NIETZ

## Industrial Network Solutions

# Product Brochure

# CONTENTS

# DS-1050 Series 5-port 100M unmanaged industrial Ethernet switch

## Features and benefits

- Support 5-way 100M power
- Wide voltage input : 12~48VDC
- Wide operating temperature range: -40~75℃
- Small and compact metal housing
- IP40 Protection level

## Introduction

The DS-1050 industrial switch is a high-performance network switching device designed for industrial environments. It uses advanced technology and has a compact appearance for easy on-site installation; the sturdy metal shell effectively resists the impact,collision and wear of the industrial site, and also has good heat dissipation performance to ensure that the switch can work stably for a long time; the wide temperature range is -40℃ ~75℃ , which can adapt to various extreme temperature conditions; it can work continuously and stably in complex industrial environments, reduce the occurrence of network failures, and ensure the continuity of industrial production.

The DS-1050 switch can be quickly deployed without complex configuration, simplifying the installation process and reducing the total cost of ownership. Whether it is used in factory automation, video surveillance or transportation, the DS-1050 can provide a stable data communication solution. It is an industrial unmanaged switch that integrates high performance, high reliability and easy deployment, designed to meet the needs of industrial automation for high-quality network infrastructure.

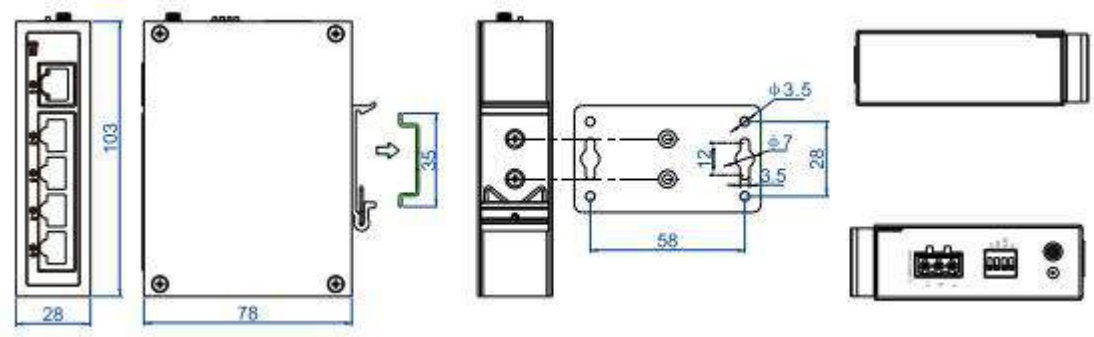
## Specification

| | |
|---|---|
| **Standards and protocols** | 10Base-T,follow IEEE 802.3<br>100Base-TX,follow IEEE 802.3u<br>Flow control, follow IEEE 802.3x |
| **Connector** | Electrical port:10/100Base-T(X),RJ45,full/half duplex mode MDI/MDI-X,automatic detection |
| **Indicator lights** | Power indicator, interface indicator |
| **Exchange properties** | Transmission mode: store and forward<br>MAC address :2K<br>Backplane bandwidth :1G<br>Switching delay : <10μs |
| **Power supply** | 12~48VDCor24VAC,3-core 5.08mm pitch terminal block supports anti-reverse connection and built-in overcurrent 3.0A protection. |

| | |
|---|---|
| **Power consumption** | No-load power :0.4W@24VDC<br>Full load power consumption :1.0W@24VDC |
| **Work environment** | Operating temperature:-40~75℃<br>Storage temperature:-40~85℃<br>Relative humidity :5 %~95 % (No condensation) |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail or wall mount<br>Dimensions (width x height x depth) :28mm× 103mm× 78mm |
| **Industry standards** | IEC61000-4-2(ESD),Level3<br>Air discharge : ± 8kV<br>Contact discharge: ± 6kV<br>IEC61000-4-4(EFT),Level3<br>Power supply : ± 2kV<br>Ethernet interface : ± 1kV<br>IEC61000-4-5(Surge),Level3<br>Power supply : common mode± 2kV,differential mode ± 1kV<br>Ethernet interface : commonmode± 2kV,differential mode ± 1kV<br>Shock:IEC60068-2-27<br>Free fall:IEC60068-2-32<br>Shock:IEC60068-2-6 |
| **Certification** | CE,FCC,ROHS |
| **Warranty** | 5 years |
| **Mean time between failures** | 510465hrs |

## Dimension

Unit:mm




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DS-1050 | 5 100M electrical ports | 12-48VDC |

# DS-1041F Series 100M 1 optical 4 electrical industrial Ethernet switch


## Features and benefits

- Adopt high-quality optoelectronic integrated modules to provide good optical and electrical characteristics to ensure reliable data transmission and long working life
- Support full-duplex or half-duplex mode, and with automatic negotiation capability. The network port supports fully automatic cross-link identification.
- Built-in storage and forwarding mechanism, supports multiple protocols, meets industrial operation standards, and has an average trouble-free working time of more than 300,000 hours
- Working power supply: DC 12-52V with reverse polarity protection
- Use SC/FC/ST/SFP fiber optic interface
- Lightning surge protection (power supply): 5000A (8/20μs)

## Introduction

4-way 100M electrical ports + 1-way 100M FX optical port industrial Ethernet switch, supports 4 10Base-T/100Base-TX electrical ports and 1 100Base-X optical port. The product complies with FCC, CE, and ROHS standards. The DS-1041F series switch has an operating temperature of-40~80 , has super strong robustness and can adapt to various harsh environments, and can also be easily placed in a compact control box. The guide rail installation characteristics, wide temperature operation, IP40 protection grade housing and LED indicator make the DS-1041F a plug-and-play industria grade device, providing users with a reliable and portable solution for Ethernet device networking.

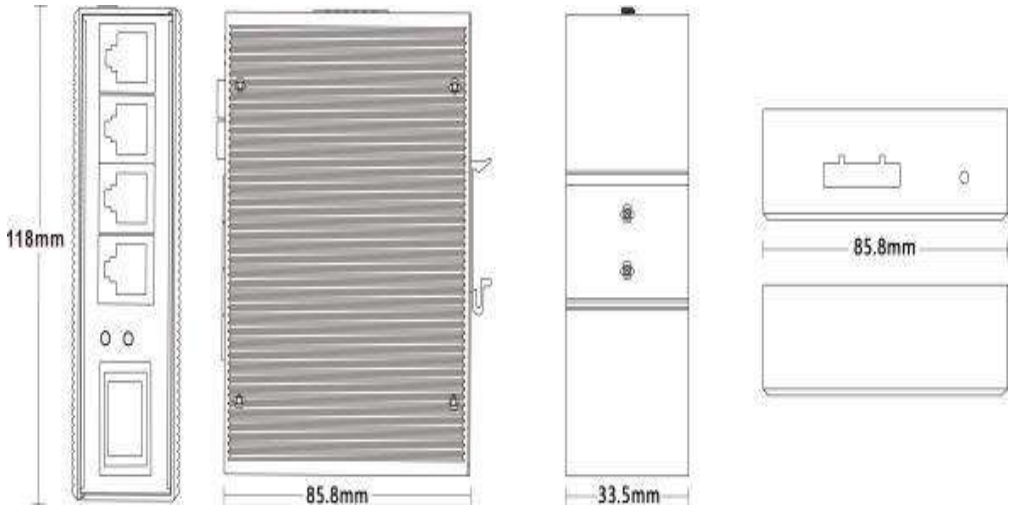
## Specification

| | |
|---|---|
| **RJ45 interface** | 10/100BaseT(X) automatic detection, full/half duplex MDI/MDI-X adaptive |
| **Port Description** | 4 RJ45 ports + 1 fiber optic port |
| **Fiber optic port** | 100BaseFX port (SC/FC/ST/SFP optional) |
| **Network protocol** | IEEE802.310BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab1000Base-T;IEEE802.3z1000Base-X;IEEE802.<br>3x;IEEE802.3af,IEEE802.3at |
| **Work environment** | Operating temperature: -40~80℃(-40~180°F)<br>Storage temperature: -40~80℃(-40~180°F)<br>Relative humidity:5%~95%(No condensation) |
| **Industry standards** | EMI: FCCPart15SubpartBClassA,EN55022ClassA EMS:IEC(EN)61000-4-2<br>(ESD):± 8kVcontact discharge,± 12kVair discharge<br>IEC(EN)61000-4-3(RS):10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT):relative humidity:± 2kVCM//± 1kVDM:<br>IEC(EN)61000-4-5(Surge):relative humidity:± 2kVCM//± 1kVDM;<br>IEC(EN)61000-4-6(radio frequency conduction):3V(10kHz~150kHz),<br>10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(common mode conduction):30Vcont.<br>300V,1sShock:IEC60068-2-27Freefall:IEC60068-2-32Vibration:IEC60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Transmission method :store and forward<br>MAC address: 2K<br>Cache: 1Mbit<br>Backplane bandwidth: 1.6G<br>Switching delay: <10μs<br>Power consumption: <3W |
| **Power supply** | Input voltage: DC12-52V (dual power supply redundant backup)<br>Access terminal: phoenix terminal<br>Support dual power supply redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical properties** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall mount<br>Heat dissipation method: natural cooling, no fan<br>Weight: 0.36Kg<br>Dimensions: 118×85.8×33.5mm (width×depth×height) |
| **LED indicators** | Power indicator: PWR<br>Interface indicator: electrical port, optical port (Link/ACT) |
| **Protection level** | IP40 |
| **Certification** | Certification: CE, FCC, Rohs |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Dimension

Length × Width × Height (mm): 118 x 85.8x 33.5m




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DS-1041F | 1 optical 4 electrical 100M | 12-52 Dual power supply redundancy |

# DS-1080 Series

**100M 8-port industrial Ethernet switch**


## Features and benefits

- Adopt high-quality optoelectronic integrated modules to provide good optical and electrical characteristics
- Ensure reliable data transmission and long working life
- Supports full-duplex or half-duplex mode with auto-negotiation capability
- The network port supports fully automatic cross-recognition
- Built-in store-and-forward mechanism, supports multiple protocols
- Meet industrial-grade operation standards, with an average trouble-free working time of more than 300,000 hours
- Working power supply: DC12-52V with reverse connection protection
- Lightning surge protection (power supply):5000A(8/20μs)

## Introduction

8-way 100M electrical port industrial Ethernet switch, supporting 8 10Base-T/100Base-TX electrical ports. The product complies with FCC, CE, and ROHS standards. The DS-1080 switch has an operating temperature of -40℃~80℃ degrees, has super strong robustness to adapt to various harsh environments, and can also be easily placed in a compact control box. The installation characteristics of the guide rail, wide temperature operation, and the IP40 protection grade shell and LED indicator make the DS-1080 a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

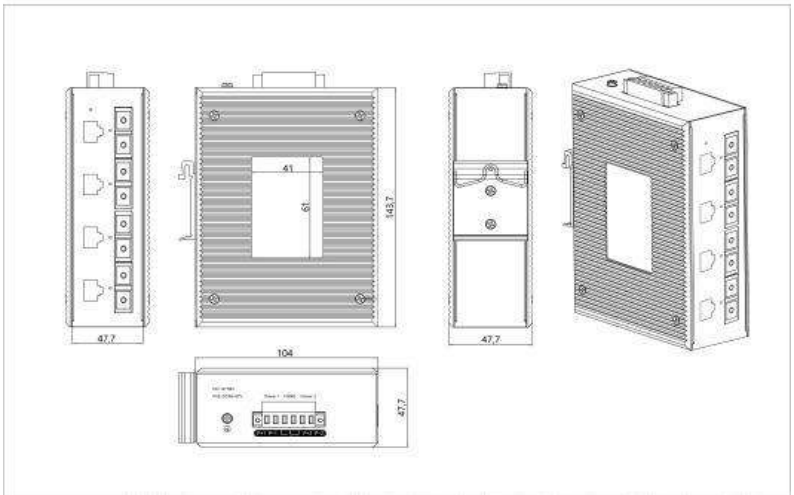
## Specification

| | |
|---|---|
| **RJ45 interface** | 8 RJ45 ports |
| **Port Description** | 10/100BaseT(X) automatic detection, full/half duplex MDI/MDI-X adaptive |
| **Network Protocol** | IEEE802.310BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab1000Base-T;IEEE802.3z1000Base-X;IEEE802 .3x;<br>IEEE802.3af,IEEE802.3at |
| **Work environment** | Operating temperature:-40~80℃(-40~180°F)<br>Storage temperature:-40~80℃(-40~180°F)<br>Relative humidity:5%~95%(No condensation) |
| **Exchange properties** | Transmission method :store and forward<br>Cache:1Mbit<br>MAC address: 2K<br>Backplane bandwidth:1.6G： 1.6G<br>Switching delay: <10μs<br>Power consumption: < 5W |

| | |
|---|---|
| **Industry standards** | IEC(EN)61000-4-2(ESD):± 8kVcontact discharge,± 12kVair discharge<br>IEC(EN)61000-4-3(RS):10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT):network port:± 2kVCM//± 1kVDM;<br>IEC(EN)61000-4-5(Surge):network port:± 2kVCM//± 1kVDM;<br>IEC(EN)61000-4-6(radio frequency conduction):3V(10kHz~150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(common mode conduction):30V cont 300V,1s<br>Shock:IEC60068-2-27<br>Freefall:IEC60068-2-32<br>Vibration:IEC60068-2-6 |
| **Power supply** | Input voltage: DC12-52V (dual power supply redundant backup)<br>Access terminal: phoenix terminal<br>Support dual power supply redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical properties** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall mount<br>Heat dissipation method: natural cooling, no fan<br>Weight: 0.64Kg<br>Dimensions: 143.7× 104× 47.7mm (width× depth× height) |
| **LED indicators** | Power indicator: PWR<br>Interface indicator: electrical port (Link) |
| **Protection level** | IP40 |
| **Certification** | Certification: CE, FCC, Rohs |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Dimension

