AES1684M Series

✧ Managed Industrial Ethernet Switch;

✧ Support 16 electrical Ports, 8 100M Optical Ports, 4 1000M Optical Ports;

✧ High efficiency radiating fan less design、Support   power redundancy;

✧ Support single ring, polycyclic networking;

✧ Recovery time of single link failure is less than 50ms;

✧ With excellent electromagnetic compatibility, stable and reliable;

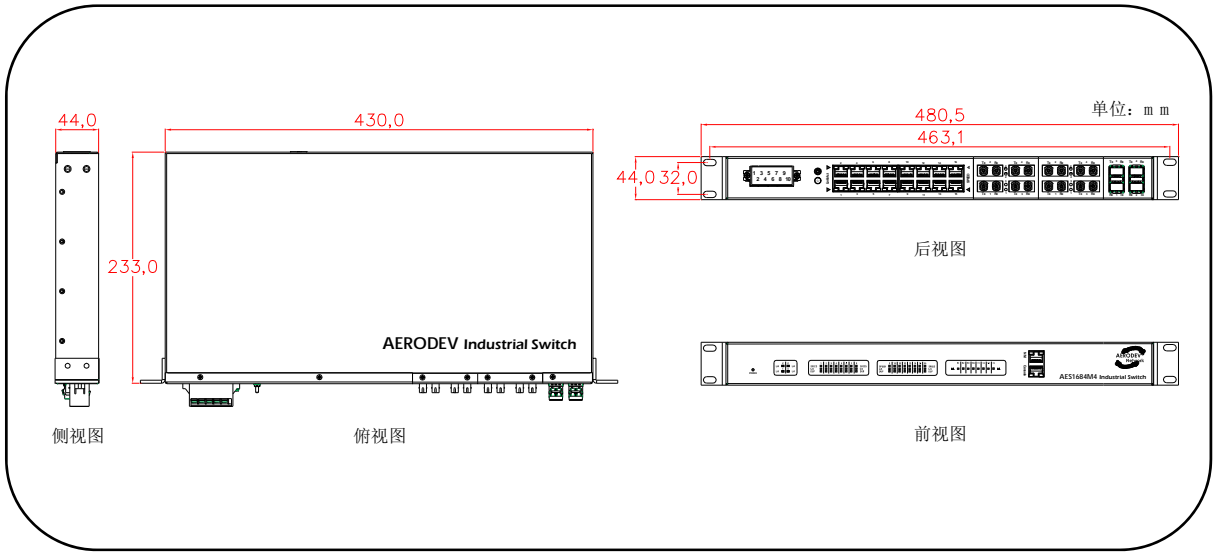✧ Applicable to industries for electric power, military, rail transportation, industrial automation and etc.

Product	
Function Description	Managed Industrial Ethernet Switch
Network topology	Chain/star/ring
switch type	layer 2 switching , all ports support line speed forwarding
Port type	16 10Base-T/100Base-TX Half duplex/ full duplex RJ45, speed and duplex auto negotiation; MDI/MDI-X Adaptive; 8 100Base-FX full duplex Optical Port (SC/ST) and 4 1000Base-X full duplex Optical Port (LC); 1 Management port（RJ45）; 1 Serial port (RJ45)
Cable	
Twisted-pair	UTP / STP 100m
Optical Fiber	SMF(15km/40km/80km) MMF(2km)
Power Requirements	
Input power	220V DC
Power consumption	<20W
Performance	
Switch capacity	12.8Gbps at most
packet forwarding rate	19.048Mpps at most
Port packet forwarding rate	0.14880952Mpps（100Base-Tx/100Base-FX）; 0.014880952Mpps (10Base-T);
Cache capacity	3Mbit

Address table capacity	8K
Address learning rate	148809pps/1488095pps
Function	
Flow Control	Support IEEE802.3X flow control （Full-duplex）
VLAN	Support IEEE802.1Q VLAN
Storm Control	Support broadcast storm control
Port isolation	Support the isolation function based on port
QoS	Ethernet frame type based Flow Based Priority Based Support 4 priority queues per port Queue schedule mode: support SP、WRR、SP and WRR mixed
Port rate	Support the port ingress rate limiting Support the output queue rate limiting
ACL	Support ACL for L2,L3,L4
Diagnosis	Support virtual cable test
Statistics	Support port snapshot, Port Statistics
Spanning Tree Protocol	Support RSTP(EEE802.1W) Compatible STP(EEE802.1D)
Ring protection protocol	Support single ring, polycyclic networking; Single link failure recovery time is less than 50ms;

SNMP	Support SNMP V1/V2C/V3 , MIBII 、 Bridge MIB、EtherLike MIB		Electrical fast transient burst immunity	4 level [GB/T 17626.4-2008]
SNTP	Support SNTP		Damped oscillatory waves immunity	3 level [GB/T 17626.12-1998]
Multicast	Support for static multicast address management		RF electromagnetic field immunity	3 level [GB/T 17626.3-2006]
management	Support for WEB based network management Support for SNMP based network management Support for through the business data export management		Surge (impact) immunity	4 level [GB/T 17626.5-2008]
			Power frequency magnetic field immunity	5 level [GB/T 17626.8-2006]
Panel indicator			The pulse magnetic field immunity	5 level [GB/T 17626.9-1998]
Diagnostic	LEDs (power, link status, port rate)		Conduction disturbance induced by radio frequency fields immunity	3 level [GB/T 17626.6-2008]
Environmental conditions			Voltage sags and short interruptions immunity	[IEC 61000-4-29:2000] Voltage sags 70% 1s; Voltage sags 40% 500ms; voltage interrupt 0 100ms
Operating temperature	-40℃～+85℃		Radiation emission	[GB 9254-1998] distance of Measurement 3m; band 30~230MHz Limit of disturbance 50dBuV/m; band 230~1000MHz Limit of disturbance 57dBuV/m
Storage/transport temperature	-40℃～+85℃			
Relative humidity	10～90%, Non condensing			
Mechanical structure				
Dimensions (W * H * D)	430mm x44 mm x233mm			
Installation	19 inch ,1U			
MTBF				
>20 years (GJB/Z 299C-2006:Gb25)				
Guarantee period				
5 years				
EMC level				
Electrostatic diacharge immunity	4 level[GB/T 17626.2-2006]			

Mounting dimensions

单位：mm

44,0   430,0   480,5
463,1
233,0   44,0 32,0

后视图

AERODEV Industrial Switch

AES1684M4 Industrial Switch

侧视图   俯视图   前视图

Typical configuration

Product model	Product description
AES1684M4-D1D1D1D1 -P6P6-T2	16 10Base-T/100Base-TX RJ45 ports 8 100Base-FX Optical Ports (Multimode 2km，SC interface) 4 1000Base-X SFP interface 2 220VDC powers
AES1684M4-D0D0D0D0 -P6P6-T2	16 10Base-T/100Base-TX RJ45 ports 4 1000Base-X SFP interface 2 220VDC powers