8012GX4-POE Datasheet

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Managed Industrial PoE Ethernet Switch

8012GX4-POE

Industrial 12-port Gigabit Managed Ethernet Switch

AVCOMM 8012GX4-POE is a Managed Gigabit Ethernet switch, providing 8 10/100/1000BaseT PoE PSE ports and 4 100/1000BaseSFP ports. It complies to IEEE 802.3at standard and able to deliver up to 30 watts power per port along with data on standard Ethernet cabling. The switch can be used to power any IEEE 802.3af/at compliant PoE PD devices with PoE power management feature, which eases the deployment effort of planning PoE power budget and eliminates the need for additional wiring to reach power source.

IEEE 802.3at PoE+

VLAN Mirroring

L2 Managed

Industrial Design

-40~75°C

- Provide 8 10/100/1000 Base TX PoE ports plus 4 100FX/1000BaseF SFP slots
- IEEE 802.3af 15.4W / IEEE 802.3at 30W High Power PoE
- Total PoE power budget: Max. 240W PSE power delivered
- 9K Jumbo frames
- L2 wire-speed switching engine
- 8K MAC forwarding addresses
- Network redundant LACP, Spanning tree STP, RSTP & MSTP, and quick Ring fail-over protection (< 20 ms)
- Port-based /tag-based VLAN, IEEE 802.1ad/QinQ VLAN, Add/remove VLAN tags,
- Multicasting support IGMP v1/v2, proxy & snooping
- Multicast/Broadcast/Flooding Storm Control
- IEEE802.1x access control
- Per VLAN mirroring
- CLI/Web/SNMP management interfaces
- PoE PSE power management & PD power consumption monitoring
- Dual power input & Reverse power protection
- DIN-Rail and Wall mounting option

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Ordering Information

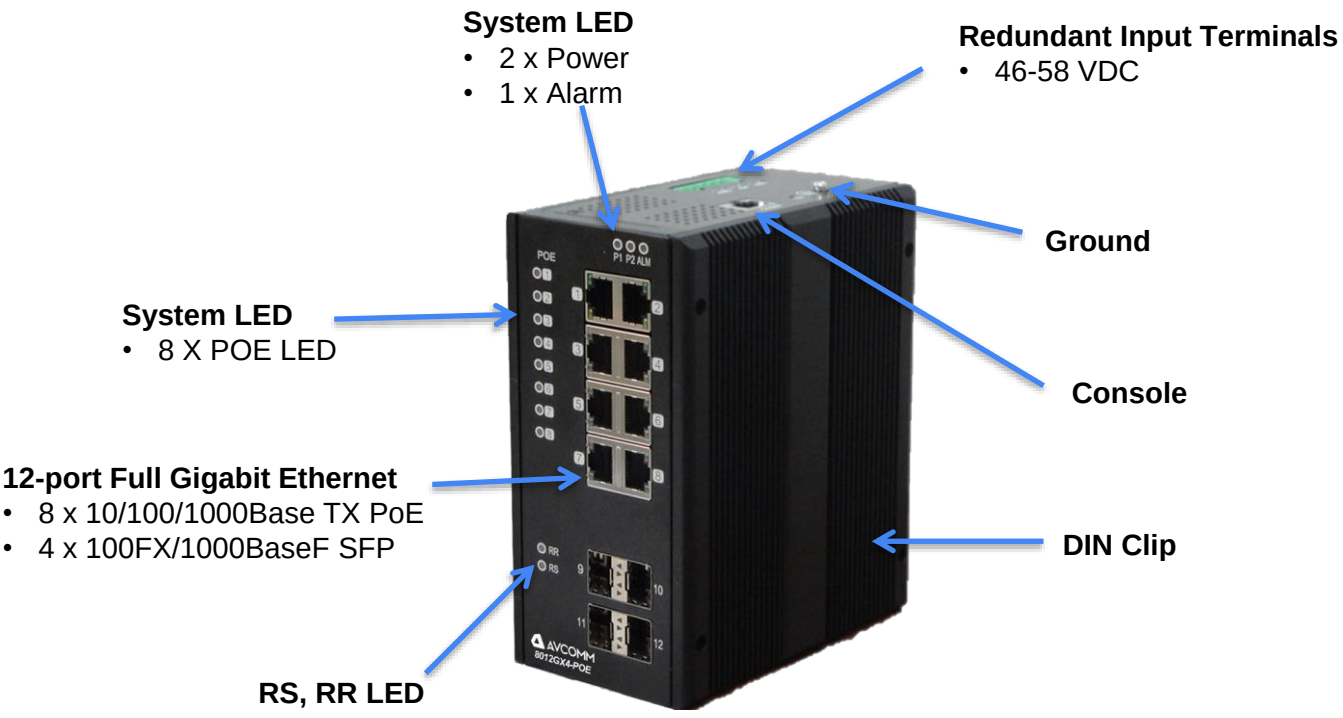
Model Name	Description
8012GX4-POE	Industrial 12-port Managed PoE Ethernet Switch, 8 x 10/100/1000BaseT(x) (IEEE 802.3at PoE PSE) and 4 x 100/1000BaseSFP, DIN-Rail, Dual Power Input 46-58 VDC, -40 to +75°C , IP30