Length × Width × Height (mm): 143.7 x 104 x 47.7 mm




## Ordering information

| Model | Interface | power supply |
|---|---|---|
| DS-1080 | 8 100M electrical ports | 12-52 Dual power supply redundancy |

# DS-1062F Series

**100M 2-fiber 6-electric industrial Ethernet switch**


## Features and benefits

- Adopt high-quality optoelectronic integrated modules to provide good optical and electrical characteristics
- Ensure reliable data transmission and long working life
- Supports full-duplex or half-duplex mode with auto-negotiation capability
- The network port supports fully automatic cross-recognition
- Built-in store-and-forward mechanism, supports multiple protocols
- Meet industrial-grade operation standards, with an average trouble-free working time of more than 300,000 hours
- Working power supply: DC12-52V with reverse connection protection
- Use SC/FC/ST fiber optic interface
- Lightning surge protection (power supply):5000A(8/20μs)

## Introduction

6-way 100M electrical ports + 2-way 100M FX optical ports Industrial Ethernet switch,supports 6 10Base-T/100 Base-TX electrical ports and 2 100Base-X optical ports. The product complies with FCC, CE, and ROHS standards. The DS-1062F series switch has an operating temperature of -40 ℃~ 80 ℃,has super strong robustness and can adapt to various harsh environments, and can also be easily placed in a compact control box. The guide rail installation characteristics, wide temperature operation, IP40 protection grade housing and LED indicator make the DS-1062F a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

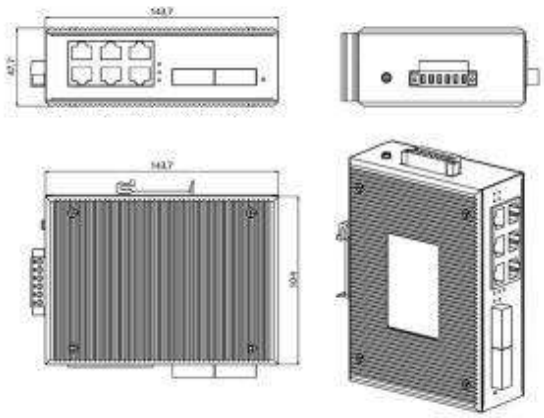
## Specification

| | |
|---|---|
| **RJ45 interface** | 6 RJ45 ports + 2 fiber optic ports |
| **Port Description** | 10/100BaseT (X) automatic detection, full/half duplex MDI/MDI-X adaptive |
| **Fiber optic port** | 100BaseFX port (SC/FC/ST optional) |
| **Network Protocol** | IEEE802.310BASE-T;IEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab1000Base-T;IEEE802.3z1000Base-X; |
| **Industry standards** | EMI:FCCPart15SubpartBClassA,EN55022ClassA<br>EMS:IEC(EN)61000-4-2(ESD):±8kVcontact discharge,±15kVair discharge<br>IEC(EN)61000-4-3(RS):10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT):power cord:±2kV;data cable:±1kV<br>IEC(EN)61000-4-5(Surge):power cord:±1kVCM/±2kVDM;data cable:±2kV<br>IEC(EN)61000-4-6(radio frequency conduction):3V(10kHz~150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(common mode conduction):30Vcont.<br>300V,1s IEC(EN)61000-4-8<br>Shock:IEC60068-2-27<br>Freefall:IEC60068-2-32<br>Vibration:IEC60068-2-6 |

| | |
|---|---|
| **Work environment** | Operating temperature: -40~80℃(-40~180°F)<br>Storage temperature: -40~80℃(-40~180°F)<br>Relative humidity:5%~95%(No condensation) |
| **Exchange properties** | Transmission method :store and forward<br>MAC address: 2K<br>Cache: 1Mbit<br>Backplane bandwidth: 1.6G<br>Switching delay: ＜10μs<br>Power consumption: ＜5W |
| **Power supply** | Input voltage: DC12-52V (dual power supply redundant backup)<br>Access terminal: phoenix terminal<br>Support dual power supply redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical properties** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall mount<br>Heat dissipation method: natural cooling, no fan<br>Weight: 0.64Kg<br>Dimensions: 143.7× 104× 47.7mm (width× depth× height) |
| **LED indicators** | Power indicator: PWR<br>Interface indicator: electrical port, optical port (Link/ACT) |
| **Protection level** | IP40 |
| **Certification** | Certification: CE, FCC, Rohs |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Dimension

Length × Width × Height (mm)： 143.7 x 104 x 47.7mm

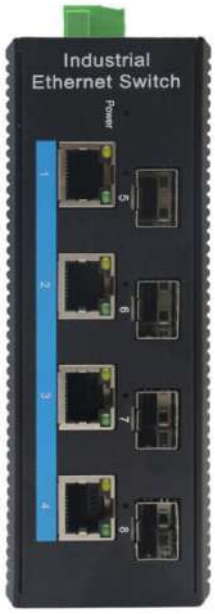


## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DS-1062F | 100M 2 optical 6 electrical | 12-52 Dual power supply redundancy |

# DS-1044F Series

**4-way 100M electrical port +**
**4-way 100M optical port industrial Ethernet switch**




## Features and benefits

- Adopt high-quality optoelectronic integrated modules to provide good optical and electrical characteristics
- Ensure reliable data transmission and long working life
- Supports full-duplex or half-duplex mode with auto-negotiation capability
- The network port supports fully automatic cross-recognition
- Built-in store-and-forward mechanism, supports multiple protocols
- Meet industrial-grade operation standards, with an average trouble-free working time of more than 300,000 hours
- Working power supply: DC12-52V with reverse connection protection
- Lightning surge protection (power supply):5000A(8/20μs)

## Introduction

4-way 100M electrical ports + 4-way 100M optical ports industrial Ethernet switch, supports 4 10Base-T/100 Base-TX electrical ports and 4 100Base-FX optical ports. The product complies with FCC, CE, and ROHS standards. The DS-1044F switch has an operating temperature of -40℃~ 80℃degrees, has super ruggedness and can adapt to various harsh environments, and can also be easily placed in a compact control box. The installation characteristics of the guide rail, wide temperature operation, and the housing with IP40 protection level and LED indicator make the DS-1044F a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

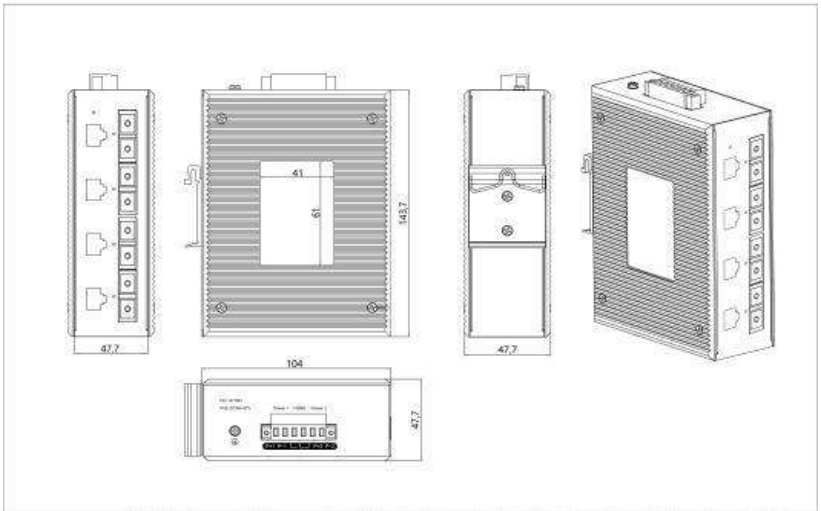
## Specification

| | |
|---|---|
| **RJ45 interface** | 4 RJ45 ports + 4 fiber optic ports |
| **Port Description** | 10/100BaseT (X) automatic detection, full/half duplex MDI/MDI-X adaptive |
| **Fiber optic port** | 100BaseFX port (SC/FC/ST optional) |
| **Industry standards** | EMI:FCCPart15SubpartBClassA,EN55022ClassA<br>EMS:IEC(EN)61000-4-2(ESD):± 8kVcontact discharge,± 15kVair discharge<br>IEC(EN)61000-4-3(RS):10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT):power cord:± 2kV;data cable:± 1kV<br>IEC(EN)61000-4-5(Surge):power cord:± 2kVCM/± 1kV DM;data cable:± 1kV<br>IEC(EN)61000-4-6(radio frequency conduction):3V(10kHz~150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(common mode conduction):30V cont.300V,1s<br>IEC(EN)61000-4-8<br>Shock:IEC60068-2-27<br>Freefall:IEC60068-2-32<br>Vibration:IEC60068-2-6 |

| | |
|---|---|
| **Ethernet standards** | IEEE802.310BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;IEEE802.3x; |
| **Work environment** | Operating temperature: -40~80℃(-40~180℉)<br>Storage temperature: -40~80℃(-40~180℉)<br>Relative humidity:5%~95%(No condensation) |
| **Exchange properties** | Transmission method :store and forward<br>MAC address: 2K<br>Cache: 1Mbit<br>Backplane bandwidth: 1.6G<br>Switching delay: <5μs<br>Power consumption: < 8W |
| **Power supply** | Input voltage: DC12-52V (dual power supply redundant backup)<br>Access terminal: phoenix terminal<br>Support dual power supply redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical properties** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall mount<br>Heat dissipation method: natural cooling, no fan<br>Weight: 0.7Kg<br>Dimensions: 143.7× 104× 47.7mm (width× depth× height) |
| **LED indicators** | Power indicator: PWR<br>Interface indicator: electrical port(Link) |
| **Protection level** | IP40 |
| **Certification** | Certification: CE, FCC, Rohs |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Dimension

Length × Width × Height (mm): 143.7 x 104 x 47.7 mm

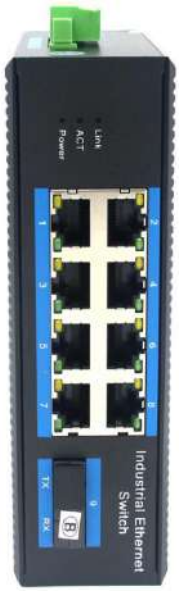



## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DS-1044F | 4 optical 4 electrical 100M | 12-52VDC dual power supply redundancy |

# DS-1081F Series

**1 Gigabit optical +**
**8 Gigabit electrical industrial-grade switch**




## Features and benefits

- Utilizes high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensures reliable data transmission and long working life
- Supports full-duplex or half-duplex modes, with automatic negotiation capability
- Network ports support automatic cross-identification
- Equipped with a storage-forwarding mechanism, supporting multiple protocols
- Complies with industrial-grade operation standards,with an average downtime of over 300,000 hours
- Working power supply: DC 12-52V with reverse connection protection
- Uses SC/FC/ST optical fiber interfaces
- Lightning surge impact protection (power supply): 5000A (8/20μs)

## Introduction

8 Gigabit Ethernet ports + 1 Gigabit FX optical port industrial-grade Ethernet switch, supporting 8 10/100Base-TX Ethernet ports and 1 100Base-X optical port. The product complies with FCC, CE, and ROHS standards. The DS-1081F switch has a working temperature range of -40° C to 80° C, with extremely strong durability that can adapt to various harsh environments, and can be conveniently installed in compact control boxes. The rail installation feature, wide temperature operation and the IP40 protection level of the enclosure and LED indicator lights make DS-1081F an easy-to-use industrial-grade device, providing areliable and convenient solution for users to connect their Ethernet devices.

