

CentreCOM[®] GS970EMX Series

Gigabit Layer3 Lite Access Switches with 10 Gigabit Uplinks

The Allied Telesis CentreCOM GS970EMX series Layer 3 Lite switches provide Gigabit connectivity with 10 Gigabit copper and fiber uplinks. They feature a comprehensive feature-set making them ideal for secure and cost-effective access in small to medium business networks.



Overview

The Allied Telesis GS970EMX series provide high availability, security, and a basic L3 feature set. The GS970EMX/10 features 8x 10M/100M/1 Gigabit ports with 1x 100M/1/2.5/5/10 Multi-Gigabit copper uplink and 1x 1/10G SFP+ uplink. The GS970EMX/28 features 24x 10M/100M/1 Gigabit ports with 2x 100M/1/2.5/5/10 Multi-Gigabit copper uplinks and 2x 1/10G SFP+ uplinks.

The compact and fan-less design provides silent operation and flexible deployment, making it ideal for the edge of modern business networks.

Network Management

The GS970EMX Series support the AlliedWare Plus™ advanced operating system for consistent management across all devices. The industry-standard Command Line Interface (CLI) reduces time and cost, while the web-based Graphical User Interface (GUI) is built in for easy-to-use visual management.

Network Security

Network security is guaranteed, with powerful control over network traffic types, secure management options, and other multi-layered security features built right in.

Network Access Control (NAC) gives unprecedented control over user access to the network, in order to mitigate threats to network infrastructure.

802.1x port-based authentication, in partnership with standards-compliant dynamic VLAN assignment, checks a user's adherence to network security policies and either grants access or offers remediation. Tri-authentication

ensures the network is only accessed by known users and devices, and secure access is available for guests.

Protection from malicious network attacks is provided by security features such as DHCP snooping, STP root guard, BPDU protection, and access control lists. Each of these can be configured to perform a variety of actions upon detection of a suspected attack.

Stackable

Create a VCStack™ of up to four GS970EMX/28 switches with 40 Gbps of stacking bandwidth. VCStack provides a highly-available system in which network resources are spread out across stacked units, minimizing the impact should any link or unit fail.

Reliability

The GS970EMX Series support Ethernet Protection Switched Ring (EPSRing™), which prevents loops in ring-based networks. EPSR offers rapid detection and extremely fast failover in the event of a link or node failure, with recovery in as little as 50 milliseconds.

The GS970EMX Series can act as the EPSR master with a premium license, ensuring resiliency in Ethernet ring-based networks.

Comprehensive Security

As AMF members, the GS970EMX Series is compatible with our AMF-Security solution, which enables a self-defending network. The AMF-Sec controller responds immediately to any internal malware threats by instructing the GS970EMX to isolate the affected part of the network, and quarantine the suspect device.

ECO Friendly

The GS970EMX Series support Energy Efficient Ethernet, which automatically reduces the power consumed by the switch whenever there is no traffic on a port.

The GS970EMX Series are fanless, providing silent operation, which makes them ideal for desktop or work area deployment.

Key Features

- ▶ AlliedWare Plus operating system
- ▶ Autonomous Management Framework (AMF) edge node
- ▶ Vista Manager EX compatible
- ▶ AMF-Security compatible
- ▶ 1/2.5/5/10 Multi-Gigabit copper uplink ports
- ▶ 1/10G SFP/SFP+ fiber uplink ports
- ▶ EPSRing™ for resilient high-speed ring-based networks
- ▶ EPSR Master
- ▶ Energy Efficient Ethernet
- ▶ Active Fiber Monitoring
- ▶ Static and dynamic routing
- ▶ Fan-less design for silent operation
- ▶ Web-based Device GUI
- ▶ Multicast Source Discovery Protocol (MSDP)
- ▶ Link Monitoring

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Product Specifications

PRODUCT	10/100/1000T (RJ-45) COPPER PORTS	1/2.5/5/10GT COPPER PORT	1/10G SFP+ PORT	TOTAL PORTS	STACKING PORTS	SWITCHING FABRIC	FORWARDING RATE
GS970EMX/10	8	1	1	10	2	56Gbps	41.6Mpps
GS970EMX/28 ¹	24	2	2	28	4	128Gbps	95.2Mpps

