

RUGGEDIZED SERIES • L2+ MANAGED INDUSTRIAL SWITCH

AL-ISG3204I-2F

4-P Gigabit + 2-SFP(100/1G) slot L2 Managed Industrial Ethernet Switch

The Antek Labs AL-ISG3204I-2F is an Layer-2+ managed industrial switch built for the cabinet and the field. It delivers 36Gbps (non-blocking) non-blocking switching with store-and-forward forwarding at 8.93Mpps, and fanless, wide-temperature operation on a wide DC input for continuous duty in surveillance, ITS, rail, energy and industrial-automation networks. A full L2+ feature set — VLAN, LACP, RSTP, ERPS sub-20 ms ring recovery, IGMP multicast, ACL, QoS and SNMP/Web/CLI management — is included.

KEY FEATURES

- Non-blocking store-and-forward switching at full wire speed across all ports.
- Gigabit RJ45 and SFP fiber uplink combination for flexible copper/fiber network builds.
- L2+ management: 4K VLAN, QinQ, GVRP; LACP link aggregation; RSTP and ERPS (<20 ms) ring protection.
- IGMP/MLD multicast, ACL, rate-limiting and QoS; SNMP v1/v2c/v3, Web, CLI and NTP.
- Broadcast-storm suppression and port mirroring for diagnostics.
- Fanless aluminium housing with wide-temperature operation and anti-reverse-polarity DC input.
- DIN-rail or desktop mounting; industrial EMC, surge and lightning protection.

SWITCHING

Port configuration	4-P Gigabit + 2-SFP(100/1G) slot L2 Managed Industrial Ethernet Switch
Standards	IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3x
Forwarding mode	Store-and-forward (full wire speed)
Switching capacity	36Gbps (non-blocking)
Forwarding rate (64 byte)	8.93Mpps
MAC address table	8K
Packet buffer	4M

L2+ MANAGEMENT

Rate limiting	mini granularity is 16Kbps and max 1Gbps
Spanning tree	RSTP (IEEE802.1w)
Ring protection	Support ERPS fast ring network function, recovery time less than 20ms
Multicast	Multicast VLAN, IGMP Snooping v1/v2, Fast log out
L3	IPv4 static routing/ default routing, L2+ network management
Port mirroring	Bidirectional data mirroring based on port
DHCP / management	DHCP Client, DHCP Snooping

POWER

DC input	DC12-57V (anti-reverse), Phoenix terminal
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Redundant input	Dual V+/V- redundant DC feed
External PSU	Optional Antek industrial DIN-rail PSU (ordered separately)
Power consumption	Standby<8W, full load<12W

PHYSICAL

Dimensions (L×W×H)	145*134.5*47mm
Weight	0.7kg/ 0.9kg
Housing	Aluminium alloy, fanless
Mounting	Desktop, 35mm DIN Rail

ENVIRONMENTAL & PROTECTION

Operating temperature	-40°C~+80°C, 5%~90% RH non-condensing
Storage temperature	-40 °C to +85 °C, 5~95 % RH
Ingress protection	IP40
Surge / lightning	6KV 8/20us (8/20 μs)

EMC & IMMUNITY

ESD (IEC 61000-4-2)	±8kV contact discharge, ±15kV air discharge
EFT/Burst (IEC 61000-4-4)	Power cable: ±4kV, data cable: ±2kV
Surge (IEC 61000-4-5)	Power cable: CM±4kV/ DM±2kV, data cable: ±4kV
Radiated RF (IEC 61000-4-3)	10V/m (80~1000MHz)
Conducted RF (IEC 61000-4-6)	10V(150kHz~80MHz)
Power-freq magnetic (IEC 61000-4-8)	100A/m, 1000A/m, 1s
Pulsed magnetic (IEC 61000-4-9)	1000A/m
Damped oscillation (IEC 61000-4-10)	30A/m, 1MHz
Common-mode (IEC 61000-4-16)	30V, 300V, 1s
Mechanical (IEC 60068)	Vibration, shock and free-fall tested (IEC 60068-2-6/-27/-32)

COMPLIANCE & WARRANTY

Regulatory	CE · CE/LVD (EN 62368-1) · FCC Part 15 Class A · RoHS
Warranty	5 years, lifetime support

ORDERING INFORMATION

AL-ISG3204I-2F 4-P Gigabit + 2-SFP(100/1G) slot L2 Managed Industrial Ethernet Switch.

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