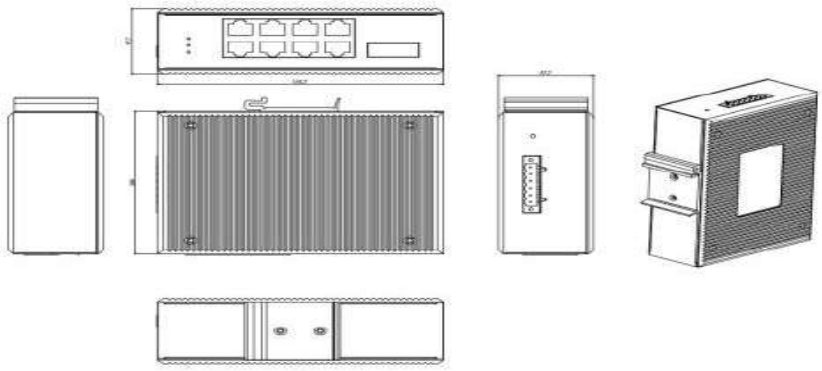
## Specification

| | |
|---|---|
| **RJ45 port** | 10/100BaseT(X) automatic detection, full/half-duplex MDI/MDI-X adaptive |
| **Port description** | 8 RJ45 ports + 1 fiber optic interface |
| **Fiber port** | 100BaseFX port (SC/FC/ST options available) |
| **Networking protocol** | IEEE802.310BASE-T;IEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab 1000Base-T;IEEE802.3z<br>1000Base-X;IEEE802.3x; |
| **Industry standards** | EMI : FCC Part 15 Subpart B Class A , EN 55022 Class A<br>EMS : IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ±15kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT) : power cord: ±2kV ; USB cable : ± 1kV<br>IEC(EN)61000-4-5(Surge) : power cord : ± 1kV CM/ ±2kV DM ;USB cable:±2kV<br>IEC(EN)61000-4-6(Radiofrequency conduction) : 3V(10kHz~150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC(EN )61000-4-8<br>Shock : IEC 60068-2-27<br>Freefall: IEC 60068-2-32 Vibration :IEC 60068-2-6 |

| | |
|---|---|
| **Work environment** | Operating temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Storage temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Relative humidity: 5% to 95% (no condensation) |
| **Exchange attributes** | Transmission mode: Store-and-forward<br>MAC address: 4K<br>Cache: 1.25 Mbit<br>Backplane bandwidth: 1.8G<br>Switching delay: <10μs<br>Power consumption: <5W |
| **Power supply** | Input voltage: DC12-52V (with dual power supply redundancy backup)<br>Access terminal: Phoenix terminal<br>Supports dual power redundancy<br>Supports built-in overcurrent protection of 4.0A<br>Support reverse connection protection |
| **Mechanical characteristics** | Shell: IP40 protection grade, metal casing<br>Installation: DIN rail mounting, wall-mounted installation<br>Cooling method: Natural cooling, without fan<br>Weight: 0.64 Kg<br>Dimensions: 143.7 x 104 x 47.7mm (Length x Width x Height) |
| **LED indicators** | Power indicator light: PWR<br>Interface indicator lights: Ethernet port, optical port (Link/ACT) |
| **Level of protection** | IP40 |
| **Certification** | Pass the certification : CE,FCC,ROHS |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 143.7 x 104 x 47.7mm



## Ordering information

| Model | Interface | Power Supply |
|---|---|---|
| DS-1081F | 1 Light 8 Electricity 100 Megabits | 12-52 Dual Power Redundancy |

# DS-1160 Series Industrial-grade 100Mbps 16-port Ethernet switch

## Features and benefits

- Utilizes high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensures reliable data transmission and long working life
- Supports full-duplex or half-duplex modes, with automatic negotiation capability
- Network ports support automatic cross-identification
- Equipped with a storage-forwarding mechanism, supporting multiple protocols
- Complies with industrial-grade operation standards,with an average downtime of over 300,000 hours
- Working power supply: DC 12-52V with reverse connection protection
- Lightning surge impact protection (power supply): 5000A (8/20μs)

## Introduction

16-port Gigabit Ethernet industrial-grade switch with 16 10Base-T/100Base-TX electrical ports. The product complies with FCC, CE, and ROHS standards. The ZIS-1160 switch has a working temperature range of -40° C to 80° C.It has extremely strong durability and can adapt to various harsh environments. It can also be conveniently installed in compact control boxes. The rail installation feature, operation, and wide temperature range with an IP40 level of protection enclosure and LED indicator lights make the DS-1160 an immediately plug-and-play industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

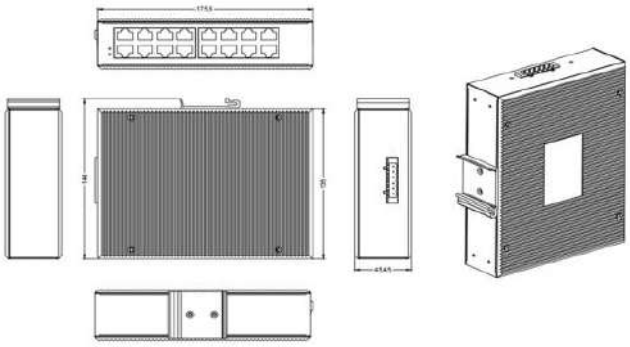
## Specification

| | |
|---|---|
| **RJ45 port** | 10/100T (X) Automatic detection, full/half-duplex MDI/MDI-X adaptive |
| **Port description** | 16 pcs RJ45 Port |
| **Networking protocol** | IEEE802.310BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX;IEEE802.3x; |
| **Work environment** | Operating temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Storage temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Relative humidity: 5% to 95% (no condensation) |
| **Industry standards** | EMI :FCC Part 15 Subpart B Class A , EN 55022 Class A<br>EMS : IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT):power cord:±4kV ; USB cable:±2kV<br>IEC(EN)61000-4-5(Surge) : net gape : ±4kV CM//±2kV DM ;<br>IEC(EN)61000-4-6(Radiofrequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz ~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC(EN )61000-4-8<br>Shock: IEC 60068-2-27<br>Freefall : IEC 60068-2-32<br>Vibration :IEC 60068-2-6 |

| | |
|---|---|
| **Exchange attributes** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 4Mbit<br>Backplane bandwidth: 3.2G<br>Switching delay: <10μs<br>Power consumption: <10W |
| **Power supply** | Input voltage: DC12-52V (with dual power supply redundancy backup)<br>Access terminal: Phoenix terminal<br>Supports dual power redundancy<br>Supports built-in overcurrent protection of 4.0A<br>Support reverse connection protection |
| **Mechanical characteristics** | Shell: IP40 protection grade, metal casing<br>Installation: DIN rail mounting, wall-mounted installation<br>Cooling method: Natural cooling, without fan<br>Weight: 1 Kg<br>Dimensions: 175.6 x 135 x 45.5 mm (width x depth x height) |
| **LED indicators** | Power indicator light: PWR<br>Interface indicator: Ethernet port (Link) |
| **Level of protection** | IP40 |
| **Certification** | Pass the certification : CE,FCC,ROHS |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

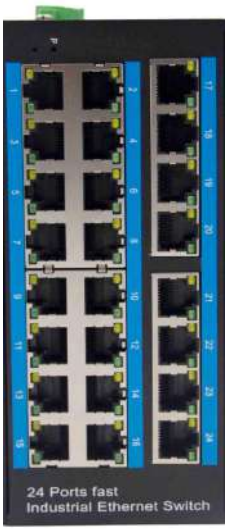
Length x Width x Height (mm): 175.6x135x45.5mm



## Ordering information

| Model | Interface | Power Supply |
|---|---|---|
| DS-1160 | 16-channel 100-megabit | 12-52 Dual Power Redundancy |

# DS-1240F Series Industrial-grade 100Mbps 24-port Ethernet switch




## Features and benefits

- Utilizes high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensures reliable data transmission and long working life
- Supports full-duplex or half-duplex modes, with automatic negotiation capability
- Network ports support automatic cross-identification
- Equipped with a storage-forwarding mechanism, supporting multiple protocols
- Complies with industrial-grade operation standards,with an average downtime of over 300,000 hours
- Working power supply: DC 12-52V with reverse connection protection
- Lightning surge impact protection (power supply): 5000A (8/20μs)

## Introduction

24-port Gigabit Ethernet industrial-grade switch with 24 10Base-T/100Base-TX electrical ports. The product complies with FCC, CE, and ROHS standards. The DS-1240F switch has a working temperature range of -40 ℃to 80 ℃It has extremely strong durability and can adapt to various harsh environments. It can also be conveniently installed in compact control boxes. The rail-mounted installation feature, wide temperature operation range, IP40 level of protection for the enclosure, and LED indicator lights make the DS-1240F an easy-to-use industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

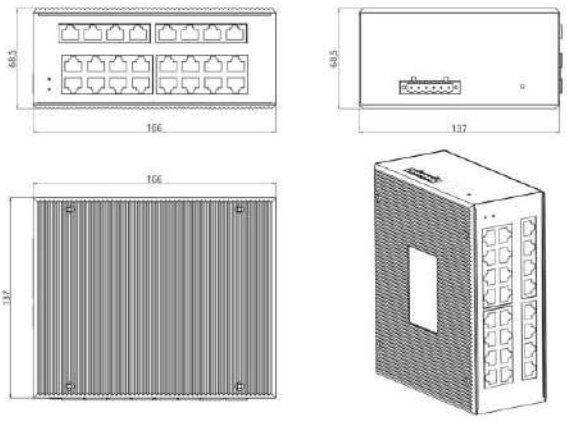
## Specification

| | |
|---|---|
| **RJ45 port** | 10/100T (X) Automatic detection, full/half-duplex MDI/MDI-X adaptive |
| **Port description** | 24 pcs RJ45 Port |
| **Networking protocol** | IEEE802.310BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX;IEEE802.3x; |
| **Work environment** | Operating temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Storage temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Relative humidity: 5% to 95% (no condensation) |
| **Industry standards** | EMI :FCC Part 15 Subpart B Class A , EN 55022 Class A<br>EMS :IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT):power cord:±4kV ; USB cable:±2kV<br>IEC(EN)61000-4-5(Surge) : net gape : ±4kV CM//±2kV DM ;<br>IEC(EN)61000-4-6(Radiofrequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz ~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC(EN )61000-4-8<br>Shock: IEC 60068-2-27<br>Freefall : IEC 60068-2-32<br>Vibration :IEC 60068-2-6 |

| | |
|---|---|
| **Exchange attributes** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 4Mbit<br>Backplane bandwidth: 4.8G<br>Switching delay: <10μs<br>Power consumption: <10W |
| **Power supply** | Input voltage: DC12-52V (with dual power supply redundancy backup)<br>Access terminal: Phoenix terminal<br>Supports dual power redundancy<br>Supports built-in overcurrent protection of 4.0A<br>Support reverse connection protection |
| **Mechanical characteristics** | Shell: IP40 protection grade, metal casing<br>Installation: DIN rail mounting, wall-mounted installation<br>Cooling method: Natural cooling, without fan<br>Weight: 1.5 Kg<br>Dimensions: 166x137x68.5mm (width x depth x height) |
| **LED indicators** | Power indicator light: PWR<br>Interface indicator: Ethernet port (Link) |
| **Level of protection** | IP40 |
| **Certification** | Pass the certification : CE,FCC,ROHS |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 166x 137x68.5mm



## Ordering information

| Model | Interface | Power Supply |
|---|---|---|
| DS-1240F | 24 Gigabit Ethernet | 12-52 Dual Power Redundancy |

# DGS-1050 Series Gigabit 5-port industrial-grade Ethernet switch

## Features and benefits

- Utilizes high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensures reliable data transmission and long working life
- Supports full-duplex or half-duplex modes, with automatic negotiation capability
- Network ports support automatic cross-identification
- Equipped with a storage-forwarding mechanism, supporting multiple protocols
- Complies with industrial-grade operation standards,with an average downtime of over 300,000 hours
- Working power supply: DC 12-52V with reverse connection protection
- Lightning surge impact protection (power supply): 5000A (8/20μs)

## Introduction

1 Port, 10 Gigabit Uplink Port + 4 Port, 10 Gigabit Downlink Port Industrial-grade ATM Switch, supporting 1 10/100/1000Base-TX Uplink Port and 4 10/100/1000Base-TX Downlink Ports. The product complies with FCC, CE, and ROHS standards. The DGS-1050 switch has a working temperature range of -40 ℃to 80 ℃and has extremely strong durability. It can adapt to various harsh environments and can be conveniently installed in compact control boxes. The rail installation feature, wide temperature operation, and IP40 level of protection of the enclosure and LED indicator lights make the DGS-1050 an easy-to-use industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

