

# QUICK START GUIDE

Non-POE switch

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Applicable Model: TD-IS3216GF

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Touching  
the future

## Product Specification

# 18-port full Gigabit industrial Ethernet switch

## TD-IS3216GF



### Product description

TD-IS3216GF series unmanaged industrial Ethernet switches have 16 Gigabit Ethernet ports + 2 Gigabit uplink SFP optical port slots, and all ports support wire-speed forwarding.

TD-IS3216GF completely complies with industrial product design and materials. The shell is made of aluminum alloy to enhance heat dissipation performance. It supports 6KV electrostatic surge protection, the protection level reaches IP40, supports dual DC redundant power supply, low power consumption fanless heat dissipation technology, MTBF average trouble-free working time can reach 35 years, and super long 5-year warranty. It is suitable for industrial scenarios such as intelligent transportation, rail transit, electric power industry, mining, petroleum, shipping, metallurgy, pipe gallery and green energy construction to establish a cost-effective, stable and reliable communication network. Non-network management model, plug and play, no need to configure, easy to use;

### Product Features

1. Dual optical port uplink port, long-distance transmission, adaptable to various ring network/chain network cascading and expansion, making networking easier;
2. Industrial-grade high-bandwidth switching chip, high backplane, large cache, reducing network congestion;
3. Support IEEE802.3X full-duplex intelligent flow control, large stream high-definition transmission without lag;
4. Support MAC address automatic learning and updating, support port automatic flip (Auto MDI/MDI-X) function;
5. The service port supports 6KV anti-surge (lightning protection) protection, power short-circuit and overload protection,

making it safer and more secure to use;

6. Aluminum alloy profile metal shell, strong heat dissipation, shielding interference, strong, rust-proof and more durable;

7. Dual DC redundant power supply interface, DC12-57V wide voltage input, meeting the wide voltage requirements of industrial environments;

8. DIN35 guide rail installation, IP40 protection level, wide temperature design from -40°C to +75°C, more stable and reliable application in harsh environments;

9. Low power consumption, fanless and silent design, plug and play, no configuration required, easy to use.

## Product Specification

Model		TD-IS3216GF
<b>port characteristics</b>		
fixed port	Downlink port	16 10/100/1000Base-T RJ45 network ports
	Uplink port	2 1000M SFP optical port slots
Network port characteristics		1-16 ports 10/100/1000M adaptive, full/half duplex MDI/MDI-X adaptive
Twisted pair transmission		10BASE-T: Cat3,4,5 UTP(≤100 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter) 1000BASE-T: Cat5e or later UTP(≤100 meter)
Optical port characteristics		Gigabit SFP optical fiber interface, the default is not equipped with optical modules, which need to be purchased separately, (optional order mode/multimode, single fiber/dual fiber optical modules, LC/SC)
fiber optic cable		Multi-mode : 850nm 0~550M , 50μm/125μm&62.5μm/125μm Singlemode : 1310nm 0~40KM , 1550nm0~120KM 。 9.5μm/125μm
<b>Chip parameters</b>		
Network management type		Non-network management
Network protocol		IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X; IEEE802.3x Flow Control; IEEE 802.3af DTE Power via MDI; IEEE 802.3at DTE Power via MDI;
forwarding mode		Store-and-forward (full wire speed)
Backplane Bandwidth		52Gbps (non-blocking)
Packet forwarding rate@64byte		26.78Mpps
MAC address table		8K

packet forwarding cache	4.1Mbits
jumbo frame	10Kbytes
indicator light	Power indicator: PWR (green); Network indicator: Link/Act (green); Optical port indicator: SFP (green).
MTBF	500,000 hours
<b>Power Characteristics</b>	
Input voltage	DC12-57V
Power consumption	Standby power consumption: <12W; full load power consumption: <15W
power supply	The power supply is not provided by default and needs to be purchased separately. It is recommended to purchase DC24V/1A
<b>Physical Specifications</b>	
Working temperature/humidity	-40~+75°C; 5%~90% RH non-condensing
storage temperature/humidity	-40~+85°C; 5%~95% RH non-condensing
Appearance size (L*W*H)	195*145*48mm
Net weight/Gross weight	< 1.5kg / < 2.0kg
installation method	Desktop, DIN-rail installation
<b>Product Certification</b>	
Lightning Protection/Protection Level	Port lightning protection: 6KV 8/20us; protection level: IP40
Applicable industry standard	IEC61000-4-2 (ESD): ±8kV contact discharge, ±15kV air discharge IEC61000-4-3 (RS): 10V/m (80~1000MHz) IEC61000-4-4 (EFT): power line: ±4kV; data line: ±2kV IEC61000-4-5 (Surge): power line: CM±4kV/DM±2kV; data line: ±4kV IEC61000-4-6 (radio frequency conduction): 10V (150kHz~80MHz) IEC61000-4-8 (power frequency magnetic field): 100A/m continuous; 1000A/m, 1s to 3s IEC61000-4-9 (pulse magnetic field): 1000A/m IEC61000-4-10 (damped oscillation): 30A/m 1MHz IEC61000-4-12/18 (oscillating wave): CM 2.5kV, DM 1kV IEC61000-4-16 (common mode conduction): 30V continuous; 300V, 1s FCC Part 15/CISPR22 (EN55022): Class A IEC61000-6-2 (general industry standard)
mechanical properties	IEC60068-2-6 (anti-vibration) IEC60068-2-27 (shock resistance) IEC60068-2-32 (free fall)
Certification	CE, FCC, RoHS, CCC



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