

RUGGEDIZED SERIES • L2+ MANAGED INDUSTRIAL POE SWITCH

AL-IPG6204I-2F

4-P Gigabit PoE + 2-SFP(1G/2.5G) slot L2 Managed Industrial PoE Switch

The Antek Labs AL-IPG6204I-2F is an Layer-2+ managed industrial switch built for the cabinet and the field. It delivers 160 Gbps (non-blocking) non-blocking switching with store-and-forward forwarding at 44.64 Mpps, integrated IEEE 802.3af PoE sourcing, 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.
- Integrated PoE PSE — 802.3af — with per-port power management and priority.
- 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 PoE + 2-SFP(1G/2.5G) slot L2 Managed Industrial PoE Switch
Standards	IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3x
Forwarding mode	Store-and-forward (full wire speed)
Switching capacity	160 Gbps (non-blocking)
Forwarding rate (64 byte)	44.64 Mpps
MAC address table	16K
Packet buffer	12M
Jumbo frame	12K

POWER OVER ETHERNET

PoE standard	IEEE 802.3af
PoE ports	Per port configuration above
Max power per port	15.4 W
PoE pinout	1/2 (+), 3/6 (-), Mode A
PoE management	Per-port on/off, status, priority

L2+ MANAGEMENT

Rate limiting	mini granularity is 16Kbps and max 1Gbps
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Link aggregation	LACP dynamic aggregation, Static aggregation, Max 5 aggregation groups and max 8 ports per group.
Multicast	Multicast VLAN, User quick log out, MLD Snooping, MVR (Multicast VLAN Registration), IGMP Snooping v1/v2/v3 and 256
DHCP / management	DHCP Client, DHCP Snooping, DHCP Server

POWER

DC input	DC44-57V (anti-reverse), Phoenix terminal
Redundant input	Dual V+/V- redundant DC feed
External PSU	Optional Antek industrial DIN-rail PSU (ordered separately)

PHYSICAL

Dimensions (L×W×H)	165*148*54mm
Weight	0.85kg/ 1.05kg
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-IPG6204I-2F 4-P Gigabit PoE + 2-SFP(1G/2.5G) slot L2 Managed Industrial PoE Switch.

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