AE CONNECT®
DESIGNED FOR NETWORKING

AE700-IPS16GE2GF-M

16-Port 10/100/1000Mbps Industrial Managed PoE Switch with 2 SFP Uplink

Ports: Provide 16*10/100/1000Mbps PoE ports with 2*1000Mbps SFP

PoE Standard: IEEE802.3af/at Power over Ethernet (PoE) Compliant

Self-adaption: RJ45 port supports 10/100/1000Mbps Auto MDI/MDIX

Industrial Installation: Din Rail mounting installation

Wide Application: Designed for Railway, traffic etc some Industrial environment

Surge protection: Protect the device from lighting surges and others electrical hazards

Managed: Support remote web managed, VLAN and storm control and IPV6 management etc.

Working Temperature: -40 to 85 degrees operating temperature

Considerate Design: IP40 Industrial design with dual power input

Environmentally Hardened Design

With the **IP40** metal industrial case which provides a high level of immunity against electromagnetic interference and heavy electrical surges, being able to operate under the temperature range from **-40 to 85 degrees C,** the AE700-IPS16GE2GF-M can be placed in almost any difficult environment.

Working Temperature
- 40°C   85°C
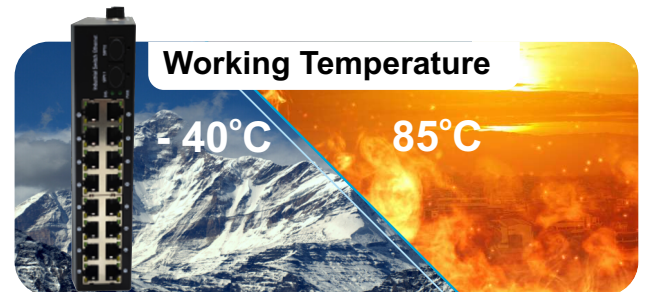
Cost-effective
Ipv6 Managed Gigabit PoE Switch Solution

With layer 2+ managed Gigabit PoE Switch, It provides IPv6/IPv4 management and built-in L2/L4 Gigabit Switching engine, and supports high-speed transmission of surveillance images and videos.
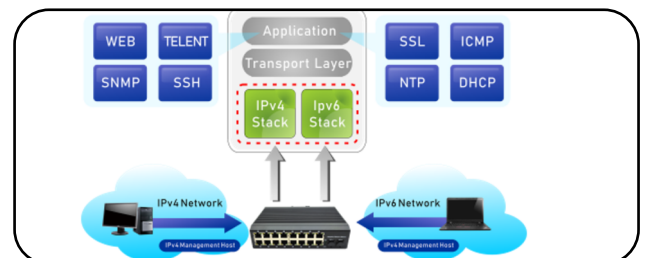

Surge Protection Design

Provides contact discharge of ±8KV DC and air discharge of ±15KV DC for Ethernet ESD protection. It also supports ±6KV surge immunity to improve product stability and protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.

Comprehensive reliability mechanisms(ERPS)

Besides STP,RSTP, and MSTP, the IES7511 Series Managed PoE Switch supports enhanced Ethernet reliability technologies such as Ethernet Ring Protection Switching (ERPS), also referred to as G.8032. ERPS supports various services and allows flexible networking, helping customers build a network with lower OPEX and CAPEX.

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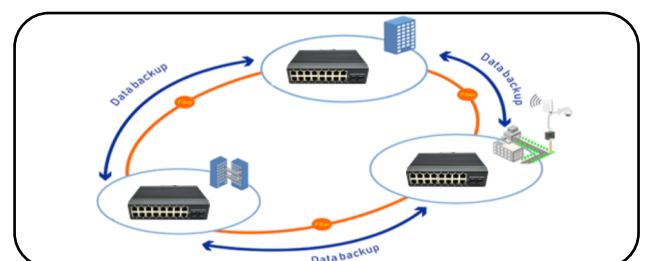
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TECHNICAL DATASHEET