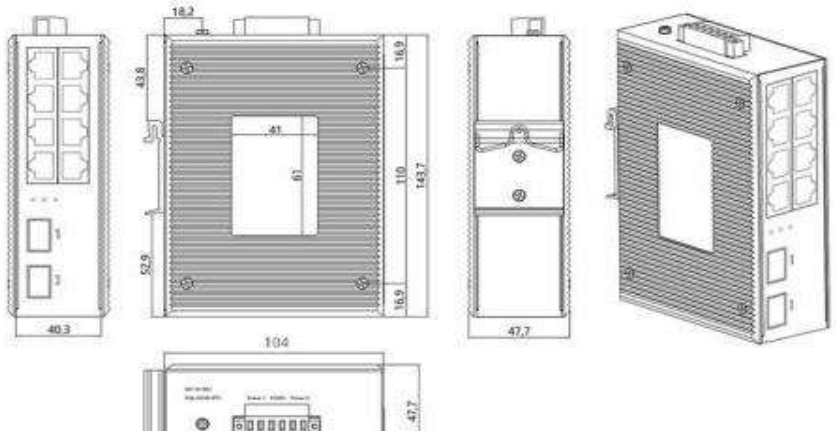
## Specification

| | |
|---|---|
| **product description** | 1 Gigabit uplink Ethernet port + 4 Gigabit downlink Ethernet ports industrial-grade Ethernet switch |
| **RJ45 port** | 10/100/1000BaseT (X) Automatic detection, full/half-duplex MDI/MDI-X adaptive |
| **Port description** | 5 pcs RJ45 Port |
| **Networking protocol** | IEEE802.310BASE-TIEEE802.3i;10Base-T;IEEE802.3u;<br>100Base-TX/FX;IEEE802.3ab 100Base-T;IEEE802.3z1000Base-X;IEEE802.3x |
| **Work environment** | Operating temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Storage temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Relative humidity: 5% to 95% (no condensation) |
| **Industry standards** | EMI :FCC Part 15 Subpart B Class A , EN 55022 Class A<br>EMS : IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT):power cord:± 2kV ; USB cable:± 1kV<br>IEC(EN)61000-4-5(Surge) : net gape : ± 2kV CM//± 1kV DM ;<br>IEC(EN)61000-4-6(Radiofrequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz ~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC(EN )61000-4-8<br>Shock: IEC 60068-2-27<br>Freefall : IEC 60068-2-32<br>Vibration :IEC 60068-2-6 |

| | |
|---|---|
| **Exchange attributes** | Transmission mode: Store-and-forward<br>MAC address: 2K<br>Cache: 1.2Mbit<br>Backplane bandwidth: 14G<br>Switching delay: <10μs<br>Power consumption: <3W |
| **Power supply** | Input voltage: DC12-52V (with dual power supply redundancy backup)<br>Access terminal: Phoenix terminal<br>Supports dual power redundancy<br>Supports built-in overcurrent protection of 4.0A<br>Support reverse connection protection |
| **Mechanical characteristics** | Shell: IP40 protection grade, metal casing<br>Installation: DIN rail mounting, wall-mounted installation<br>Cooling method: Natural cooling, without fan<br>Weight: 0.36 Kg<br>Dimensions: 118 x 85.8 x 33.5mm (width x depth x height) |
| **LED indicators** | Power indicator light: PWR<br>Interface indicator: Ethernet port (Link) |
| **Level of protection** | IP40 |
| **Certification** | Pass the certification : CE,FCC,ROHS |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 143.7 x 104 x 47.7mm




## Ordering information

| Model | Interface | Power Supply |
|---|---|---|
| DGS-1050 | 5 Gigabit Full Speed | 12-52 Dual Power Redundancy |

# DGS-1041GF Series Gigabit 1 optical 4 electrical industrial-grade Ethernet switch

## Features and benefits

- Utilizes high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensures reliable data transmission and long working life
- Supports full-duplex or half-duplex modes, with automatic negotiation capability
- Network ports support automatic cross-identification
- Equipped with a storage-forwarding mechanism, supporting multiple protocols
- Complies with industrial-grade operation standards,with an average downtime of over 300,000 hours
- Working power supply: DC 12-52V with reverse connection protection
- Lightning surge impact protection (power supply): 5000A (8/20μs)

## Introduction

4 Gigabit Ethernet ports + 1 Gigabit FX optical port industrial-grade Ethernet switch, supporting 4 100Base-T/1000 Base-TX electrical ports and 1 1000Base-X optical port. The product complies with FCC, CE, and ROHS standards. The DGS-1041 GF Series switch has an operating temperature range of -40 ℃to 80 ℃It has extremely strong durability and can adapt to various harsh environments. It can also be conveniently installed in compact control boxes. The rail installation feature, wide temperature operation, and the IP40 level of protection of the enclosure and LED indicator lights make the DGS-1041GF Series an easy-to-use industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

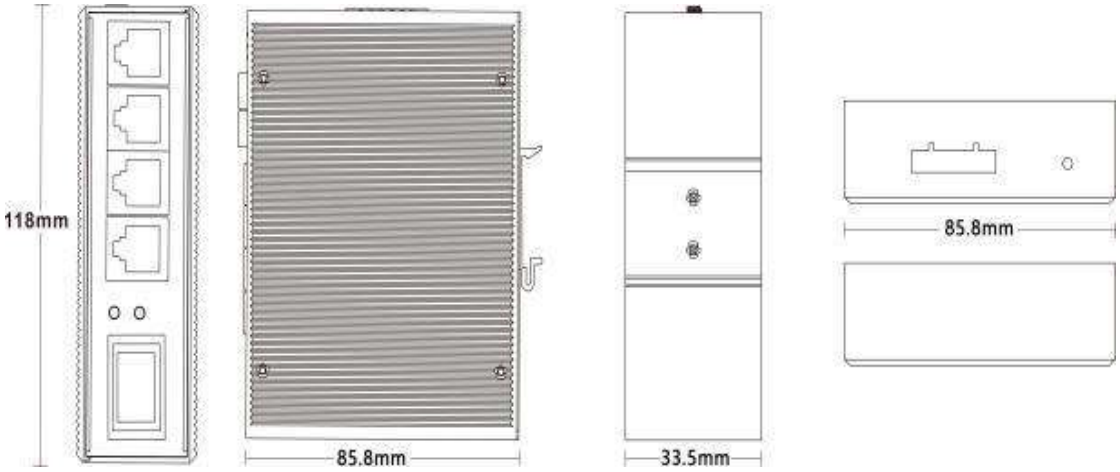
## Specification

| | |
|---|---|
| **Product description** | 4 RJ45 ports + 1 fiber optic interface |
| **RJ45 port** | 10/100/1000BaseT (X) Automatic detection, full/half-duplex MDI/MDI-X adaptive |
| **Port description** | 1000Base FX port (SC/FC/ST/SFP optional) |
| **Networking protocol** | IEEE802.3 10BASE-T;IEEE802.3i 10Base-T<br>IEEE802.3u; 100Base-TX/FX;IEEE802.3ab 1000Base-T;IEEE802.3z 1000Base-X |
| **Work environment** | Operating temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Storage temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Relative humidity: 5% to 95% (no condensation) |
| **Industry standards** | EMI :FCC Part 15 Subpart B Class A , EN 55022 Class A<br>EMS : IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT):power cord:± 2kV ; USB cable:± 1kV<br>IEC(EN)61000-4-5(Surge) : net gape : ± 2kV CM//± 1kV DM ;<br>IEC(EN)61000-4-6(Radiofrequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz ~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC(EN )61000-4-8<br>Shock: IEC 60068-2-27<br>Freefall : IEC 60068-2-32<br>Vibration :IEC 60068-2-6 |

| | |
|---|---|
| **Exchange attributes** | Transmission mode: Store-and-forward<br>MAC address: 2K<br>Cache: 1.2Mbit<br>Backplane bandwidth: 14G<br>Switching delay: <10μs<br>Power consumption: <3W |
| **Power supply** | Input voltage: DC12-52V (with dual power supply redundancy backup)<br>Access terminal: Phoenix terminal<br>Supports dual power redundancy<br>Supports built-in overcurrent protection of 4.0A<br>Support reverse connection protection |
| **Mechanical characteristics** | Shell: IP40 protection grade, metal casing<br>Installation: DIN rail mounting, wall-mounted installation<br>Cooling method: Natural cooling, without fan<br>Weight: 0.36 Kg<br>Dimensions: 118 x 85.8 x 33.5mm (width x depth x height) |
| **LED indicators** | Power indicator light: PWR<br>Interface indicator: Ethernet port ,optical port(Link/ACT) |
| **Level of protection** | IP40 |
| **Certification** | Pass the certification : CE,FCC,ROHS |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 118 x 85.8 x33.5mm




## Ordering information

| Model | Interface | Power Supply |
|---|---|---|
| DGS-1041GF | 1 Light 4 Electricity Gigabit | 12-52 Dual Power Redundancy |

# DGS-1080 Series 8-port 100Mbps non-managed industrial Ethernet switch

## Features and benefits

- DIN rail mounting
- 8 Gigabit Ethernet ports
- Supports features such as storm suppression, flow control, one-click VLAN, loop detection, forced 100Mbps, etc.
- Supports dual Power Supply redundancy, input voltage: 12~48 VDC
- Supports operating temperature range of -40~75℃
- Supports IP40 level of protection

## Introduction

DGS-1080 is a non-managed all-gigabit Ethernet switch specifically designed for industrial-level applications. This device is encapsulated in a sturdy metal casing and has an IP40 level of protection, which effectively prevents dust from entering and ensures long-term stable operation in harsh environments. Its wide operating temperature range is from -40° C to 75° C, enabling DGS-1080 to continuously work in extreme temperature conditions, especially suitable for various demanding environments in industrial sites.

As a non-managed switch, DGS-1080 can be quickly deployed without complex configuration, simplifying the installation process and reducing the total cost of ownership. It is equipped with 8 full-duplex gigabit Ethernet ports, supporting automatic negotiation and MDI/MDI-X automatic flipping functions, capable of achieving high-speed data transmission, and is highly suitable for scenarios requiring high bandwidth, such as industrial automation control and video surveillance systems.

Whether applied in factory workshops, outdoor monitoring, or in fields like new energy, DGS-1080 is anideal choice. It not only provides outstanding performance and durability but also ensures reliable data communication in various complex environments. In summary, DGS-1080 is an industrial non-managed switch that integrates high performance, high reliability, and easy deployment, aiming to meet the demand for high-quality network infrastructure in the industrial automation field.

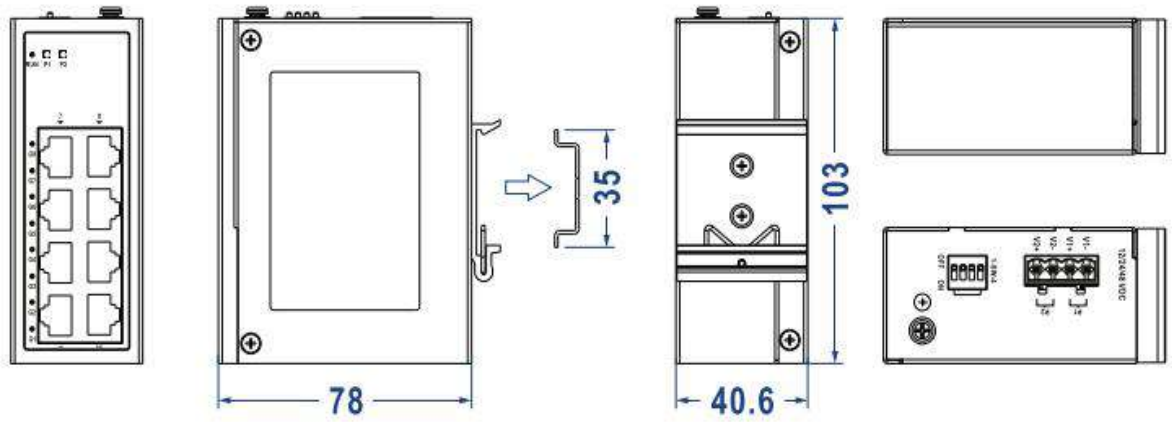
## Specification

| | |
|---|---|
| **Standards and protocols** | 10Base-T,follow IEEE 802.3 ; 100Base-TX ,follow IEEE 802.3u<br>1000Base-T,follow IEEE 802.3ab ; Flow control,follow IEEE 802.3x<br>VLAN follow IEEE 802.1Q |
| **Port** | Gigabit Ethernet port:10/100/1000 Base-T(X),RJ45,automatic flow rate control,full/half duplex Mode, MDI/MDI-X automatic detection<br>Dip switch: 1-Force 100M (8GT)/Loop detection, 2-Storm suppression, 3-VLAN, 4-Flow control |
| **Indicator indicators** | Power lights,operation indicator lights Interface;indicator light |
| **Exchange attributes** | Transmission mode: Store-and-forward<br>MAC address: 4K<br>Cache: 1.5Mbit<br>Backplane bandwidth: 16G<br>Switching delay: <10 μs |
| **Power supply** | 12/24/48 VDC (9 - 60VDC), dual power supply redundancy, using 4-bit 5.08mm spacing terminal Blocks, supporting reverse connection prevention |
| **Power consumption** | No-load: 0.4W @ 12VDC<br>Full-load: 3.0W @ 12VDC |

| | |
|---|---|
| **Work environment** | Operating temperature: -40 to 75 ° C (-40 to 180 ° F)<br>Storage temperature: -40 to 80 ° C (-40 to 180 ° F)<br>Relative humidity: 5% to 95% (no condensation) |
| **Mechanical characteristics** | Shell: IP40 protection grade, metal casing<br>Installation: DIN rail mounting, wall-mounted installation<br>Weight: 0.567 Kg<br>Dimensions(width × height × depth): 40.6mm × 103mm × 78mm |
| **Industry standards** | IEC 61000-4-2 (ESD, Electrostatic Discharge Immunity) - Level 3<br>IEC 61000-4-4 (EFT, Electrical Fast Transient Pulse Immunity) - Level 3<br>IEC 61000-4-5 (Surge, Surge Immunity) - Level 3<br>Shock: IEC 60068-2-27<br>Freefall : IEC 60068-2-32<br>Vibration :IEC 60068-2-6 |
| **Certification** | CE,FCC,ROHS |
| **Mean time between failures** | 520,000 hours |
| **Warranty** | 5 years |

