

RUGGEDIZED SERIES • L2+ MANAGED INDUSTRIAL POE SWITCH

AL-IPG508-2F

6-P Gigabit + 2-SFP(100/1G) slot Industrial Managed Switch, w/ 4-Port 802.3at PoE (120W)

The Antek Labs AL-IPG508-2F 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 14.88Mpps, integrated IEEE 802.3af/at 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/at — 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	6-P Gigabit + 2-SFP(100/1G) slot Industrial Managed Switch, w/ 4-Port 802.3at PoE (120W)
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)	14.88Mpps
MAC address table	8K
Packet buffer	4M

POWER OVER ETHERNET

PoE standard	IEEE 802.3af/at
PoE ports	Per port configuration above
Max power per port	120 W
PoE pinout	1/2 (+), 3/6 (-), Mode A
PoE management	Per-port on/off, status, priority

L2+ MANAGEMENT

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	DC44-57V (anti-reverse), Phoenix terminal
Redundant input	Dual V+/V- redundant DC feed
External PSU	Optional Antek industrial DIN-rail PSU (ordered separately)
Power consumption	Standby<8W, full load<120W

PHYSICAL

Dimensions (L×W×H)	145*134.5*47mm
Weight	0.85kg/ 1.1kg
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

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