Physical Specifications

PRODUCT	WIDTH X DEPTH X HEIGHT	MOUNTING	WEIGHT		PACKAGED DIMENSIONS
			UNPACKAGED	PACKAGED	
GS970EMX/10	263 x 179 x 38 mm (10.35 x 7.04 x 1.50 in)	Rack-mount	1.6 kg (3.53 lb)	2.98 kg (6.57 lb)	462 x 258 x 107 mm (18.19 x 10.15 x 4.21 in)
GS970EMX/28 ¹	341 x 231 x 44 mm (13.42 x 9.09 x 1.73 in)	Rack-mount	TBD	TBD	TBD

Latency (microseconds)

PRODUCT	PORT SPEED				
	100MBPS	1GBPS	2.5GBPS	5GBPS	10GBPS
GS970EMX/10	6.22	3.68	3.24	2.68	1.73
GS970EMX/28 ¹	TBD	TBD	TBD	TBD	TBD

¹ GS970EMX/28 available Q2 2022

Power Characteristics

PRODUCT	MAX POWER CONSUMPTION (W)	MAX HEAT DISSIPATION (BTU/H)
GS970EMX/10	19	65
GS970EMX/28 ¹	TBD	TBD

Specifications

Performance

- ▶ Supports 10KB L2 jumbo frames for 2.5G connections, or 12KB for all other connection speeds
- ▶ Wire speed multicasting
- ▶ 4094 configurable VLANs
- ▶ Up to 16K MAC addresses
- ▶ 1GB DDR3 SDRAM, 256MB NAND flash memory
- ▶ Packet buffer memory: 2MB

Reliability

- ▶ Modular AlliedWare Plus operating system
- ▶ Temperature and internal voltages. SNMP traps alert network managers in case of any failure

Expandability

- ▶ Stack up to four units in a VCStack (GS970EMX/28 only)
- ▶ Premium license for additional features

Flexibility and Compatibility

- ▶ 10G SFP+ ports will support any combination of Allied Telesis 1000Mbps SFP and 10GbE SFP+ modules and direct attach cables listed in this document under Ordering Information
- ▶ The 1/2.5/5/10G Multi-Gigabit port enables flexible uplink options, and support for legacy cabling
- ▶ Port speed and duplex configuration can be set manually or by auto-negotiation

Diagnostic Tools

- ▶ Built-In Self Test (BIST)
- ▶ Ping polling and traceroute for IPv4 and IPv6
- ▶ Optical Digital Diagnostic Monitoring (DDM)
- ▶ Find-me device locator
- ▶ Automatic link flap detection and port shutdown
- ▶ Cable fault locator (TDR)
- ▶ Uni-Directional Link Detection (UDLD)
- ▶ Active Fiber Monitoring detects tampering on optical links

IP Features

- ▶ RIP, OSPF, and Static routing for IPv4
- ▶ Device management over IPv6 networks with SNMP, Telnet, SSH
- ▶ IPv6 hardware ACLs
- ▶ Log to IPv6 hosts with Syslog
- ▶ IPv6 Ready certified

Management

- ▶ Allied Telesis Autonomous Management Framework™ (AMF) enables powerful centralized management and zero-touch device installation and recovery
- ▶ Manage the GS970EMX Series switches with Vista Manager EX—our graphical single-pane-of-glass monitoring and management tool for AMF networks, which also supports wireless and third party devices
- ▶ AMF Security (AMF-Sec) enables a self-defending network—managing the GS970EMX (or other AMF switches) to automatically block the spread of malware by quarantining suspect end devices
- ▶ Industry-standard CLI with context-sensitive help
- ▶ Built-in text editor and powerful CLI scripting engine
- ▶ Comprehensive SNMP MIB support for standards-based device management
- ▶ Console management port on the front panel for ease of access
- ▶ Event-based triggers allow user-defined scripts to be executed upon selected system events
- ▶ Eco-friendly mode allows ports and LEDs to be disabled to save power
- ▶ USB interface allows software release files, configurations and other files to be stored for backup and distribution to other devices
- ▶ Front panel 7-segment LED provides at-a-glance status and fault information
- ▶ Web-based Graphical User Interface (GUI)

