

## Layer-3 Managed 10G Industrial Switch

---

### AIES2000-T Series

- **6 kV lightning protection**
- **IP40-rated, industrial fanless thermal design**
- **Supports STP / EAPS / ERPS ring protection**
- **Virtual stacking capability**
- **Built-in Data Leakage Prevention**
- **SNMP and Pallas cloud platform**



ASCENT AIES2000-T series is built on a high-performance industrial hardware and the BDROS software platform, to deliver rich Layer-2/Layer-3 routing and advanced industrial ring networking capabilities. The AIES2000-T adopts a die-cast aluminum enclosure with a standard 19-inch rack-mount design and provides redundant wide-voltage industrial power inputs, ensuring high durability and deployment flexibility in harsh field environments.

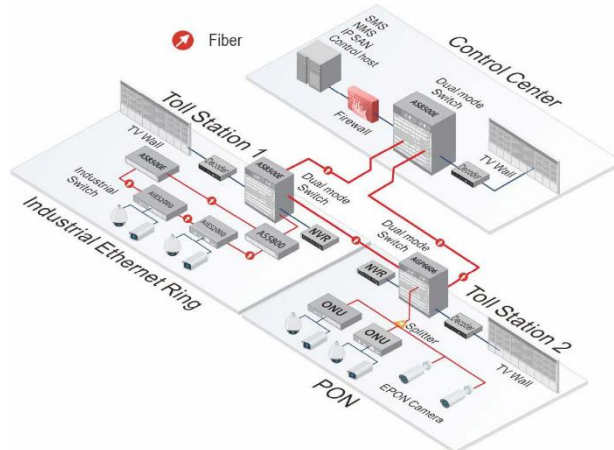
With hardware-accelerated industrial Ethernet ring protection, the AIES2000-T series achieves rapid recovery performance—node-level self-healing within 5 milliseconds and ring-level convergence typically under 50 milliseconds. This enables continuous service availability for latency-sensitive industrial and mission-critical networks.

The fanless, low-power design of the AIES2000-T series, combined with wide-temperature and wide-voltage support, meets strict EMC, anti-vibration, and shock-proof requirements. Its IP40-rated protection and robust reliability make it suitable for deployment in energy systems, transportation infrastructure, industrial automation, environmental monitoring, and defense-related applications where long-term operational stability is essential.

## Key Features

- Lightning protection level: 6KV
- IP40 protection, industrial fanless thermal conduction
- Supports dual 220V wide-voltage industrial power input (DC model is optional)
- Business ports, management ports, power input terminals, and relay alarm output are located on the front panel, complying with industrial operation specifications
- Supports STP/EAPS/ERPS
- Supports node self-healing time less than 5 milliseconds, and ring network self-healing time less than 50 milliseconds (typical value)
- Supports layer-3 static routing, dynamic routing (RIP, OSPF), Virtual Router Redundancy Protocol (VRRP)
- Supports virtual stacking
- Supports to form a self-healing ring between any two ports, and supports multiple independent self-healing rings
- Provides Data Leakage Prevention (DLP), to quickly recover from network failures
- Supports simple network management protocol (SNMP) and cloud-based operating platform (Pallas)
- The mean time between failures (MTBF): more than 800,000 hours

## Model Lists



AIES2000-TU16T4S4X

- 16-Port Gigabit RJ45
- 4-Port Gigabit SFP
- 4-Port 10G/GE SFP+

## Specifications

### Product Characteristics

Item		Unit	Description
<b>Gigabit Interface</b>			
RJ45			16
SFP			4
10G/GE SFP+			4
Console (RJ45)			1
Backplane		Gbps	128
Forwarding Rate (With 64 Bytes)		Mpps	90
Chassis	Dimensions (WxDxH)	mm	170x140x100
	Weight(Empty)	kg	2.2
Package	Dimensions (WxDxH)	mm	300x195x145
	Weight	kg	2.4
Power Consumption	No-Load	W	13.5
	Full-Load	W	31
Power Supply		V	Dual AC or DC 100 to 240
Total Output BTU (1000BTU/H=293W)			105.8
MTBF(H)			>800,000
Operating Temperature		°C	-40 to 75
Forwarding Mode			Store-forward
Flash		MB	16
DRAM		MB	256
MAC		K	16
Buffer Size		MB	12
Jumbo Frame		K	9
Total SVI			64