## Appearance size

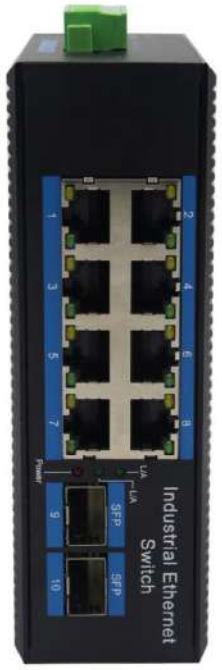
unit: mm




## Ordering information

| Model | Interface | Power Supply |
|---|---|---|
| DGS-1080 | 8 Gigabit Ethernet Port | 12-52 Dual Power Redundancy |

# DGS-1082GF Series Gigabit 2 optical 8 electrical industrial-grade Ethernet switch




## Features and benefits

- Utilize high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensure reliable data transmission and long working life
- Support full-duplex or half-duplex modes, with automatic negotiation capability
- Net gape supports automatic cross-identification
- Equipped with a storage forwarding mechanism, supporting multiple protocols
- Comply with industrial-grade operation standards, with an average downtime of over 300,000 hours
- Working Power Supply: DC 12-52V with reverse connection protection
- Use SFP optical fiber interface
- Lightning surge impact protection (Power Supply): 5000A (8/20 μs)

## Introduction

Industrial Ethernet switch with 1000Mbps electrical ports + 2 1000Mbps fiber optic ports. It supports 8 100Base-T/1000 Base-TX electrical ports and 2 1000Base-X fiber optic ports. The product complies with FCC, CE, and ROHS standards. The DGS-1082GF switch has an operating temperature range of -40° C to 80° C. It has extremely strong durability and can adapt to various harsh environments. It can also be conveniently installed in a compact control box. The rail installation feature, wide temperature operation, and the IP40 level of protection of the enclosure and LED indicator lights make the DGS-1082GF an easy-to-use industrial-grade device, providing a reliable and convenient solution for users to connect their Ethernet devices.

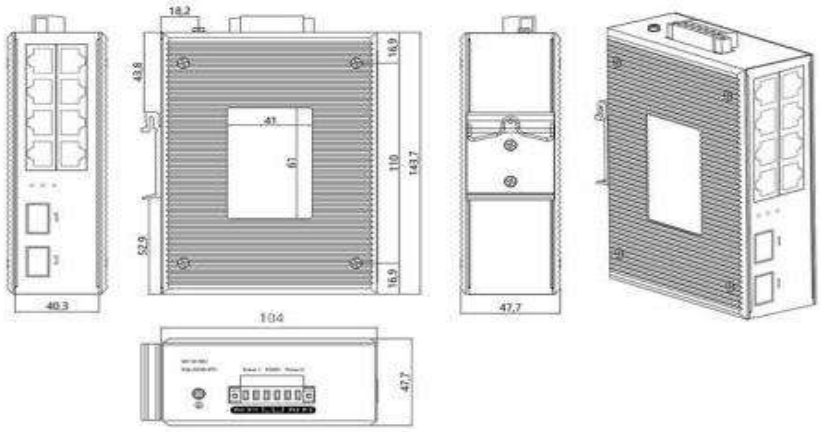
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000BaseT (X) auto-sensing, full/half-duplex MDI/MDI-X adaptive |
| **Optical fiber Port** | 1000BaseFX Port |
| **Network protocol** | IEEE802.3 10BASE-T;<br>IEEE802.3i10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab 1000Base-T; IEEE802.3z<br>1000Base-X;IEEE802.3x; |
| **Work environment** | Operating temperature:-40~80℃(-40~180℉)<br>Storage temperature:-40~80℃(-40~180℉)<br>Relative humidity :5 %~95 % (No condensation) |
| **Industrial standard** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS :IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS): 10V/m(80~1000MHz)<br>IEC(EN)61000-4-5(Surge) : net gape : ±2kV CM//± 1kV DM ;<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz ~ 80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1sl EC(EN )61000-4-8<br>Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 2 Mbit<br>Backplane bandwidth: 20G<br>Switching delay: < 10 μs<br>Power consumption: <8W |
| **Power Supply** | Input voltage: DC 12-52V.<br>Support dual power redundancy<br>Support built-in overcurrent protection (4.0A)<br>Support reverse connection protection |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall-mounted installation<br>Cooling method: Natural cooling, no fan<br>Weight: 0.64 Kg<br>Dimensions: 143.7× 104mm× 47.7mm(length x width x height) |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port, optical port (Link/ACT) |
| **Level of protection** | IP40 |
| **Certification** | Pass the Certification: CE, FCC, ROHS |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 143.7 x 104 x 47.7mm




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-1082GF | 2 optical 8 electrical all Gigabit | 12-52 Dual Power Supply Redundancy |

# DGS-1028GF Series

**Gigabit 8-Gigabit Optical 2-Megabit Electrical Industrial-grade Ethernet Switch**


## Features and benefits

- Utilize high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensure reliable data transmission and long working life
- Support full-duplex or half-duplex modes, with automatic negotiation capability
- Net gape supports automatic cross-identification
- Equipped with a storage forwarding mechanism, supporting multiple protocols
- Comply with industrial-grade operation standards, with an average downtime of over 300,000 hours
- Working Power Supply: DC 12-52V with reverse connection protection
- Use SFP optical fiber interface
- Lightning surge impact protection (Power Supply): 5000A (8/20μs)

## Introduction

DGS-1028GF is an industrial-grade Ethernet switch that supports 2 100Base-T/1000Base-TX electrical ports and 8 1000Base-X optical ports. The product complies with FCC, CE, and ROHS standards. The DGS-1028GF switch has an operating temperature range of -40° C to 80° C. It has extremely strong durability and can adapt to various harsh environments. It can also be conveniently installed in a compact control box. The rail installation feature, wide temperature operation, and the IP40 level of protection of the enclosure and LED indicator lights make DGS-1028GF an easy-to-use industrial-grade device, providing a reliable and convenient solution for users to connect their Ethernet devices.

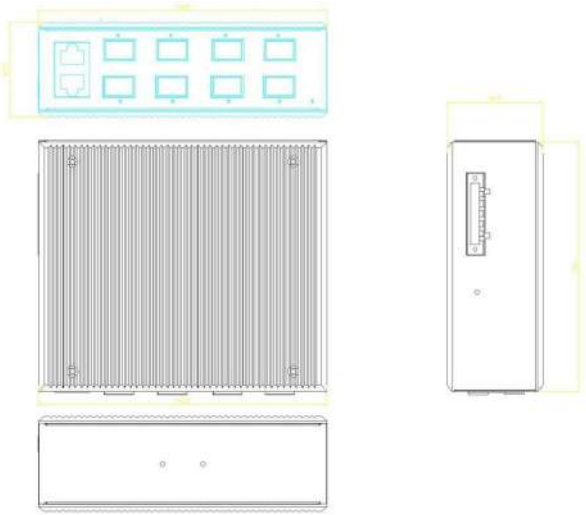
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000BaseT (X) auto-sensing, full/half-duplex MDI/MDI-X adaptive |
| **Optical fiber Port** | 1000BaseFX Port (SFP interface) |
| **Network protocol** | IEEE802.3 10BASE-T;IEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;<br>IEEE802.3x; |
| **Work environment** | Operating temperature:-40~80℃(-40~180℉)<br>Storage temperature:-40~80℃(-40~180℉)<br>Relative humidity :5 %~95 % (No condensation) |
| **Industrial standard** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT) : Power cable : ±4kV ; date cable : ±2kV<br>EC(EN)61000-4-5(Surge) : net gape : ±4kV CM//±2kV DM ;<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 2 Mbit<br>Backplane bandwidth: 20G<br>Switching delay: < 10μs<br>Power consumption: <10W |
| **Power Supply** | Input voltage: DC 12-52V.<br>Support dual power redundancy<br>Support built-in overcurrent protection (4.0A)<br>Support reverse connection protection |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall-mounted installation<br>Cooling method: Natural cooling, no fan<br>Weight: 0.82 Kg<br>Dimensions: 143.7× 125mm× 47.7mm(length x width x height) |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port, optical port (Link/ACT) |
| **Level of protection** | IP40 |
| **Certification** | Pass the Certification: CE, FCC, ROHS |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 143.7 x 125 x 47.7mm



## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-1028GF | 8 optical 2 electrical full Gigabit | 12-52 Dual power supply redundancy |

# DGS-1162GF Series Gigabit 2 optical 16 electrical industrial Ethernet switch


## Features and benefits

- Utilize high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensure reliable data transmission and long working life
- Support full-duplex or half-duplex modes, with automatic negotiation capability
- Net gape supports automatic cross-identification
- Equipped with a storage forwarding mechanism, supporting multiple protocols
- Comply with industrial-grade operation standards, with an average downtime of over 300,000 hours
- Working Power Supply: DC 12-52V with reverse connection protection
- Lightning surge impact protection (Power Supply): 5000A (8/20μs)

## Introduction

16-port Gigabit electrical port + 2-port Gigabit optical port industrial Ethernet switch, supports 16 10Base-T/100 Base-T/1000Base-TX electrical ports and 2 1000Base-X optical ports. The product complies with FCC, CE, and ROHS standards. The DGS-1162GF switch has an operating temperature range of -40° C to 80° C. It has extremely strong durability and can adapt to various harsh environments. It can also be conveniently installed in a compact control box. The rail installation feature, wide temperature operation, and the IP40 level of protection of the enclosure and LED indicator lights make the DGS-1162GF an easy-to-use industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

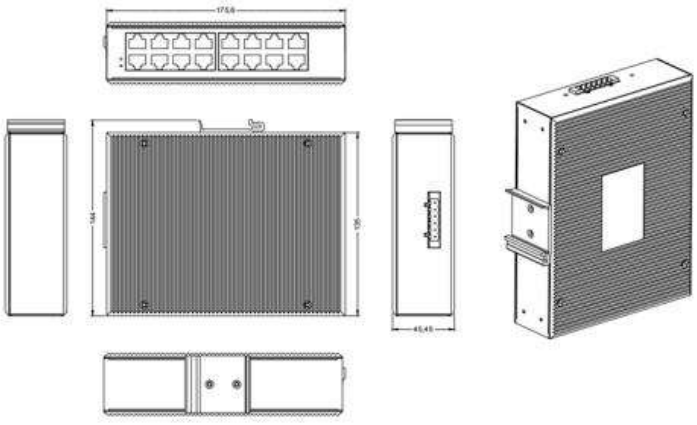
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000BaseT (X) auto-sensing, full/half-duplex MDI/MDI-X adaptive |
| **Optical fiber Port** | 1000BaseFX Port (SFP interface) |
| **Network protocol** | IEEE802.310BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;IEEE802.3x; |
| **Work environment** | Operating temperature:-40~80℃<br>Storage temperature:-40~80℃<br>Relative humidity :5 %~95 % (No condensation) |
| **Industrial standard** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 15kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT) : Power line : ±4kV ; date cable : ±2kV<br>EC(EN)61000-4-5(Surge) : Power line : ±2kV CM/ ± 1kV DM ; USB cable : ± 1kV<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 4 Mbit<br>Backplane bandwidth: 56G<br>Switching delay: < 10 μs<br>Power consumption: <10W |
| **Power Supply** | Input voltage: DC 12-52V (Dual Power Supply redundant backup)<br>Connection terminals: Phoenix terminals<br>Support dual power redundancy<br>Support built-in overcurrent protection (4.0A)<br>Support reverse connection protection |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall-mounted installation<br>Cooling method: Natural cooling, no fan<br>Weight: 0.65 Kg<br>Dimensions: 175.6× 135mm× 45.5mm(width x depth x height) |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link) |
| **Level of protection** | IP40 |
| **Certification** | Pass the Certification: CE, FCC, ROHS |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 175.6 x 135 x 45.5mm



## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-1162GF | 2 optical 16 electrical full Gigabit | 12-52 Dual power supply redundancy |

# DGS-1240 Series Gigabit 2 optical 24 electrical industrial Ethernet switch


## Features and benefits

- Utilize high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensure reliable data transmission and long working life
- Support full-duplex or half-duplex modes, with automatic negotiation capability
- Net gape supports automatic cross-identification
- Equipped with a storage forwarding mechanism, supporting multiple protocols
- Comply with industrial-grade operation standards, with an average downtime of over 300,000 hours
- Working Power Supply: AC 12-52V with reverse connection protection
- Lightning surge impact protection (Power Supply): 5000A (8/20μs)

## Introduction

24-way Gigabit electrical port industrial Ethernet switch, supports 24pcs 10Base-T/100 Base-T/1000Base-TX electrical ports. The product complies with FCC, CE, and ROHS standards. The DGS-1240 switch has an operating temperature range of -40° C to 80° C, is extremely rugged and can adapt to a variety of harsh environments, and can also be easily placed in a compact control box. The rack-mounted installation feature, wide temperature operation, and IP40 protection grade housing and LED indicator make the DGS-1240 a plug-and-play industrial-grade device, providing users with 24-a reliable and convenient solution for networking Ethernet devices.