Quality of Service

- ▶ IP precedence and DiffServ marking based on Layer 2, 3 and 4 headers
- ▶ Queue scheduling options for strict priority, weighted round robin or mixed scheduling
- ▶ Taildrop for queue congestion control
- ▶ Extensive remarking capabilities
- ▶ Policy-based QoS based on VLAN, port, MAC and general packet classifiers
- ▶ Limit bandwidth per port or per traffic class down to 64kbps
- ▶ 8 priority queues with a hierarchy of high priority queues for real time traffic, and mixed scheduling, for each switch port
- ▶ Policy-based storm protection
- ▶ Wirespeed traffic classification with low latency essential for VoIP and real-time streaming media applications

Resiliency Features

- ▶ EPSRing (Ethernet Protection Switched Rings) with Super Loop Protection (SLP) and enhanced recovery
- ▶ STP root guard
- ▶ Loop protection: thrash limiting and loop detection
- ▶ Dynamic link failover (host attach)
- ▶ Control Plane Prioritization (CPP) ensures the CPU always has sufficient bandwidth to process network control traffic
- ▶ PVST+ compatibility mode
- ▶ BPDU forwarding

Security Features

- ▶ MAC address filtering and MAC address lock-down
- ▶ Port-based learn limits (intrusion detection)
- ▶ Access Control Lists (ACLs) based on layer 3 and 4 headers
- ▶ Private VLANs provide security and port isolation for multiple customers using the same VLAN

- ▶ Secure Copy (SCP)
- ▶ BPDU protection
- ▶ Network Access and Control (NAC) features manage endpoint security
- ▶ Dynamic VLAN assignment
- ▶ Tri-authentication: MAC-based, web-based and IEEE 802.1x
- ▶ DoS attack blocking and virus throttling
- ▶ DHCP snooping, IP source guard and Dynamic ARP Inspection (DAI)
- ▶ Strong password security and encryption
- ▶ Auth fail and guest VLANs
- ▶ Secure File Transfer Protocol (SFTP) client
- ▶ Authentication, Authorisation and Accounting (AAA)
- ▶ Bootloader can be password protected for device security
- ▶ Configurable ACLs for management traffic
- ▶ RADIUS group selection per VLAN or port

Environmental Specifications

- ▶ Operating temperature range: 0°C to 50°C (32°F to 122°F)
- ▶ Storage temperature range: -25°C to 70°C (-13°F to 158°F)
- ▶ Operating relative humidity range: 5% to 90% non-condensing
- ▶ Storage relative humidity range: 5% to 95% non-condensing
- ▶ Operating altitude range: Up to 3,048 meters maximum (10,000 ft)

Electrical Approvals and Compliances

EMC:

- ▶ EN55032 class A

EMI:

- ▶ FCC part15 Subpart B/ Class A
- ▶ ICES-003:2016, Issue6 Class A
- ▶ EN55032:2012 / AC: 2013 Class A
- ▶ CISPR 32:2012 Class A
- ▶ RCM AS/NZS CISPR 32 : 2013 Class A
- ▶ EN 61000-3-2
- ▶ EN 61000-3-3

EMS:

- ▶ EN 55024: 2010
- ▶ EN 55035: 2017

Safety Standards

- ▶ UL62368-1(cULus),
- ▶ EN/IEC62368-1(UL-CB/EU)
- ▶ EN/IEC 60825-1 (Laser Safety)
- ▶ ISO/IEC 15408
- ▶ CE
- ▶ EAC
- ▶ UKCA
- ▶ NOM

Restrictions on Hazardous Substances (RoHS) Compliance

- ▶ EU RoHS compliant
- ▶ China RoHS compliant

Standards and Protocols

Authentication

- RFC 1321 MD5 Message-Digest algorithm
- RFC 1828 IP authentication using keyed MD5

