensions	Width: 0.89" [22.5 mm] Depth: 3.94" [100 mm] Height: 3.54" [90 mm]
Environment	Operating: -20°C to 70°C Storage: -40°C to 85°C Humidity: 20% to 90% (non-condensing)
Weight	0.37 lbs. [0.17 kg]
Compliance	Safety: UL508, TUV EN60950-1, NEC Class 2/LPS EMC Emissions: EN55011, EN55022, CISPR22, EN61204-3 Class B, EN61000-3-2, EN61000-3-3 EMC Immunity: EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN55024, EN61000-6-1, EN61204-3 A IEC60068-2-6 (Vibration)
Warranty	Lifetime

Ordering Information

25135

24VDC, 10 Watts – DIN Rail Mount

CBC €



25104

Industrial DIN Rail Mounted Power Supply



Features

- 94% High Efficiency
- 150% Peak Load
- Protected against:
 - Short Circuit
 - Overload
 - Over Voltage
 - Overheating
- Convection air cooling
- DIN rail mountable
- UL 508 approved
- Full load burn in test
- RoHS compliant
- MTBF 169.3 Khrs

Specifications

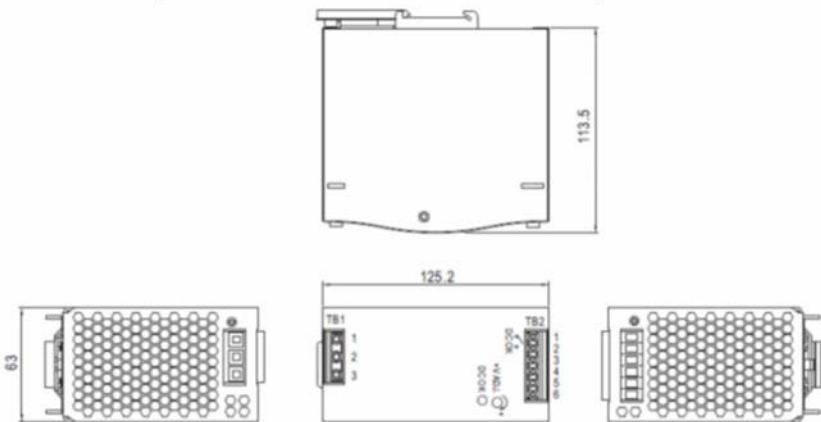
Output	Output Voltage	48VDC
	Current Rating	5A
	Power Rating	240 Watts
	Ripple & Noise Max	120mVp-p
	Voltage Range	48~55VDC
	Voltage Tolerance	±1.0%
	Line Regulation	±0.5%
	Load Regulation	±1.0%
	Setup, Rise Time	300ms, 60ms
	Hold Up Time	20ms
Input	Voltage Range	Switch Selectable
		88~264VAC
		124~370VDC
	Frequency Range	47~63Hz
	Efficiency	94%
	AC Current (Typical)	2.6A@115VAC
		1.3A@230VAC
	Inrush Current (Cold)	33A@115VAC 65A@230VAC
Protection	Overload	105~160%
	Overvoltage	56~65V
Dimensions	Width: 2.48"	[63 mm]
	Depth: 4.47"	[113.5 mm]
	Height: 4.93"	[125.2 mm]
Environment	Operating: -25°C to +70°C	
	Storage: -40°C to +85°C	
	Humidity: 20% to 90% (non-condensing)	
Weight	2.27 lbs. [1.03 kg]	
Compliance	Safety: UL508, TUV EN60950-1;	
	IEC60068-2-6 (Vibration);	
	EMC Emission: EN55022, CISPR22 Class B,	
	EN61000-3-2, IEN61000-3-3;	
	EMC Immunity: EN61000-4-2, EN61000-4-3,	
	EN61000-4-4, EN61000-4-5, EN61000-4-6,	
	EN61000-4-8, EN61000-4-11, EN55024,	
	EN61000-6-2, EN50082-2, EN61204-3, SEMI F47,	
	GL Approved	
Warranty	Lifetime	