Model	AE700-IPS16GE2GF-M
Hardware Specifications	
Connector	16* 10/100/1000BASE-T RJ45 auto MDI/MDIX ports 2* 1000 Base-X SFP Slots 1 Console port
PoE Port	16* 10/100/1000Mbps POE PSE port
LED Display	Power Indicator: PWR(green).Network Indicator: Link(yellow) PoE Working Indicator: PoE(green)
Thermal Fan	Fanless Design
Installation	Din Rail
Switch Architecture	Store and Forward
Transmission model	IEEE802.3X full-duplex and Backpressure half-duplex
Switch Performance	Backplane bandwidth 48Gbps Packet forwarding rate 27Mbps MAC address 8k
Power requirement	DC 44V~54V
ESD Protection	6KV ESD
Dimension(W×D×H)	50mm x110mm x 180mm(1.97in x 4.33in x 7.9in)
Weight	<1.32kg

Power over Ethernet (PoE) Specifications

Network standard	IEEE802.3i 10 BASE-T IEEE802.3u 100 BASE-TX IEEE802.3ab 1000BASE-T IEEE802.3x Flow Control IEEE802.3af Power over Ethernet IEEE802.3at Power over Ethernet IEEE802.3az EEE
PoE Standard	IEEE 802.3af Power over Ethernet/PSE IEEE 802.3at Power over Ethernet Plus/PSE
PoE Supply Type	1/2(+), 3/6(-) End-span
PoE Power Output	Per Port 52V DC, 300mA. max. 15.4 watts (IEEE 802.3af) Per Port 52V DC, 600mA. max. 30 watts (IEEE 802.3at)
PoE Power budget	240W optional

Layer 2 Functions

Port Mirroring	TX / RX / both Many-to-1 monitor
Vlan	802.1Q tagged-based VLAN Up to 256 VLAN groups, out of 4094 VLAN IDs 802.1ad Q-in-Q tunneling Voice VLAN;Protocol VLAN;Private VLAN (Protected port),GVRP

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Link Aggregation	IEEE 802.3ad LACP and static trunk Supports 8 groups of 8-port trunk
Spanning Tree Protocol	STP, IEEE 802.1D Spanning Tree Protocol RSTP, IEEE 802.1w Rapid Spanning Tree Protocol MSTP, IEEE 802.1s Multiple Spanning Tree Protocol
Industrial Ring	G.8032 (ERPS),Recovery time less than 20ms 250 Ring at most, Max 1024 devices per ring
IGMP Snooping	IGMP (v2/v3) snooping IGMP querier Up to 256 multicast groups
MLD Snooping	MLD (v1/v2) snooping, up to 256 multicast groups
Access Control List	IPv4/IPv6 IP-based ACL / MAC-based ACL
PoE Management	Open or close port Standard POE scheduling management Power and current display Automatic restarting function of equipment dead machine Timing Support IP bindings restarting
QoS	8 mapping ID to 8 level priority queues --- Port number --- 802.1p priority --- 802.1Q VLAN tag --- DSCP field in IP packet Traffic classification based, strict priority and WRR
Security	IEEE 802.1X port-based authentication Built-in RADIUS client to co-operate with RADIUS server RADIUS / TACACS+ user access authentication IP-MAC port binding MAC filtering Static MAC address DHCP Snooping and DHCP Option82 STP BPDU guard, BPDU filtering and BPDU forwarding DoS attack prevention ARP inspection IP source guard

Management Function

Basic Management Interfaces	Web browser / Telnet / SNMP v1, v2c, V3 Firmware upgrade by HTTP / TFTP protocol through Ethernet network Remote / Local Syslog, System log, LLDP protocol, SNTP

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Secure Management Interfaces	SSH, SSL, SNMP
SNMP MIBs	RFC 1213 MIB-II RFC 1215 Generic Traps RFC 1493 Bridge MIB RFC 2674 Bridge MIB Extensions RFC 2737 Entity MIB (Version 2) RFC 2819 RMON (1, 2, 3, 9) RFC 2863 Interface Group MIB RFC 3635 Ethernet-like MIB

Environment

Safety	FCC Part15 Class A,CE.RoHs
Environment specification	Operating temperature: -40℃~85℃，operating humidity: 5％~95％ Storage temperature: -40℃~85℃，storage humidity: 5％~95％

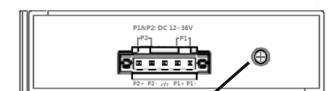## Installation Models

Power Terminal

- P1-
- P1+
- P2 -
- P2+
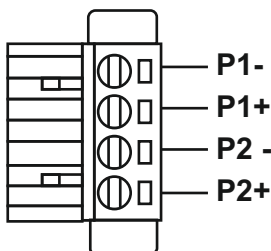
◆ 4-pin 3.81mm-spacing plug-in terminal
◆ 48V-56VDC wide voltage input
◆ P1&P2 dual power input
◆ Reverse protection