Cryptographic Algorithms

FIPS Approved Algorithms

- Encryption (Block Ciphers):
- ▶ AES (ECB, CBC, CFB and OFB Modes)
- ▶ 3DES (ECB, CBC, CFB and OFB Modes)

Block Cipher Modes:

- ▶ CCM
- ▶ CMAC
- ▶ GCM
- ▶ XTS

Digital Signatures & Asymmetric Key Generation:

- ▶ DSA
- ▶ ECDSA
- ▶ RSA

Secure Hashing:

- ▶ SHA-1
- ▶ SHA-2 (SHA-224, SHA-256, SHA-384, SHA-512)

Message Authentication:

- ▶ HMAC (SHA-1, SHA-2(224, 256, 384, 512)

Random Number Generation:

- ▶ DRBG (Hash, HMAC and Counter)

Non FIPS Approved Algorithms

- RNG (AES128/192/256)
- DES
- MD5

Encryption (management traffic only)

- FIPS 180-1 Secure Hash standard (SHA-1)
- FIPS 186 Digital signature standard (RSA)
- FIPS 46-3 Data Encryption Standard (DES and 3DES)

Ethernet Standards

- IEEE 802.2 Logical Link Control (LLC)
- IEEE 802.3 Ethernet
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3ae 10 Gigabit Ethernet
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- IEEE 802.3bz 2.5GBASE-T and 5GBASE-T ("multi-gigabit")
- IEEE 802.3u 100BASE-X
- IEEE 802.3x Flow control - full-duplex operation
- IEEE 802.3z 1000BASE-X

IPv4 Features

- RFC 768 User Datagram Protocol (UDP)
- RFC 791 Internet Protocol (IP)
- RFC 792 Internet Control Message Protocol (ICMP)
- RFC 793 Transmission Control Protocol (TCP)
- RFC 826 Address Resolution Protocol (ARP)
- RFC 894 Standard for the transmission of IP datagrams over Ethernet networks
- RFC 919 Broadcasting Internet datagrams
- RFC 922 Broadcasting Internet datagrams in the presence of subnets
- RFC 932 Subnetwork addressing scheme
- RFC 950 Internet standard subnetting procedure
- RFC 951 Bootstrap Protocol (BootP)
- RFC 1027 Proxy ARP
- RFC 1035 DNS client
- RFC 1042 Standard for the transmission of IP datagrams over IEEE 802 networks
- RFC 1071 Computing the Internet checksum
- RFC 1122 Internet host requirements
- RFC 1191 Path MTU discovery
- RFC 1256 ICMP router discovery messages

- RFC 1518 An architecture for IP address allocation with CIDR
- RFC 1519 Classless Inter-Domain Routing (CIDR)
- RFC 1542 Clarifications and extensions for BootP
- RFC 1591 Domain Name System (DNS)
- RFC 1812 Requirements for IPv4 routers
- RFC 1918 IP addressing
- RFC 2581 TCP congestion control

IPv6 Features

- RFC 1981 Path MTU discovery for IPv6
- RFC 2460 IPv6 specification
- RFC 2464 Transmission of IPv6 packets over Ethernet networks
- RFC 2711 IPv6 router alert option
- RFC 3484 Default address selection for IPv6
- RFC 3587 IPv6 global unicast address format
- RFC 3596 DNS extensions to support IPv6
- RFC 4007 IPv6 scoped address architecture
- RFC 4193 Unique local IPv6 unicast addresses
- RFC 4213 Transition mechanisms for IPv6 hosts and routers
- RFC 4291 IPv6 addressing architecture
- RFC 4861 Neighbor discovery for IPv6
- RFC 4862 IPv6 Stateless Address Auto-Configuration (SLAAC)
- RFC 5014 IPv6 socket API for source address selection
- RFC 5095 Deprecation of type 0 routing headers in IPv6
- RFC 5175 IPv6 Router Advertisement (RA) flags option
- RFC 6105 IPv6 Router Advertisement (RA) guard