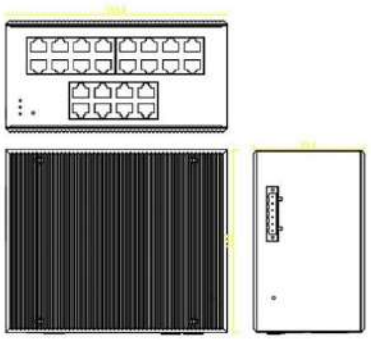
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000BaseT (X) auto-sensing, full/half-duplex MDI/MDI-X adaptive |
| **Network protocol** | IEEE802.310BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;IEEE802.3x; |
| **Work environment** | Operating temperature:-40~80℃<br>Storage temperature:-40~85℃<br>Relative humidity :5 %~95 % (No condensation) |
| **Industrial standard** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 15kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT) : Power line : ±4kV ; date cable : ±2kV<br>EC(EN)61000-4-5(Surge) : Power line : ±2kV CM/ ± 1kV DM ; date cable : ± 1kV<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 4 Mbit<br>Backplane bandwidth: 56G<br>Switching delay: < 10 μs<br>Power consumption: <15W |

| | |
|---|---|
| **Power Supply** | Input voltage: DC 12-52V<br>Support built-in overcurrent protection (4.0A) |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Installation: rail<br>Cooling method: Natural cooling, no fan<br>Weight:< 2Kg<br>Dimensions: 166× 137× 83.5mm(width x depth x height) |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link) |
| **Level of protection** | IP40 |
| **Certification** | Pass the Certification: CE, FCC, ROHS |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 166 x 137 x 83.5mm



## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-1240 | 24 Gigabit | DC12-52V |

# DGS-1242GF Series Gigabit 2 optical 24 electrical industrial Ethernet switch

## Features and benefits

- Utilize high-quality photoelectric integrated modules to provide excellent optical and electrical characteristics
- Ensure reliable data transmission and long working life
- Support full-duplex or half-duplex modes, with automatic negotiation capability
- Net gape supports automatic cross-identification
- Equipped with a storage forwarding mechanism, supporting multiple protocols
- Comply with industrial-grade operation standards, with an average downtime of over 300,000 hours
- Working Power Supply: AC 110-240V with reverse connection protection
- Lightning surge impact protection (Power Supply): 5000A (8/20μs)

## Introduction

24-channel Gigabit electrical port and 2-channel Gigabit optical port industrial Ethernet switch, supports 24pcs 10Base-T/100Base-T/1000Base-TX electrical ports and 2pcs 1000Base-X optical ports. The product complies with FCC, CE, and ROHS standards. The DGS-1242GF switch has an operating temperature of -40° C to 80° C, is extremely rugged to adapt to various harsh environments. It can also be easily placed in a compact control box. The rack-mounted installation feature, wide temperature operation, and IP40 protection grade housing and LED indicator make the DGS-1242GF a plug-and-play industrial-grade device, providing users with a reliable and 25-convenient solution for networking Ethernet devices.

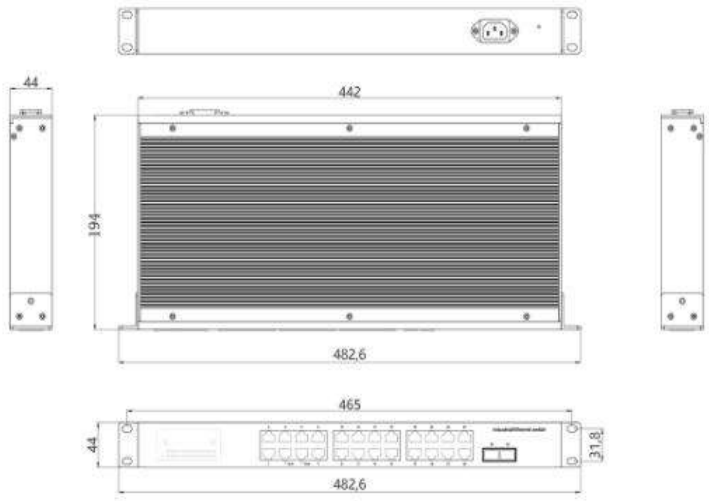
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000BaseT (X) auto-sensing, full/half-duplex MDI/MDI-X adaptive |
| **Fiber optic port** | 1000BaseFX port (SFP interface) |
| **Network protocol** | IEEE802.310BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;IEEE802.3x; |
| **Work environment** | Operating temperature:-40~80℃<br>Storage temperature:-40~85℃<br>Relative humidity :5 %~95 % (No condensation) |
| **Industrial standard** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 15kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT) : Power line : ±2kV ; USB cable : ±1kV<br>EC(EN)61000-4-5(Surge) : Power line : ±2kV CM/ ± 1kV DM ; USB cable : ± 1kV<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 4 Mbit<br>Backplane bandwidth: 56G<br>Switching delay: < 10 μs<br>Power consumption: <15W |
| **Power Supply** | Input voltage: AC 110-240V<br>Support built-in overcurrent protection (4.0A)<br>Support reverse connection protection |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Installation: rack-mounted installation<br>Cooling method: Natural cooling, no fan<br>Weight: 2.66Kg<br>Dimensions: 442× 194× 44mm(width x depth x height) |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link/ACT) |
| **Level of protection** | IP40 |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 442 x 194 x 44mm




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-1242GF | 2 optical 24 electrical full Gigabit | 12-52 Dual power supply redundancy |

# DS-2082GF Series

**Gigabit 2 optical 100M 8 electrical industrial Ethernet switch**

## Features and benefits

- Support IGMP Snooping
- Support Port-based VLAN, IEEE 802.1Q VLAN, simple network planning
- Support QoS (IEEE 802.1p/1Q) and TOS/DiffServ to increase network stability
- Support STP/RSTP/ERPS, SNMPv1/v2/v3 to ensure network security
- Use RMON to improve the prediction ability of network monitoring machine
- Support port mirroring function for online debugging
- Support port speed limit, broadcast storm suppression, multicast storm suppression, unknown unicast storm suppression
- Security management: support ACL access control list, support 802.1X
- Management function: support WEB, CLI, SNMP management mode
- Monitoring and maintenance: support port mirroring, interface status monitoring management, log management

## Introduction

DS-2082GF is a managed industrial Ethernet switch that complies with FCC, CE, and RoHS standards. It supports 2pcs Gigabit optical ports and 8pcs 100M electrical ports; it supports the Ethernet Layer 2 protocol required by industrial sites to ensure the stability of the communication network; this series of switches adopts low power consumption and fanless design to ensure no noise interference, while supporting -40° C to 80° C, operating temperature and good EMC electromagnetic compatibility performance to ensure stable operation in harsh industrial environments, providing safe and reliable solutions for the establishment of fast and stable network terminal access networks in industrial application fields such as factory automation, intelligent transportation, and video surveillance.

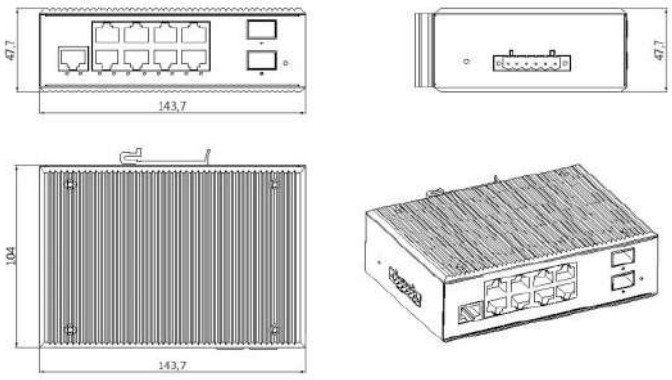
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000BaseT (X) auto-sensing, full/half-duplex MDI/MDI-X adaptive |
| **Fiber optic port** | 1000BaseFX port (SFP or 1*9 module), compatible with Gigabit/100M |
| **Network protocol** | IEEE802.3-10BaseT, IEEE802.3u-100BaseTX/100Base-FX,<br>IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX,<br>IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol,<br>IEEE802.1D-Spanning Tree Protocoll, IEEE802.1w-Rapid<br>Spanning Tree Protocoll, IEEE802.1Q -VLAN Tagging,<br>IEEE802.1p -Class of Service, IEEE802.1X-Port Based<br>Network Access Control, etc. |
| **Work environment** | Operating temperature:-40~80℃(-40~180℉)<br>Storage temperature:-40~85℃(-40~185℉)<br>Relative humidity :5 %~95 % (No condensation) |
| **Industry standards** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT): Ethernet port: ±4kV CM//±2kV DM;<br>IEC(EN)61000-4-5(Surge): Ethernet port: ±4kV CM//±2kV DM ;<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 4K<br>Switching capacity: 12.8Gbps<br>Packet forwarding rate: 9.5Mpps<br>Switching delay: < 10μs<br>Power consumption: <10W |
| **Network security** | Support IEEE 802.1x Support HTTP<br>Support RADIUS Support MAC address binding |
| **Management and maintenance** | Support Console, Telnet, WEB management methods<br>Support SNMP v1/v2/v3 |
| **Power Supply** | Input voltage: DC12-52V (dual power supply redundant backup)<br>Access terminal: Phoenix terminal<br>Support dual power supply redundancy<br>Support reverse connection protection |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Dimensions: 143.7× 104× 47.7mm<br>Weight: 0.6Kg<br>Installation: DIN rail installation, wall-mounted installation<br>Cooling method: Natural cooling, no fan |
| **Redundancy technology** | Support STP/RSTP/MSTP<br>Support ERPS |
| **Multicast technology** | IGMP snooping<br>MLD snooping |
| **Switching function** | Support port speed limit Support port aggregation Support port flow control<br>Support port VLAN, IEEE 802.1Q VLAN<br>Support broadcast storm suppression<br>Optical port supports Gigabit/100M |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link/ACT) |
| **Level of protection** | IP40 |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 143.7 x 104 x 47.7mm




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DS-2082GF | Gigabit 2 optical 100M<br>8 electrical | DC12-52V (dual power supply redundancy backup) |

# DGS-2082GF Series 2 optical 8 electrical Gigabit managed industrial switches


## Features and benefits

- Support IGMP Snooping
- Support Port-based VLAN, IEEE 802.1Q VLAN, simple network planning
- Support QoS (IEEE 802.1p/1Q) and TOS/DiffServ to increase network stability
- Support STP/RSTP/ERPS, SNMPv1/v2/v3 to ensure network security
- Use RMON to improve the prediction ability of network monitoring machine
- Support port mirroring function for online debugging
- Support port speed limit, broadcast storm suppression, multicast storm suppression, unknown unicast storm suppression
- Security management: support ACL access control list, support 802.1X
- Management function: support WEB, CLI, SNMP management mode
- Monitoring and maintenance: support port mirroring, interface status monitoring management, log management
- Alarm function: support power supply abnormal state relay output

## Introduction

DGS-2082GF is a managed industrial Ethernet switch that complies with FCC, CE, and RoHS standards. It supports 2pcs Gigabit optical ports and 8pcs Gigabit electrical ports; it supports the Ethernet Layer 2 protocol required by industrial sites to ensure the stability of the communication network; this series of switches adopts low power consumption and fanless design to ensure no noise interference, while supporting -40° C to 80° C, operating temperature and good EMC electromagnetic compatibility performance to ensure stable operation in harsh industrial environments, providing safe and reliable solutions for the establishment of fast and stable network terminal access networks in industrial application fields such as factory automation, intelligent transportation, and video surveillance.

