

ON-8712G-4XFPI Datasheet

ON-8712G-4XFPI

Product Type	Managed Industrial Layer 3 PoE Ethernet Switch
Model	ON-8712G-4XFPI
Ethernet Ports	8 × 10/100/1000BASE-T/TX RJ-45
PoE Ports	Port 1–8, IEEE 802.3af/at
PoE Power Budget	240 W
10G Uplink Ports	4 × SFP+ (Mini-GBIC)
Copper Port Features	Auto-Negotiation, Full/Half Duplex, Auto MDI/MDI-X
Console Port	RS-232, RJ-45
Digital Input	1 channel
Digital Input — Logic 1	+13 to +30 V
Digital Input — Logic 0	-30 to +3 V
Maximum Digital Input Current	8 mA
USB Interface	1 × USB Type-A
Relay Output	1 × relay output, 1 A @ 24 VDC
Power Connector	8-pin screw terminal block
Power Input	Dual 48–57 VDC
Recommended PoE Supply	53–57 VDC for IEEE 802.3at operation
System Power Consumption	24 W @ 54 VDC
Switching Capacity	96 Gbps
Transmission Rate	71.2 Mpps
MAC Address Table	16K
Jumbo Frame	12,288 bytes
Maximum IGMP Groups	256
Maximum VLAN Groups	256
VLAN ID Range	1–4094
VLAN	IEEE 802.1Q, IEEE 802.1ad QinQ VLAN Stacking
Port Mirroring	1-to-1, N-to-1; up to 4 mirror sessions

RSPAN	Supported
Multicast	IGMP Snooping v1/v2/v3, MLD Snooping, IGMP Immediate Leave
Storm Control	Broadcast, Multicast, Unknown Unicast
LLDP	IEEE 802.1ab LLDP, LLDP-MED
Industrial Protocol	Modbus/TCP
Link Aggregation	IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking
QoS Scheduling	WRR, Strict Priority, Hybrid Priority
Priority Queues	Up to 8
Class of Service	IEEE 802.1p, IP ToS, DSCP
Rate Limiting	Ingress and Egress
Layer 3 Routing	Static Routing, NAT
Network Redundancy	X-Ring Pro, STP, RSTP, MSTP, ERPS
Port Security	Static/Dynamic MAC, MAC Learning Limit, MAC Violation Notification
Authentication	802.1X Port/MAC-based, MAB
Authentication Servers	RADIUS, TACACS+
IP Security	IP Source Guard, DHCP Snooping, ARP Spoofing Prevention
ACL	IP-ACL, MAC-ACL; up to 128 entries
Management Protocols	SNMP v1/v2c/v3, Web, Telnet, RMON
Management MIBs	Standard MIB-II, Private MIB, Ethernet-Like MIB, RMON MIB
Secure Management	SSH 2.0, SSL
Software Upgrade	TFTP, SFTP, HTTP, Dual Image
Time Synchronization	SNTP Client
DHCP	Client, Server, Relay, Option 66/67/82
Network Monitoring	NMS support for remote monitoring and management
Enclosure	Metal Shell
Protection Class	IP40
Installation	DIN-Rail, Wall-Mount
Dimensions (W × H × D)	57.5 × 152 × 116 mm
Operating Temperature	-40°C to +75°C
Storage Temperature	-40°C to +85°C

Copper SFP Operating Limitation	-40°C to +50°C when using copper SFP ×4
Relative Humidity	5–95% RH, non-condensing
Overcurrent Protection	Supported
Reverse Polarity Protection	Supported
LED Indicators	PWR1, PWR2, SYS, Alarm, R.M.; Link/Speed/Activity/PoE
Power Redundancy	Dual DC Power Inputs
Power Supply Range	48–57 VDC
Certifications / Standards	Source-referenced: UL 62368, CE, CISPR 32, FCC Part 15B Class A, IEC 61000 series, EN 61000-6-2/-6-4, IEC 60068 series
