

# Fully Managed Industrial Switch

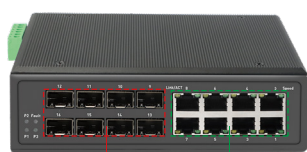
## GNT-G1608FMI

- Gigabit L2+ managed switch
- 8 ports RJ45
- 8 ports SFP
- 1 RS232 console port

## Product Features

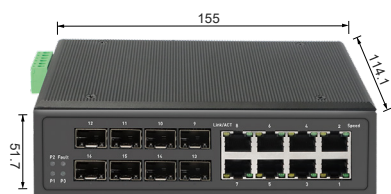
- Support 802.1q VLAN
- Supports Web-based operation
- Support RSTP/MSTP spanning tree
- Support VLAN, ACL, ERPS ring network

## Ports Description

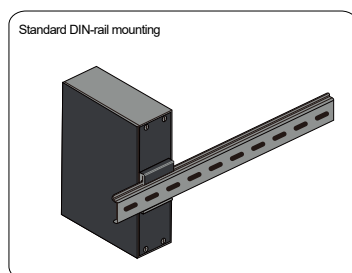


- ① 1000Mbps Ports
- ② 1000Mbps SFP Port

## Dimension (mm)



## Installation Diagram



## Specifications

Model	GNT-G1608FMI
Ports	8x10/100/1000Mbps RJ45 ports+8xSFP
	1xRS232 console port(115200,N,8,1)
	2 sets of V+, V- redundant DC power interface (6 Pin Phoenix terminal)
	1 group of alarm output and relay output can define various custom condition trigger.
Network Protocol	Port 1-8 can support IEEE 802.3,802.3i,802.3u,802.3x
	IEEE 802.3 10BASE-T
	IEEE 802.3u 100BASE-TX/FX
	IEEE 802.3ab 1000BASE-TX
	IEEE802.3i 10Base-T
	IEEE802.3z 1000Base-X
Ethernet Port Feature	IEEE802.3x
	10/100/1000BaseT (X) automatic detection, full / half duplex MDI/MDI-X adaptive
SFP Port Characteristic	Gigabit SFP optical fiber interface, default matching optical modules, need to buy separately, (optional order mode / multi-mode, single fiber / double fiber optical module)
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	32Gbps
Forwarding Rate	23.808Mpps
MAC Address Table	8K
Packet Buffer Memory	4Mb
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meter)
	100BASE-TX: Cat5 or later UTP(≤100 meter)
	1000BASE-T: Cat5 or later UTP(≤100 meter)
Optical Cable	Multi mode: 850nm 0 ~ 550M,single mode: 1310nm 0 ~ 40KM, 1550nm 0 ~ 120KM.
Power Supply Pin	Only support 1/2 (+), 3/6 (-) 4-core power supply
Power Consumption	Standby:<10W;Full load:<240W

LED	System indicator:SYS(green)
	Network Indicator: Link (yellow)
	SFP Indicator: L/A (green)
	PoE Indicator: PoE (green)
Power Supply	No, see accessories information table to buy
Lightning Protection	Lightning protection: 6KV 8/20us;Protection level: IP40
	IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge
	IEC61000-4-3(RS):10V/m(80~1000MHz)
	IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV
	IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV
	IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz)
	IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s
	IEC61000-4-9(pulsed magnet field):1000A/m
	IEC61000-4-10(damped oscillation):30A/m 1MHz
	IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV
	IEC61000-4-16(common-mode transmission):30V; 300V,1s
	FCC Part 15/CISPR22(EN55022):Class A
	IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration)
	IEC60068-2-27 (anti shock)
	IEC60068-2-32 (free fall)
Physical Specifications	Size(L*W*H): 155mmx114.1mmx51.7mm,Net Weight:<1.1kg,Gross Weight:<1.4kg
Operation TEMP / Humidity	-40~+75°C;5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+85°C;5%~95% RH Non condensing
Certification	CE;FCC;RoHS
Warranty	Whole Device: 1 year

Port	Support IEEE802.3x flow control (full duplex)
	Support for broadcast storm suppression based on port rate
	Support speed limit for incoming and offline message traffic, with a minimum particle size of 64Kbps.
	Support port temperature protection settings
	Support port EEE green Ethernet energy saving configuration
Layer 3 Function	L2+ network management function
	Support IPV4/IPV6 management
	Support layer3 soft routing (weak three tier) forwarding
	Support different network segments, communication between different VLAN
	Support static routing / default routing 128, 1024 ARP software forwarding

VLAN	Support port based VLAN (4K), IEEE802.1q
	Support protocol based VLAN
	Support Voice VLAN
	Support for MAC address-based VLANs
	Support Access, Trunk, Hybrid three types of port configuration
Port Aggregation	Support LACP
	Support static polymerization
	Support the largest 8 aggregation groups; each aggregation group supports 8 ports.
Spanning Tree	Support STP (IEEE802.1d)
	Support RSTP (IEEE802.1w)
	Support MSTP (IEEE802.1s)
Industrial Ring Network Protocol	Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring
	The self healing time of the ring network is less than 20ms
Multicast	Support IGMP Snooping V1/V2 and support 1024 multicast groups at most
	Support the user's quick departure mechanism
	Support MLD Snooping V1/V2
	Support multicast VLAN
Mirror	Bi-directional traffic mirroring supporting the basic port
QoS	Support Diff-Serv QoS
	Each port supports 8 output queues
	Support 802.1p/DSCP priority mapping
	Support queue scheduling mechanism (SP, WRR, SP+WRR)
	Support priority tag Mark/Remark
	Support stream based packet filtering
	Support for stream based redirection
	Support flow based speed limit
ACL	Support L2 to L4 packet filtering function, match the first 80 bytes of the message
	Provide based on the source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN and other definition ACL
	Support ACL based on port and VLAN
Safety Characteristics	Support user grading management and password protection
	Support IEEE802.1X authentication / centralized MAC address authentication
	Support AAA&RADIUS authentication
	Support the number of MAC address learning restrictions
	Support MAC address black hole
	Support SSH 2.0 to provide secure passwords for user login
	Support SSL to ensure data transmission security
	Support port isolation
	Support the speed limit function of ARP message

	Support IP source address protection
	Support ARP intrusion detection function
	Support against DoS attacks
	Support port broadcast message suppression
	Support host data backup mechanism
	Binding capabilities of IP+MAC+VLAN+ ports
DHCP	Support DHCP Client
	Support DHCP Snooping
Management And Maintenance	Support Console/AUX Modem/Telnet/SSH2.0 CLI command line configuration
	Support WEB network management (HTTPS)
	Support FTP, TFTP, Xmodem, SFTP file download management
	Support SNMP V1/V2C/V3
	Support one bond reduction
	Support NTP clock Support system work log Support Ping detection
	Support cable state detection
	Support CPU instant utilization status view
	Support link layer discovery protocol LLDP center
System Requirements	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later
	Cat5e or later Ethernet cable
	TCP/ IP, network adapter and network operating system (Microsoft Windows, Linux or Mac OS X) installed on on every computer in the network.