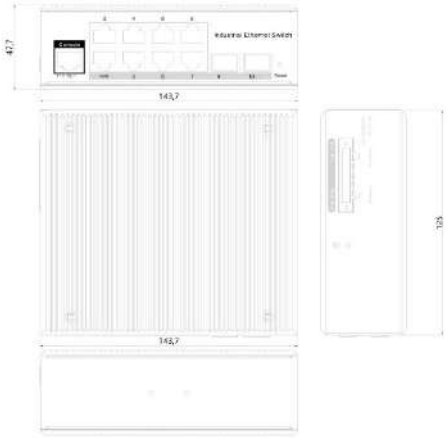
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000M auto-sensing, full/half-duplex MDI/MDI-X adaptive |
| **Fiber optic port** | 1000BaseFX port (SFP slot) |
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 12Mbit<br>Backplane bandwidth: 38G<br>Switching delay: < 10 μs<br>Power consumption: <10W |
| **Work environment** | Operating temperature:-40~80℃(-40~180℉)<br>Storage temperature:-40~80℃(-40~180℉)<br>Relative humidity :5 %~95 % (No condensation) |
| **Ethernet standards** | IEEE802.3-10BaseT, IEEE802.3u-100BaseTX/100Base-FX,<br>IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX,<br>IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol,<br>IEEE802.1D-Spanning Tree Protocoll, IEEE802.1w-Rapid<br>Spanning Tree Protocoll, IEEE802.1Q -VLAN Tagging,<br>IEEE802.1p -Class of Service, IEEE802.1X-Port Based<br>Network Access Control, etc. |
| **Industry standards** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) |

| | |
|---|---|
| | IEC(EN)61000-4-4(EFT): Ethernet port: ± 4kV CM//± 2kV DM;<br>IEC(EN)61000-4-5(Surge): Ethernet port: ± 4kV CM//± 2kV DM ;<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27<br>Firewall: IEC 60068-2-32<br>Vibration: IEC 60068-2-6 |
| **Network security** | Support IEEE 802.1x Support HTTP<br>Support RADIUS Support MAC address binding |
| **Management and maintenance** | Support Console, Telnet, WEB management methods<br>Support SNMP v1/v2/v3 |
| **Power Supply** | Input voltage: DC12-52V (dual power supply redundant backup)<br>Access terminal: Phoenix terminal<br>Support dual power supply redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Dimensions: 143.7× 125× 47.7mm<br>Weight: 0.64Kg<br>Installation: DIN rail installation, wall-mounted installation<br>Cooling method: Natural cooling, no fan |
| **Redundancy technology** | Support STP/RSTP/MSTP<br>Support ERPS |
| **Multicast technology** | IGMP snooping<br>Support static multicast |
| **Switching function** | Support port speed limit Support port aggregation Support port flow control<br>Support port VLAN, IEEE 802.1Q VLAN<br>Support broadcast storm suppression |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link/ACT) |
| **Level of protection** | IP40 |
| **Certification** | CE, FCC, ROHS |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 143.7 x 125 x 47.7mm



## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-2082GF | 2 optical 8 electrical all Gigabit | DC12-52V (dual power supply redundancy backup) |

# DGS-2244GF Series Gigabit 4-optical 24-electrical industrial Ethernet switch

## Features and benefits

- Support IGMP Snooping
- Support Port-based VLAN, IEEE 802.1Q VLAN, simple network planning
- Support QoS (IEEE 802.1p/1Q) and TOS/DiffServ to increase network stability
- Support STP/RSTP/ERPS
- Support SNMPv1/v2c/v3, RMON to improve network monitoring machine prediction ability
- Support port speed limit, broadcast storm suppression, multicast storm suppression, unknown unicast storm suppression
- Security management: support ACL access control list, support 802.1X
- Management function: support WEB, CLI, SNMP management mode
- Monitoring and maintenance: interface status monitoring, log management
- Alarm function: support power supply abnormal status relay output (optional)
- IP40 Protection level

## Introduction

DGS-2244GF is a managed industrial Ethernet switch that complies with FCC, CE, and RoHS standards. It supports 4pcs Gigabit optical ports and 24pcs Gigabit electrical ports; it supports the Ethernet Layer 2 protocols required by industrial sites to ensure the stability of the communication network; this series of switches adopts low power consumption and fanless design to ensure no noise interference, while supporting -40° C to 80 ° C operating temperature and good EMC electromagnetic compatibility performance to ensure stable operation in harsh industrial environments,providing safe and reliable solutions for the establishment of fast and stable network terminal access networks in industrial application fields such as factory automation, intelligent transportation,and video surveillance.

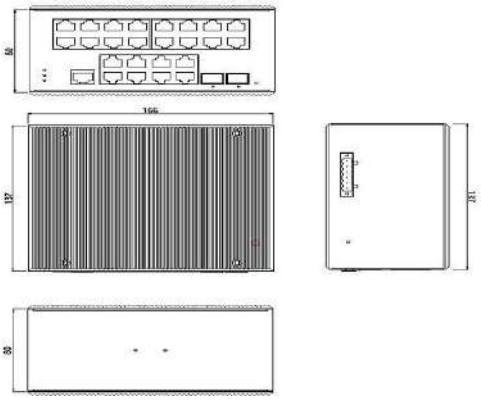
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000M automatic, full/half-duplex MDI/MDI-X adaptive |
| **Fiber optic port** | 1000BaseFX port (SFP slot), 1000M self-adaptation |
| **Network protocol** | IEEE802.3-10BaseT, IEEE802.3u-100BaseTX/100Base-FX,<br>IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX,<br>IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol,<br>IEEE802.1D-Spanning Tree Protocoll, IEEE802.1w-Rapid<br>Spanning Tree Protocoll, IEEE802.1Q -VLAN Tagging,<br>IEEE802.1p -Class of Service, IEEE802.1X-Port Based<br>Network Access Control, etc. |
| **Work environment** | Operating temperature:-40~80℃(-40~180℉)<br>Storage temperature:-40~85℃(-40~185℉)<br>Relative humidity :5%~95 % (No condensation) |
| **Industry standards** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ±12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT): Ethernet port: ±4kV CM//±2kV DM;<br>IEC(EN)61000-4-5(Surge): Ethernet port: ±4kV CM//±2kV DM ;<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 12Mbit<br>Backplane bandwidth: 56G<br>Switching delay: < 10 μs<br>Power consumption: <20W |
| **Network security** | Support IEEE 802.1x  Support HTTP<br>Support MAC address binding Anti-attack |
| **Management and maintenance** | Support Console, Telnet, WEB management methods<br>Support SNMP v1/v2/v3 |
| **Power Supply** | Input voltage: DC12-52V<br>Access terminal: Phoenix terminal<br>Support dual power redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical structure** | Housing: IP40 protection grade, metal casing<br>Dimensions:166*137*80mm<br>Weight: 1.25Kg<br>Installation: DIN rail installation, wall-mounted installation<br>Cooling method: Natural cooling, no fan |
| **Redundancy technology** | Support STP/RSTP/MSTP<br>Support ERPS |
| **Multicast technology** | IGMP snooping |
| **Switching function** | Support port speed limit Support port aggregation Support port flow control<br>Support port VLAN, IEEE 802.1Q VLAN<br>Support broadcast storm suppression |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link/ACT) |
| **Level of protection** | IP40 |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 166*137*80mm



## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-2244GF | 4 optical 24 electrical full Gigabit | DC12-52V |

# DGS-2168GF Series 8-port 16-port Gigabit managed industrial switch

## Features and benefits

- Support IGMP Snooping
- Support Port-based VLAN, IEEE 802.1Q VLAN, simple network planning
- Support QoS (IEEE 802.1p/1Q) and TOS/DiffServ to increase network stability
- Support STP/RSTP/ERPS, SNMPv1/v2/v3 to ensure network security
- Use RMON to improve network monitoring machine prediction capabilities
- Support port speed limit, broadcast storm suppression, multicast storm suppression, unknown unicast storm suppression
- Security management: support ACL access control list, support 802.1X
- Management function: support WEB, CLI, SNMP management mode
- Monitoring and maintenance: interface status monitoring, log management

## Introduction

DGS-2168GF is a managed industrial Ethernet switch that complies with FCC, CE, and RoHS standards. It supports 8pcs Gigabit optical ports and 16pcs Gigabit electrical ports; it supports the Ethernet Layer 2 protocols required by industrial sites to ensure the stability of the communication network; this series of switches adopts low power consumption and fanless design to ensure no noise interference, while supporting -40° C to 80 ° C operating temperature and good EMC electromagnetic compatibility performance to ensure stable operation in harsh industrial environments,providing safe and reliable solutions for the establishment of fast and stable network terminal access networks in industrial application fields such as factory automation, intelligent transportation,and video surveillance.

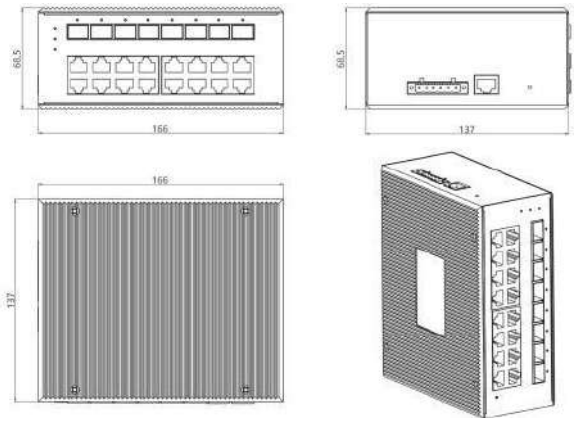
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000M automatic, full/half-duplex MDI/MDI-X adaptive |
| **Fiber optic port** | 1000BaseFX port (SFP slot) |
| **Network protocol** | IEEE802.3-10BaseT, IEEE802.3u-100BaseTX/100Base-FX,<br>IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX,<br>IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol,<br>IEEE802.1D-Spanning Tree Protocoll, IEEE802.1w-Rapid<br>Spanning Tree Protocoll, IEEE802.1Q -VLAN Tagging,<br>IEEE802.1p -Class of Service, IEEE802.1X-Port Based<br>Network Access Control, etc. |
| **Work environment** | Operating temperature:-40~80℃(-40~180℉)<br>Storage temperature:-40~80℃(-40~185℉)<br>Relative humidity :5%~95 % (No condensation) |
| **Industry standards** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ±12kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT): Ethernet port: ±2kV CM//±1kV DM;<br>IEC(EN)61000-4-5(Surge): Ethernet port: ±2kV CM//±1kV DM ;<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 12Mbit<br>Backplane bandwidth: 56G<br>Switching delay: < 10 μs<br>Power consumption: <20W |
| **Network security** | Support IEEE 802.1x  Support HTTP Support RADIUS<br>Support MAC address binding Anti-attack |
| **Management and maintenance** | Support Console, Telnet, WEB management methods<br>Support SNMP v1/v2/v3 |
| **Power Supply** | Input voltage: DC12-52V<br>Access terminal: Phoenix terminal<br>Support dual power redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical characteristics** | Casing: IP40 protection grade, metal casing<br>Dimensions:166*137*68.5mm<br>Weight: 1.25Kg<br>Installation: DIN rail installation, wall-mounted installation<br>Cooling method: Natural cooling, fanless |
| **Redundancy technology** | Support STP/RSTP/MSTP |
| **Multicast technology** | Support IGMP snooping |
| **Switching function** | Support port speed limit Support port aggregation Support port flow control<br>Support port VLAN, IEEE 802.1Q VLAN<br>Support broadcast storm suppression |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link/ACT) |
| **Level of protection** | IP40 |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x width x height (mm): 166*137*68.5mm




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-2168GF | 8 optical 16 electrical all Gigabit | DC12-52V |

# RS-2242GF Series Gigabit 2 optical 24 electrical industrial Ethernet switch

## Features and benefits

- Support 24 100M ports + 2 SFPs
- Support Port-based VLAN, IEEE 802.1Q VLAN, simple network planning
- Support QoS (IEEE 802.1p/1Q) and TOS/DiffServ to increase network stability
- Support STP/RSTP/MSTP/ERPS, SNMPv1/v2c/v3 to ensure network security
- Use RMON to improve network monitoring machine prediction capabilities
- Support port speed limit, broadcast storm suppression, multicast storm suppression, unknown unicast storm suppression
- Security management: support ACL access control list, support 802.1X
- Management function: support WEB, CLI, SNMP management mode
- Monitoring and maintenance: interface status monitoring, log management

## Introduction

RS-2242GF is a managed industrial Ethernet switch that complies with FCC, CE, and RoHS standards. It can provide 24 100M ports and 2 Gigabit SFP ports. Supports Ethernet Layer 2 protocol required by industrial sites to ensure the stability of the communication network; this series of switches adopts low power consumption and fanless design to ensure no noise interference, while supporting -40° C to 80 ° C operating temperature and good EMC electromagnetic compatibility performance to ensure stable operation in harsh industrial environments,providing safe and reliable solutions for the establishment of fast and stable network terminal access networks in industrial application fields such as factory automation, intelligent transportation,and video surveillance.