## Features

Item	Description
VLAN	4K Active VLAN, QinQ & Selective QinQ, GVRP, Private VLAN, Voice-VLAN
Spanning Tree	802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP) BPDU guard, root guard and loopback guard
Multicast IP	IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter Static route, RIP, OSPF IPv4/v6 dual stack
Ipv6	ICMPv6, DHCPv6, ACLv6 and Telnet IPv6 neighbor discovery, Path MTU discovery MLD V1, MLD snooping IPv6 Static Routing, RIPng, OSPFv3 Manual tunnel, ISATAP tunnel, 6 to 4 tunnel
QoS	CAR, HQoS, MAC/IP/TCP/UDP/ VLAN/ COS/ DSCP/ TOS based QoS, 802.1P/ DSCP priority re-labeling, SP, WRR, and "SP+WRR", Tail-Drop, WRED, flow monitoring and traffic shaping
Security	Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky DAI & IP source guard, PPPoE+ IEEE 802.1x, AAA, Radius and BDTacacs+ L2/L3/L4 ACL flow identification and Port security, IP+MAC+port binding filtration Anti-attack from DDoS, TCP's SYN Flood, UDP Flood, etc Broadcast/multicast/unknown unicast storm-control
Virtualization	MD5, SHA-256, RSA-1024, AES256, etc ASCENT Virtual Stacking System (BVSS) Up to 16 stacking units
DHCP	DHCP server/relay/client DHCP snooping/option82
Reliability	Static/LACP link aggregation, Interface backup EAPS and ERPS ISSU uninterrupted system upgrade BVSS, up to 16-units per stack VRRP UDLD
Management	Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON TFTP, FTP, SFTP NTP ZTP SPAN, RSPAN
Environment	Operating Temperature/Humidity: -40 to 85°C, 10%-90% non-condensing Storage Temperature/Humidity: -40 to 85°C, 5%-95% non-condensing
Accessories	Power cord, rackmount kits, console cable

## Ordering Information

**Product name**

AIES2000-TU16T4S4X

**Product description**

16-Port Gigabit RJ45 + 4-Port Gigabit SFP + 4-Port 10G SFP+ L3-lite Stackable Managed Industrial Switch (supports industrial ring protection protocol, operating temperature -40 to 85°C; IP40; supports 16-unit virtual stacking, industrial universal AC/DC power input, excluding power cable, Din-rail installation)

## Contact Information

**Ascent Communication Technology Ltd****AUSTRALIA**

140 William Street, Melbourne  
Victoria 3000, AUSTRALIA  
Phone: +61-3-8691 2902

**Hong Kong SAR**

Room 1210, 12th Floor, Wing Tuck Commercial Centre  
181 Wing Lok Street, Sheung Wan, Hong Kong SAR  
Phone: +852-2851 4722

**CHINA**

Unit 1933, 600 Luban Road  
200023, Shanghai, CHINA  
Phone: +86-21-60232616

**USA**

2710 Thomes Ave  
Cheyenne, WY 82001, USA  
Phone: +1 203 350 9822

**EUROPE**

Pfarrer-Bensheimer-Strasse 7a  
55129 Mainz, GERMANY  
Phone: +49 (0) 6136 926 3246

**VIETNAM**

11th Floor, Hoa Binh Office Tower  
106 Hoang Quoc Viet Street, Nghia Do Ward  
Cau Giay District, Hanoi 10649, VIETNAM  
Phone: +84-24-37955917

**WEB:** [www.ascentcomtec.com](http://www.ascentcomtec.com)

**EMAIL:** [sales@ascentcomtec.com](mailto:sales@ascentcomtec.com)

Specifications and product availability are subject to change without notice.  
Copyright © 2025 Ascent Communication Technology Limited. All rights reserved.  
Ver. ACT\_AIES2000-T\_Datasheet\_V1b\_Dec\_2024