Din-Rail
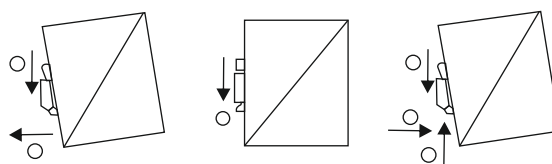
Earth Protection
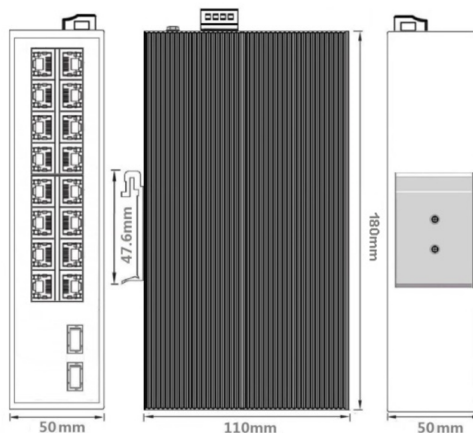

Ground terminal or screw

Mechanical Drawing
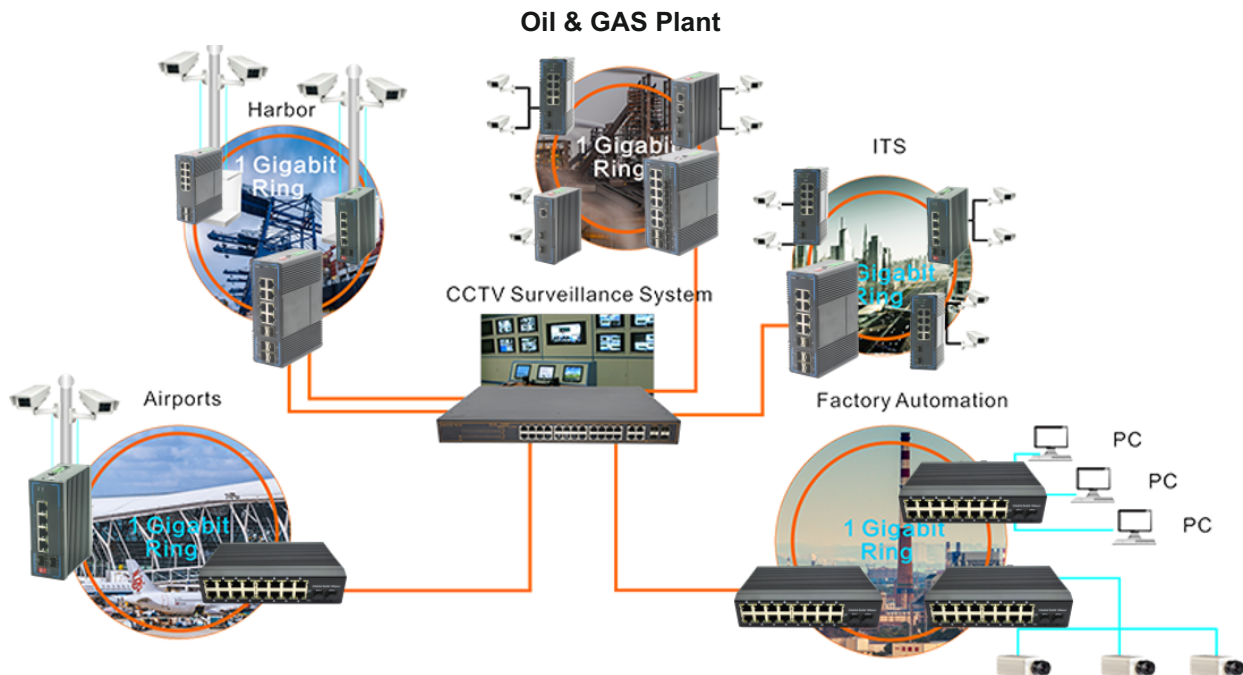

47.6mm   180mm

50mm   110mm   50mm

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Applications

ORDERING INFORMATION

AE700-IPS16GE2GF-M	16 Ports 10/100/1000Mbps Industrial Managed Din rail PoE switch With 2 SFP，IEEE802.3af/at