

IMS-803

Industrial Gigabit Ethernet Managed PoE Switch

3x 1G WAN

8x LAN 10/100/1000Base-T, with PoE

Description:

IMS-803 is a rugged industrial managed Ethernet switch designed for reliable operation in harsh environments. It provides secure data, voice and video communication for industrial networks and supports advanced Layer 2 management, redundancy, security and PoE functionality.

The switch is suitable for industrial automation, transportation systems, surveillance networks and critical infrastructure applications. It can be mounted on a DIN rail.



IMS-803

Features:

- Industry design resistant to harsh environmental conditions and rough handling
- 1G uplinks, 1G downlinks
- WAN – 3x ports, SFP slots
- LAN – 8x 10Base-T/100Base-TX/1000Base-T
- Provides 8-port IEEE 802.3af / 802.3at PoE+ output (30 W per port, total 180 W)
- Cable diagnostics, identifies opens/shorts distance
- Provides 5 ring instances that each can support μ -Ring, μ -Chain or Sub-Ring type for flexible uses.
- Supports up to 5 rings in one device

Key Specifications

Parameter	Specification	Parameter	Specification
Model	IMS+803SM-8PHE24	Console Port	RS-232 (RJ45)
Ethernet Ports	8x 10/100/1000Base-T RJ45	Power Input	Redundant 24/48 VDC (20–57 VDC)
Fiber Ports	3x 100/1000Base-X SFP	Operating Temperature	–40 °C to +75 °C
Total Ports	11	Storage Temperature	–40 °C to +85 °C
PoE Standard	IEEE 802.3af / IEEE 802.3at PoE+	Humidity	5–95 % non-condensing
PoE Power per Port	Up to 30 W	Protection Class	IP30
Total PoE Budget	180 W	Cooling	Fanless
Switching Capacity	22 Gbps	Surge Protection	6 kV (PoE, RJ45, SFP)
MAC Address Table	8K entries	Dimensions	106 × 72 × 152 mm
Jumbo Frames	Up to 9.6 KB	Weight	0.86 kg
Memory	128 MB RAM, 16 MB Flash	Mounting	DIN rail or wall mount (optional)

Main Features

Industrial Reliability

- Extended temperature operation: -40 to +75 °C
- Rugged metal IP30 housing
- Fanless design for increased reliability
- Redundant power inputs
- Reverse polarity and overload protection
- MTBF over **528,000 hours**
- 6 kV surge protection on Ethernet and fiber interfaces

PoE Management

- 8 PoE+ ports (IEEE 802.3af/at)
- Automatic PoE device monitoring and reset
- PoE scheduling by day/week
- Per-port power control and prioritization
- Total PoE budget management (180 W)

Traffic Management

- VLAN, Q-in-Q, Voice VLAN
- QoS with 8 priority queues
- Link Aggregation (LACP)
- IGMP Snooping v1/v2/v3
- Bandwidth control and traffic shaping
- Storm control and multicast optimization

Time Synchronization

- IEEE 1588v2 Precision Time Protocol (PTP)
- Boundary Clock, Transparent Clock and Master/Slave modes supported

Advanced Network Redundancy

- μ -Ring, μ -Chain and Sub-Ring support
- Up to 5 independent ring instances
- Ring recovery time below 10 ms
- Support for up to 250 nodes in a ring
- ERPS (ITU-T G.8032)
- EPS (ITU-T G.8031)
- STP, RSTP and MSTP support

Network Management & Security

- Web GUI, CLI, Telnet and SSH
- SNMP v1/v2c/v3
- RMON and sFlow
- DHCP Server, Relay and Snooping
- IEEE 802.1X authentication
- RADIUS and TACACS+
- ACL filtering (Layer 2/3/4)
- HTTPS and SSL support
- IPv6 management and security features

Certifications and Compliance

The IMS-803 is certified for industrial and transportation applications and complies with:

- CE, FCC Class A
- EN50121-4 (Railway Applications)
- EN61000-6-2 (Industrial Immunity)
- EN61000-6-4 (Industrial Emissions)
- NEMA TS2 (Traffic Control)
- UL60950-1, EN60950-1, EN62368-1

Order code:

IMS-803SM-8PHE24

Accessories:

- 2x DC power connector
- DIN rail mount kit
- Console cable RJ45M-DB9F