Ethernet	
Operating mode	Store and forward, L2 wire-speed/non-blocking switching engine
MAC addresses	8K
Jumbo frames	9K Bytes
Copper RJ45 Ports	
Speed	10/100/1000 Mbps
MDI/MDIX auto-crossover	Support straight or cross wired cables
Auto-negotiating	10/100/1000 Mbps speed auto-negotiation; Full and half duplex
Ethernet isolation	1500 VRMS 1 minute
SFP (pluggable) Ports	
Port types supported	SFP (pluggable) Ports 100/1000BaseSFP slot Support 100FX SFP transceiver Support 100/1000BaseT SFP transceiver
Fiber port connector	LC typically for fiber (depends on module)
Optimal fiber cable	Typical 50 or 62.5/125 μm for multimode (mm); Typical 8 or 9/125 μm for single mode (sm)
Network Redundancy	
Fast failover protection rings	Link loss recovery < 20ms Support Single & Multiple rings; Ring coupling; Dual-homing; Chain
Spanning tree protocol	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
Port trunk with LACP	Static trunk or Dynamic via LACP (Link Aggregation Control Protocol)
Bridge, VLANs & Protocols	
Flow control	IEEE 802.3x (Full Duplex) and Back-Pressure(Half Duplex)
Max VLANs	1024
VLAN types	Port-based VLANs; MAC-based VLANs; IP Subnet-based VLANs Protocol-based VLANs IEEE 802.1Q tag-based VLANs RADIUS-assigned VLAN IEEE 802.1ad Double Tagging (Q in Q)
Multicast protocols	IGMP v1, v2 with up to 255 multicast groups IGMP snooping and querying Immediate leave and leave proxy Throttling and filtering
LLDP	IEEE 802.1ab Link layer Discovery Protocol (LLDP)
Traffic management & QoS	
Priority	IEEE 802.1p QoS
Number of queues per port	8
Scheduling schemes	SPQ, WRR
Traffic shaper	Port-based shaping
RADIUS QoS	RADIUS-assigned QoS Class
Security	
Port security	IP and MAC-based access control IEEE 802.1X authentication Network Access Control authentication via local database, RADIUS or TACACS+ AAA (Authentication, Accounting and Authorization)
Storm control	Multicast/Broadcast/Flooding Storm Control

Management	
User management interfaces	Cisco-like CLI (command line interface) ,WEB-based Management, SNMP v1, v2c and v3 Telnet (5 sessions)
Management security	HTTPs, SSH
Upgrade & Restore	Radius Client for Management FTP for Configuration Import/Export FTP for Firmware Upgrade
Diagnostic	Syslog Per VLAN mirroring Ethernet Copper connection diagnostic tool SFP with DDM (Digital Diagnostic Monitoring)
MIBs	RFC 1757 RMON 1,2,3,9; RFC 2674 Q-Bridge MIB RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
DHCP	Client, Server, Relay, Snooping, Option 82
NTP/SNTP	Yes
System status	Device info/status, Ethernet port status, PoE status
PoE management	Scheduling; power control; PoE PD power consumption
Power	
Power input	Redundant Input Terminals
Input voltage range	46-58 VDC
Total PoE output power budget	240W
PoE PSE port output power management	Scheduling; power control; PoE PD power consumption monitoring
Reverse power protection	Yes
Transient protection	> 15,000 watts peak
Power consumption	Max. 14W without PD connected Max 265W with 240W PSE power delivered
Indicators	
Power status indication	Indication of power input status
Ethernet port indication	Link & Speed
PoE status	Indication of PoE Power applying
System alarm	Profile-defined System Alarm
Alarm	
Alarm relay output	Relay output with current carrying capacity of 0.5A @ 24 VDC
Alarm notification	Configurable alarm profile to enable Alarm LED, Alarm relay & SNMP traps

Environmental & Compliances		
Operating temperature range	40 to +75° C (cold startup at -40° C)	
Storage temperature range	-40 to +85 ° C	
Humidity (non-condensing)	5 to 95% RH	
Vibration, shock & freefall	IEC68-2-6, -27, -32	
Certification compliance	CE/FCC, UL508*(pending)	
Electrical safety	CSA C22, EN61010-1, CE	
EMC	FCC Part 15, CISPR 22 (EN55022) Class A IEC61000-4-2, -3, -4, -5, -6	
RoHS and WEEE	RoHS (Pb free) and WEEE compliant	
MTBF	> 25 years	
Mechanical		
Ingress protection	IP30	
Installation option	DIN-Rail mounting, Wall mounting	
Dimension	77mm(W) x 154mm(H) x 128mm(D)	
Weight	1410g	
100Base FX		
Multi Mode	AVC-SFP-FX-SX （550m）	Wavelength: 850 nm
	AVC-SFP-FX-S （2km）	Wavelength: 1310 nm
Single Mode	AVC-SFP-FX-10 (10km)	Wavelength: 1310 nm
1000Base FX		
Multi Mode	AVC-SFP-SX（550m）	Wavelength: 850 nm
	AVC-SFP-SX-D （2km）	Wavelength: 1310 nm
Single Mode	AVC-SFP-LX-10 (10km)	Wavelength: 1310 nm

Function interface



Installation dimensions