4MI-SG12402IFPM

보안기능확인 L2 스위치 | L2 Managed Ethernet Switch

Model-specific technical specification

DOCUMENT NO.	REVISION	RELEASE DATE	DOCUMENT STATUS
DS-SG12402IFPM-KR	Rev. A	2024-08-12	FINAL / RELEASED

01. TECHNICAL SUMMARY

Parameter	Specification	Parameter	Specification
Access Interfaces	4 x RJ45 (PoE+) + 2 x SFP	**Uplink**	2 × 100/1000BASE-X SFP
Switching Capacity	12 Gbps	**Forwarding Rate**	8.92 Mpps
MAC / Jumbo Frame	8K / 9K	**Optional Adapter**	48 V / 3 A (144 W)
Dimensions	138 × 108 × 51 mm	**Operating Temp.**	-40 - 80 °C

Product Description

4MI-SG12402IFPM은 보안기능확인서를 획득한 SG1200 Series의 산업용 L2 PoE+ 스위치로, DIN-Rail 기반의 현장 분산 설치와 방범·CCTV, 교통, 공장·플랜트 네트워크를 위해 설계되었습니다.

4개의 PoE+ RJ45 포트와 2개의 SFP 업링크를 제공하며, 링 보호, 멀티캐스트 최적화, 보안 및 통합 관리 기능을 지원합니다.

EAPS/ERPS 및 STP/RSTP/MSTP 기반의 경로 보호, LACP, IGMP Snooping/MVR, CLI/Web/SNMP 관리 기능을 통해 장애 대응과 운영 효율을 지원합니다.

02. HARDWARE SPECIFICATIONS

Electrical, interface, performance, mechanical and environmental ratings

Category	Parameter	Value / Rating
Interface	10/100/1000BASE-T RJ45	4 ports (PoE+)
Interface	100/1000BASE-X SFP	2 slots
Interface	10G/GE SFP+	Not supported
Interface	Console	1 x RJ45
Performance	Switching capacity	12 Gbps
Performance	Forwarding rate	8.92 Mpps
Performance	Jumbo frame	9K bytes
System	MAC address table	8K entries
System	Flash memory	16 MB
System	DRAM	128 MB
Mechanical	Dimensions (W x D x H)	138 × 108 × 51 mm
Mechanical	Weight	0.7 kg
Environment	Operating temperature	-40 - 80 °C
Environment	Storage temperature	-40 - 85 °C
Environment	Relative humidity	5 - 95%, non-condensing
Power	Input rating	Dual DC 48 - 55 V (Phoenix)
Power	Optional adapter	48 V DC / 3 A (144 W)
Power	Power consumption	<12 W no-load / 140 W full-load (with PoE)
Thermal	Total heat output	477.82 BTU/h
PoE	PoE budget	120 W
Reliability	MTBF	100,000 hours

Notes

- 전원 어댑터는 별도 판매이며, 전원 포함 요청 시 DC 48 V / 3 A(총 출력 144 W) 어댑터를 함께 판매합니다.
- 광모듈 사양 및 전송 거리는 선택한 SFP 트랜시버에 따라 달라집니다.
- PoE 예산 120 W, 최대 소비전력 140 W 및 환경 정격은 스위치 기준입니다. 48 V / 3 A 어댑터 사용 시 PoE 가용 전력은 144 W에서 본체 소비전력과 손실을 제외한 범위이며, 최대 120 W입니다.

03. SOFTWARE FEATURES

Protocol and feature support based on the SG1200 Series product catalog

Function Group	Supported Functions	Remarks
VLAN	VLAN segmentation; QoS policy	Series feature
Spanning Tree	STP; RSTP; MSTP	Model listed
Link Aggregation	IEEE 802.3ad LACP	Series feature
Ring Protection	EAPS; G.8032 ERPS	Series feature
Multicast	IGMP Snooping; Fast-leave; MVR	Config. dependent
PoE+	IEEE 802.3af/at; 120 W PoE budget	Device maximum; see power notes
QoS	VLAN/QoS policy support	Series overview
Security	Port Security/Isolation; DHCP Snooping (Option 82); IP-MAC-Port binding	Config. dependent
AAA / ACL	L2/L3/L4 ACL; IEEE 802.1X; RADIUS/TACACS+	Config. dependent
Protection	Storm-control; DoS/scan traffic mitigation	Series feature
Reliability	STP/RSTP/MSTP; EAPS/ERPS; LACP	Series feature
Management	Console; Telnet; SSH; SNMP; Web GUI	Model listed

Reference basis

Reference	Coverage
4MITECH Product Catalog	Integrated Edition Ver. 1.0
Product scope	SG1200 Series overview and SG12402IFPM specifications
Feature scope	Catalog-listed hardware and software features

04. MECHANICAL, ORDERING & COMPLIANCE

Installation data, order code, package contents and document control

Mechanical & Installation

Parameter	Requirement / Value
Form factor	Industrial DIN-Rail mounting
Chassis dimensions	138 × 108 × 51 mm (W x D x H)
Weight	0.7 kg
Environment	-40 - 80 °C; 5 - 95% RH, non-condensing

Ordering Information

Order Code	Description	Power Configuration
4MI-SG12402IFPM	4 PoE+ RJ45 + 2 SFP industrial L2	48 V / 3 A adapter sold separately

Package Contents & Options

Item	Quantity	Remarks
Switch chassis	1	Included; 4MI-SG12402IFPM
4-pin power terminal block	1	Included
DIN-Rail mounting bracket	1	Included; pre-installed on chassis
Power cord	1	Included
Optional DIN-Rail	1	Sold separately
Optional DC adapter	1	48 V DC / 3 A; sold separately

Compliance References

Document	Reference
Security Function Confirmation Certificate	Obtained (SG1200 Series)

Revision History

Rev.	Date	Description
A	2024-08-12	Initial release