Management

- AT Enterprise MIB including AMF MIB and SNMP traps
- Optical DDM MIB
- SNMPv1, v2c and v3
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- RFC 1155 Structure and identification of management information for TCP/IP-based Internets
- RFC 1157 Simple Network Management Protocol (SNMP)
- RFC 1212 Concise MIB definitions
- RFC 1213 MIB for network management of TCP/IP-based Internets: MIB-II
- RFC 1215 Convention for defining traps for use with the SNMP
- RFC 1227 SNMP MUX protocol and MIB
- RFC 1239 Standard MIB
- RFC 1724 RiPv2 MIB extension
- RFC 2578 Structure of Management Information v2 (SMIv2)
- RFC 2579 Textual conventions for SMIv2
- RFC 2580 Conformance statements for SMIv2
- RFC 2674 Definitions of managed objects for bridges with traffic classes, multicast filtering and VLAN extensions
- RFC 2741 Agent extensibility (AgentX) protocol
- RFC 2819 RMON MIB (groups 1, 2, 3 and 9)
- RFC 2863 Interfaces group MIB
- RFC 3176 sFlow: a method for monitoring traffic in switched and routed networks
- RFC 3411 An architecture for describing SNMP management frameworks
- RFC 3412 Message processing and dispatching for the SNMP
- RFC 3413 SNMP applications
- RFC 3414 User-based Security Model (USM) for SNMPv3
- RFC 3415 View-based Access Control Model (VACM) for SNMP
- RFC 3416 Version 2 of the protocol operations for the SNMP
- RFC 3417 Transport mappings for the SNMP
- RFC 3418 MIB for SNMP
- RFC 3635 Definitions of managed objects for the Ethernet-like interface types

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RFC 3636 IEEE 802.3 MAU MIB
 RFC 4022 MIB for the Transmission Control Protocol (TCP)
 RFC 4113 MIB for the User Datagram Protocol (UDP)
 RFC 4188 Definitions of managed objects for bridges
 RFC 4292 IP forwarding table MIB
 RFC 4293 MIB for the Internet Protocol (IP)
 RFC 4318 Definitions of managed objects for bridges with RSTP
 RFC 4502 RMON 2
 RFC 4560 Definitions of managed objects for remote ping, traceroute and lookup operations
 RFC 5424 The Syslog protocol

Multicast Support

Bootstrap Router (BSR) mechanism for PIM-SM
 IGMP query solicitation
 IGMP snooping (IGMPv1, v2 and v3)
 IGMP snooping fast-leave
 IGMP/MLD multicast forwarding (IGMP/MLD proxy)
 MLD snooping (MLDv1 and v2)
 PIM and PIM SSM for IPv6
 RFC 1112 Host extensions for IP multicasting (IGMPv1)
 RFC 2236 Internet Group Management Protocol v2 (IGMPv2)
 RFC 2715 Interoperability rules for multicast routing protocols
 RFC 3376 IGMPv3
 RFC 3618 Multicast Source Discovery Protocol (MSDP)
 RFC 3810 Multicast Listener Discovery v2 (MLDv2) for IPv6
 RFC 3956 Embedding the Rendezvous Point (RP) address in an IPv6 multicast address
 RFC 3973 PIM Dense Mode (DM)
 RFC 4541 IGMP and MLD snooping switches
 RFC 4601 Protocol Independent Multicast - Sparse Mode (PIM-SM): protocol specification (revised)
 RFC 4604 Using IGMPv3 and MLDv2 for source-specific multicast
 RFC 4607 Source-specific multicast for IP

Open Shortest Path First (OSPF)

OSPF link-local signaling
 OSPF MD5 authentication
 Out-of-band LSDB resync
 RFC 1245 OSPF protocol analysis
 RFC 1246 Experience with the OSPF protocol
 RFC 1370 Applicability statement for OSPF
 RFC 1765 OSPF database overflow
 RFC 2328 OSPFv2
 RFC 2370 OSPF opaque LSA option
 RFC 3101 OSPF Not-So-Stubby Area (NSSA) option

RFC 3509 Alternative implementations of OSPF area border routers
 RFC 3623 Graceful OSPF restart
 RFC 3630 Traffic engineering extensions to OSPF

Quality of Service (QoS)