Ordering Information

25104
Industrial DIN rail mounted power supply



Switches



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25160

Hardened DIN Rail Mounted Power Supply



Features

- 94% High Efficiency
- 150% Peak Load
- Protected against:
 - Short Circuit
 - Overload
 - Over Voltage
 - Overheating
- Convection air cooling
- DIN rail mountable
- UL 508 approved
- Full load burn in test
- RoHS compliant
- MTBF 112.9 Khrs

Specifications

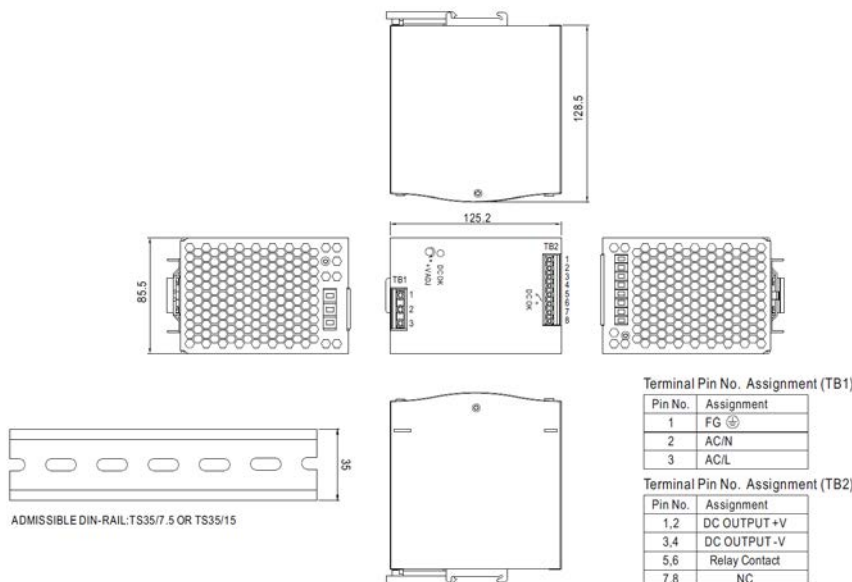
Output	Output Voltage	48VDC
	Current Rating	5A
Input	Power Rating	480 Watts
	Ripple & Noise Max	120mVp-p
	Voltage Range	48~55VDC
	Voltage Tolerance	±1.0%
	Line Regulation	±0.5%
	Load Regulation	±1.0%
	Setup, Rise Time	300ms, 60ms
	Hold Up Time	20ms
	Voltage Range	Switch Selectable 90~264VAC 127~370VDC
	Frequency Range	47~63Hz
Protection	Efficiency	94%
	AC Current (Typical)	5A@115VAC 2.5A@230VAC
Dimensions	Inrush Current (Cold)	40A@115VAC 80A@230VAC
	Overload	110~160%
Environment	Overvoltage	57.6~64.8V
	Width: 3.37" [85.5 mm] Depth: 5.06" [128.5 mm] Height: 5.99" [152.2 mm]	
Weight	Operating: -25°C to +70°C Storage: -40°C to +85°C Humidity: 20% to 90% (non-condensing)	
	3.53 lbs. [1.6 kg]	
Compliance	Safety: UL508, TUV EN60950-1; IEC60068-2-6 (Vibration)	
	EMC Emission: EN55011, EN5032(CISPR32), EN61204-3 Class B, EN61000-3-2, EN61000-3-3; EMC Immunity: EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN55024, EN61000-6-2, EN50082-2, EN61204-3, SEMI F47, GL Approved	
Warranty	5 Year	

Ordering Information

25160

Hardened DIN rail mounted power supply
Input 90-264 VAC, 127-370 VDC
Output: 48 ~ 55 VDC, 10A, 480 Watts

Switches



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