

## RUGGEDIZED SERIES • INDUSTRIAL ETHERNET SWITCH

# AL-ISG401F

4-P Gigabit +1-SFP(100/1G) slot slim type Industrial Switch

The Antek Labs AL-ISG401F is an industrial Ethernet switch built for the cabinet and the field. It delivers 12Gbps (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.

## 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.
- 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 +1-SFP(100/1G) slot slim type Industrial Switch |
| Standards                 | IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u      |
| 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

|                   |                                                             |
|-------------------|-------------------------------------------------------------|
| DC input          | DC12-48V (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<5W, Full load<8W                                    |

## PHYSICAL

|                    |                                                      |
|--------------------|------------------------------------------------------|
| Dimensions (L×W×H) | 119*100*30mm                                         |
| Weight             | 0.4kg / 0.5kg                                        |
| Housing            | Aluminium alloy, fanless                             |
| LED indicators     | Power: PWR (Green), Network: Link, Link/Act (Yellow) |
| 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-ISG401F** 4-P Gigabit +1-SFP(100/1G) slot slim type Industrial Switch.

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