

RUGGEDIZED SERIES • INDUSTRIAL POE SWITCH

AL-IPG402B

4-Gigabit PoE + 2-SFP(1G) Industrial PoE Switch

The Antek Labs AL-IPG402B is an industrial PoE switch built for the cabinet and the field. It delivers 12Gbps (non-blocking) non-blocking switching with store-and-forward forwarding at 8.93Mpps, 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.

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.
- 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-Gigabit PoE + 2-SFP(1G) Industrial PoE Switch
Standards	IEEE 802.3u 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3x
Forwarding mode	Store-and-forward (full wire speed)
Switching capacity	12Gbps (non-blocking)
Forwarding rate (64 byte)	8.93Mpps
MAC address table	2K
Packet buffer	2M
Jumbo frame	9.2K

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

POWER

DC input	DC48-57V (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)	119*100*30mm
Weight	0.4kg /0.5kg
Housing	Aluminium alloy, fanless
LED indicators	Power: PWR (Green), Network: Link (Yellow), PoE: PoE (Green)
Mounting	Desktop, 35mm DIN Rail

ENVIRONMENTAL & PROTECTION

Operating temperature	-40~+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-IPG402B 4-Gigabit PoE + 2-SFP(1G) Industrial PoE Switch.

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