IEEE 802.1p Priority tagging
 RFC 2211 Specification of the controlled-load network element service
 RFC 2474 DiffServ precedence for eight queues/port
 RFC 2475 DiffServ architecture
 RFC 2597 DiffServ Assured Forwarding (AF)
 RFC 2697 A single-rate three-color marker
 RFC 2698 A two-rate three-color marker
 RFC 3246 DiffServ Expedited Forwarding (EF)

Resiliency Features

IEEE 802.1AX Link aggregation (static and LACP)
 IEEE 802.1D MAC bridges
 IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
 IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
 IEEE 802.3ad Static and dynamic link aggregation

Routing Information Protocol (RIP)

RFC 1058 Routing Information Protocol (RIP)
 RFC 2082 RIP-2 MD5 authentication
 RFC 2453 RIPv2

Security Features

SSH remote login
 SSLv2 and SSLv3
 TACACS+ Accounting, Authentication and Authorization (AAA)
 IEEE 802.1X Authentication protocols (TLS, TTLS, PEAP and MD5)
 IEEE 802.1X Multi-suplicant authentication
 IEEE 802.1X Port-based network access control
 RFC 2560 X.509 Online Certificate Status Protocol (OCSP)
 RFC 2818 HTTP over TLS ("HTTPS")
 RFC 2865 RADIUS authentication
 RFC 2866 RADIUS accounting
 RFC 2868 RADIUS attributes for tunnel protocol support
 RFC 2986 PKCS #10: certification request syntax specification v1.7
 RFC 3546 Transport Layer Security (TLS) extensions
 RFC 3579 RADIUS support for Extensible Authentication Protocol (EAP)
 RFC 3580 IEEE 802.1x RADIUS usage guidelines
 RFC 3748 PPP Extensible Authentication Protocol (EAP)
 RFC 4251 Secure Shell (SSHv2) protocol architecture
 RFC 4252 Secure Shell (SSHv2) authentication protocol
 RFC 4253 Secure Shell (SSHv2) transport layer protocol

RFC 4254 Secure Shell (SSHv2) connection protocol
 RFC 5246 Transport Layer Security (TLS) v1.2
 RFC 5280 X.509 certificate and Certificate Revocation List (CRL) profile
 RFC 5425 Transport Layer Security (TLS) transport mapping for Syslog
 RFC 5656 Elliptic curve algorithm integration for SSH
 RFC 6125 Domain-based application service identity within PKI using X.509 certificates with TLS
 RFC 6614 Transport Layer Security (TLS) encryption for RADIUS
 RFC 6668 SHA-2 data integrity verification for SSH

Services

RFC 854 Telnet protocol specification
 RFC 855 Telnet option specifications
 RFC 857 Telnet echo option
 RFC 858 Telnet suppress go ahead option
 RFC 1091 Telnet terminal-type option
 RFC 1350 Trivial File Transfer Protocol (TFTP)
 RFC 1985 SMTP service extension
 RFC 2049 MIME
 RFC 2131 DHCPv4 client
 RFC 2132 DHCP options and BootP vendor extensions
 RFC 2616 Hypertext Transfer Protocol - HTTP/1.1
 RFC 2821 Simple Mail Transfer Protocol (SMTP)
 RFC 2822 Internet message format
 RFC 3315 DHCPv6 client
 RFC 3633 IPv6 prefix options for DHCPv6
 RFC 3646 DNS configuration options for DHCPv6
 RFC 3993 Subscriber-ID suboption for DHCP relay agent option
 RFC 4330 Simple Network Time Protocol (SNTP) version 4
 RFC 5905 Network Time Protocol (NTP) version 4

VLAN Support

Generic VLAN Registration Protocol (GVRP)
 IEEE 802.1Q Virtual LAN (VLAN) bridges
 IEEE 802.1v VLAN classification by protocol and port
 IEEE 802.3ac VLAN tagging

Voice over IP (VoIP)

LLDP-MED ANSI/TIA-1057
 Voice VLAN

Feature Licenses

NAME	DESCRIPTION	INCLUDES	STACK LICENSING
AT-FL-G97EMX-01	GS970EMX Premium license	<ul style="list-style-type: none"> ▶ Static Route² (128 routes) ▶ RIP² (256 routes) ▶ OSPFv2² (128 routes) ▶ PIMv4-SM, DM and SSM v4 ▶ EPSR Master³ 	▶ One license per stack member

² The standard switch software supports 16 Static, RIP, and OSPF routes

³ The standard switch software supports EPSR transit mode

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Ordering Information

Model availability can vary between regions. Please check to see which models are available in your region.

AT-GS970EMX/10-xx

8-port 10/100/1000T switch with 1x 1/2.5/5/10 Gigabit copper uplink, 1x SFP/SFP+ slot, and a single fixed power supply

AT-GS970EMX/28-xx⁴

24-port 10/100/1000T switch with 2x 1/2.5/5/10 Gigabit copper uplinks, 2x SFP/SFP+ slots, and a single fixed power supply

Where xx = 10 for US power cord
30 for UK power cord
40 for Australian power cord
50 for European power cord

AT-RKMT-J05

Rack Mount Tray for GS970EMX/10

AT-RKMT-J13

Rack Mount Kit for GS970EMX/28

AT-BRKT-J23

Wall mount kit for GS970EMX/10

AT-BRKT-J24

Wall mount kit for GS970EMX/28

AT-VT-Kit3

Management Cable (USB to Serial Console)

10G SFP+ Modules

Any 10G SFP+ module or cable can be used for stacking with the front panel 10G ports

AT-SP10SR

10GSR 850 nm short-haul, 300 m with MMF

AT-SP10SR/I

10GSR 850 nm short-haul, 300 m with MMF industrial temperature

AT-SP10LRa/I

10GLR 1310 nm medium-haul, 10 km with SMF industrial temperature

AT-SP10TM

1G/2.5G/5G/10G, 100m copper, TAA⁵

AT-SP10BD10/I-12

10 GbE Bi-Di (1270 nm Tx, 1330 nm Rx) fiber up to 10 km industrial temperature, TAA⁵

AT-SP10BD10/I-13

10 GbE Bi-Di (1330 nm Tx, 1270 nm Rx) fiber up to 10 km industrial temperature, TAA⁵

AT-SP10BD20-12

10 GbE Bi-Di (1270 nm Tx, 1330 nm Rx) fiber up to 20 km, TAA⁵

AT-SP10BD20-13

10 GbE Bi-Di (1330 nm Tx, 1270 nm Rx) fiber up to 20 km, TAA⁵

AT-SP10TW1

1 meter SFP+ direct attach cable

AT-SP10TW3

3 meter SFP+ direct attach cable

1000Mbps SFP Modules

AT-SPSX

1000SX GbE multi-mode 850 nm fiber up to 550 m

AT-SPEX

1000X GbE multi-mode 1310 nm fiber up to 2 km

AT-SPLX10a

1000LX GbE single-mode 1310 nm fiber up to 10 km

AT-SPLX10/I

1000LX GbE single-mode 1310 nm fiber up to 10 km, industrial temperature

AT-SPLX40

1000LX GbE single-mode 1310 nm fiber up to 40 km

AT-SPBD10-13

1000LX (LC) GbE Bi-Di (1310 nm Tx, 1490 nm Rx) fiber up to 10 km

AT-SPBD10-14

1000LX (LC) GbE Bi-Di (1490 nm Tx, 1310 nm Rx) fiber up to 10 km

AT-SPBD20-13/I

1000BX GbE Bi-Di (1310 nm Tx, 1490 nm Rx) fiber up to 20 km

AT-SPBD20-14/I

1000BX GbE Bi-Di (1490 nm Tx, 1310 nm Rx) fiber up to 20 km

AT-SPBD40-13/I

1000LX (LC) GbE single-mode Bi-Di (1310 nm Tx, 1490 nm Rx) fiber up to 40 km, industrial temperature

AT-SPBD40-14/I

1000LX (LC) GbE single-mode Bi-Di (1490 nm Tx, 1310 nm Rx) fiber up to 40 km, industrial temperature

AT-SPTX

10/100/1000 TX (RJ45), up to 100 m

⁴ GS970EMX/28 available Q2 2022

⁵ Trade Act Agreement compliant