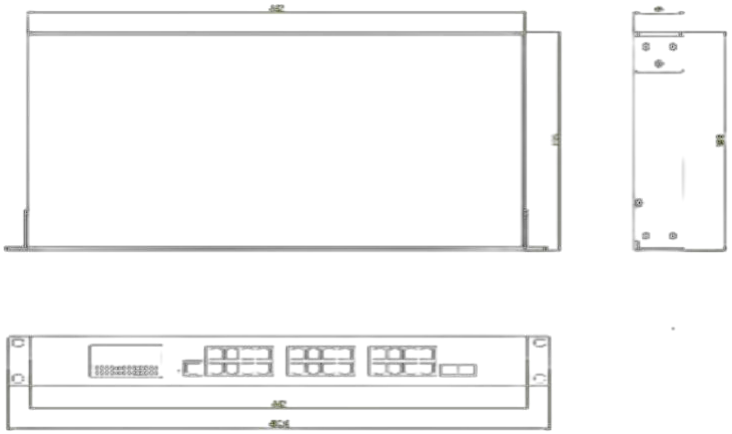
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000M automatic, full/half-duplex MDI/MDI-X adaptive |
| **Fiber optic port** | 1000BaseFX port (SFP slot), can force 100M |
| **Network protocol** | IEEE802.3-10BaseT, IEEE802.3u-100BaseTX/100Base-FX,<br>IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX,<br>IEEE802.3ab-1000BaseTX, IEEE802.1D-Spanning Tree Protocoll;<br>IEEE802.1w-Rapid Spanning Tree Protocoll;<br>IEEE802.1Q -VLAN Tagging,<br>IEEE802.1p -Class of Service, IEEE802.1X-Port Based<br>Network Access Control, etc. |
| **Work environment** | Operating temperature:-40~80℃(-40~180℉)<br>Storage temperature:-40~80℃(-40~180℉)<br>Relative humidity :5%~95 % (No condensation) |
| **Industry standards** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ±15kV air discharge<br>IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT): Power line:±2kVCM/±4kVDM;Data line:±2kV<br>IEC(EN)61000-4-5(Surge):Power line:±2kVCM/±4kVDM;Data Line:±2kV<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Application level:Layer 2 Backplane total bandwidth:12.8Gbps<br>Packet forwarding rate 9.5Mpps VLAN ID range: 1 ~ 4096 Multicast master number: 512<br>MAC address table size: 4K<br>Switching delay: < 5μs<br>Power consumption: <400W |
| **Network security** | Support IEEE 802.1x Support HTTPS<br>Support MAC address binding Anti-attack |
| **Management and maintenance** | Support Console, Telnet, WEB management methods<br>Support SNMP v1/v2/v3 |
| **Power Supply** | Input voltage: AC100-240V<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical characteristics** | Casing: IP40 protection grade, metal casing<br>Dimensions: 442× 194× 44mm<br>Weight: 4Kg<br>Installation: DIN rail installation, wall installation 67<br>Heat dissipation method: natural cooling, fanless |
| **Redundancy technology** | Support STP/RSTP/MSTP<br>Support ERPS |
| **Multicast technology** | IGMP snooping, MLD snooping |
| **Switching function** | Support port speed limit Support port aggregation Support port flow control<br>Support port VLAN, IEEE 802.1Q VLAN<br>Support broadcast storm suppression |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link/ACT) |
| **Level of protection** | IP40 |
| **Certifications** | CE, FCC, RoHS |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x width x height (mm): 442*194*44mm



## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| RS-2242GF | 2 optical 24 electrical full Gigabit | AC100-240V |

# RGS-2244GF Series

**Gigabit 4 optical 24 electrical 4 photoelectric composite industrial Ethernet switch**

## Features and benefits

- Support IGMP Snooping
- Support Port-based VLAN, IEEE 802.1Q VLAN, simple network planning
- Support QoS (IEEE 802.1p/1Q) and TOS/DiffServ to increase network stability
- Support STP/RSTP/MSTP/ERPS, SNMPv1/v2/v3 to ensure network security
- Use RMON to improve the prediction ability of network monitoring machine
- Support port speed limit, broadcast storm suppression, multicast storm suppression, unknown unicast storm suppression
- Security management: support ACL access control list, support 802.1X
- Management function: support WEB, CLI, SNMP management mode
- Monitoring and maintenance: interface status monitoring, log management

## Introduction

RGS-2244GF is a managed industrial Ethernet switch that complies with FCC, CE, and RoHS standards. It supports 4pcs Gigabit optical ports, 24pcs Gigabit electrical ports, and 4pcs optoelectronic composite ports; supports Ethernet Layer 2 protocol required by industrial sites to ensure the stability of the communication network; this series of switches adopts low power consumption and fanless design to ensure no noise interference, while supporting -40° C to 80 ° C operating temperature and good EMC electromagnetic compatibility performance to ensure stable operation in harsh industrial environments, providing safe and reliable solutions forfast and stable network terminal access networks in industrial application fields such as factory automation, intelligent transportation, and video surveillance.

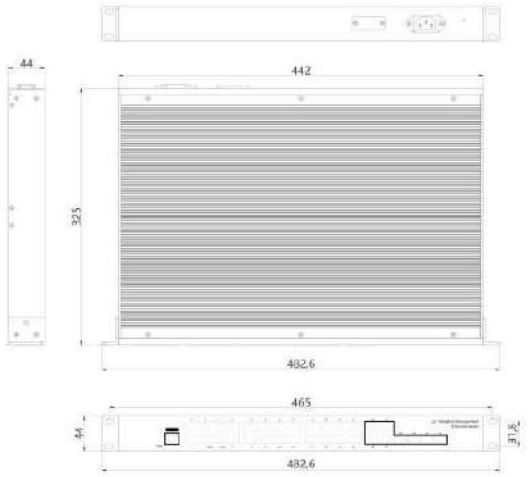
## Specification

| | |
|---|---|
| **RJ45 Port** | 10/100/1000M automatic detection, full/half duplex MDI/MDI-X self-adaptation |
| **Fiber optic port** | 1000BaseFX port (SFP slot) |
| **Network protocol** | IEEE802.3-10BaseT, IEEE802.3u-100BaseTX/100Base-FX,<br>IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX,<br>IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol,<br>IEEE802.1D-Spanning Tree Protocoll, IEEE802.1w-Rapid<br>Spanning Tree Protocoll, IEEE802.1Q -VLAN Tagging,<br>IEEE802.1p -Class of Service, IEEE802.1X-Port Based<br>Network Access Control, etc. |
| **Work environment** | Operating temperature:-40~80℃(-40~180℉)<br>Storage temperature:-40~80℃(-40~180℉)<br>Relative humidity :5%~95 % (No condensation) |
| **Industry standards** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS: IEC(EN)61000-4-2(ESD) : ±8kV contact discharge, ±15kV air discharge<br>IEC(EN)61000-4-3(RS): 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT): Power line:±1kVCM/±2kVDM; Data line:±2kV<br>IEC(EN)61000-4-5(Surge): Power line:±1kVCM/±2kVDM; Data Line:±2kV<br>IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s<br>IEC (EN) 61000-4-8<br>Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6 |

| | |
|---|---|
| **Exchange properties** | Application level:Layer 2 Backplane total bandwidth:256Gbps<br>Packet forwarding rate 131Mpps VLAN ID range: 1 ~ 4096 Multicast master number: 512<br>MAC address table size: 16K Packet buffer size: 16Mbits<br>Switching delay: < 5 μs<br>Power consumption: <45W |
| **Network security** | Support IEEE 802.1x Support HTTP Support RADIUS<br>Support MAC address binding Anti-attack |
| **Management and maintenance** | Support Console, Telnet, WEB management methods<br>Support SNMP v1/v2c/v3 |
| **Power Supply** | Input voltage: AC220V<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical characteristics** | Casing: IP40 protection grade, metal casing<br>Dimensions: 442× 325× 44mm<br>Weight: 3.12Kg<br>Installation method: rack installation<br>Heat dissipation method: natural cooling, no fan 70 |
| **Redundancy technology** | Support STP/RSTP/MSTP<br>Support ERPS |
| **Multicast technology** | IGMP snooping |
| **Switching function** | Support port speed limit Support port aggregation Support port flow control<br>Support port VLAN, IEEE 802.1Q VLAN<br>Support broadcast storm suppression |
| **LED indicators** | Power indicator: PWR<br>Interface indicator: electrical port, optical port (Link/ACT) |
| **Level of protection** | IP40 |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x width x height (mm): 442*325*44mm




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| RGS-2244GF | 4 optical 24 electrical 4 optical electrical composite full Gigabit | AC220V |

# RGS-3240-4XF Series 10G Layer 3 Managed Industrial Switch

## Features and benefits

- Interface Specifications: 4 10G optical ports + 24 1G electrical port
- Wide operating temperature range: -40° C~80° C ultra-wide operating temperature range
- Wide voltage operation: AC/DC 110-240V, DC36-72V
- Network redundancy: Support STP/RSTP/MSTP, support ERPS (self-healing time＜20ms
- Multicast management: Support IGMP Snooping/MLD Snooping
- VLAN: Support 802.1Q VLAN, QinQ, Voice VLAN, MAC VLAN, IP VLAN
- Link aggregation: Support link static/dynamic aggregation, provide perfect bandwidth utilization
- Clock synchronization: Support PTP protocol
- Security management: Support ACL access control list, support 802.1X
- Management function: Support WEB, CLI, SNMP and other management methods
- Monitoring and maintenance: support port mirroring, interface status monitoring, log management

## Introduction

The RGS-3240-4XF switch is a 10G three-layer switch launched by our company, equipped with 4pcs 10G SFP + optical ports and 24pcs 10/100/1000M Base-T adaptive electrical ports, with advanced hardware processing capabilities and the richest business features. Supporting IPv4/IPv6 hardware dual stack and line-speed forwarding, customers can calmly cope with the upcoming IPv6 era and provide high-capacity switching capabilities. The RGS-3240-4XF switch has an operating temperature of -40° C~80° C, and has super strong robustness to adapt to various harsh environments. The rail-mounted installation feature and wide temperature operation make the RGS-3240-4XF switch a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for Ethernet device networking

## Features

### Rich port types, flexible port expansion

RGS-3240-4XF switch supports diversified ports, which can meet the different networking requirements of large network aggregation or small and medium-sized network core.

### Powerful processing power

RGS-3240-4XF switch is based on the powerful and stable processing power of VCore-III MIPS-based CPU;

### Perfect security control strategy

Supports port-based user IP+MAC address authentication, port-based 802.1X authentication,
Supports ACL functions based on three and four layers, effectively defending ARP attacks and viruses;
Supports perfect storm control function, which can suppress broadcast, multicast, and unicast storms.
Supports unique ARP intrusion detection function, which can effectively prevent hackers or attackers from implementing the increasingly popular "ARP spoofing attack" through ARP packets;
Supports IP Source Guard feature to prevent illegal address spoofing including MAC spoofing, IP spoofing, MAC/IP spoofing, and DoS attacks caused by large-volume address spoofing.
Provides DHCP Snooping function. By establishing and maintaining the DHCP Snooping binding table, it can snoop the MAC address, IP address, lease period and other information of the access user, solving the problem of tracking and locating the IP and port of the DHCP user.

### Complete reliability protection mechanism and convenient management and maintenance

The RGS-3240-4XF switch uses the CPU protection strategy to classify and limit the flow of messages sent to the CPU to avoid attacks on the CPU and resource consumption by illegal attack messages;

Supports multiple spanning tree protocols such as STP, RSTP, and MSTP, fast convergence, improved fault tolerance, ensures stable operation of the network and load balancing of links, reasonably uses network channels, and improves the utilization rate of redundant links;

Supports industrial Ethernet ring network protocol ERPS, provides millisecond-level fast service switching performance, and ensures uninterrupted service. Moreover, the protocol is simple and reliable, the switching performance is high, the maintenance is convenient, and the topology is flexible, which can greatly facilitate users to manage and plan the network;

It uses industrial-grade components, has lightning protection, overvoltage protection, surge protection design, and dual power input to ensure the normal operation of the network in bad natural weather and unstable voltage environment.

Through a simple visual WEB interface (supporting http and https protocols), various functions of the switch can be operated simply and conveniently;

Support SNMP V1/V2/V3 network management to configure and manage the device;
Support command line configuration (CLI), management through Telnet and Console port;
Support SSH2.0 and other encryption methods to make management safer;
Support LLDP protocol to make network management simpler;
Support NTP clock protocol to automatically synchronize network time.

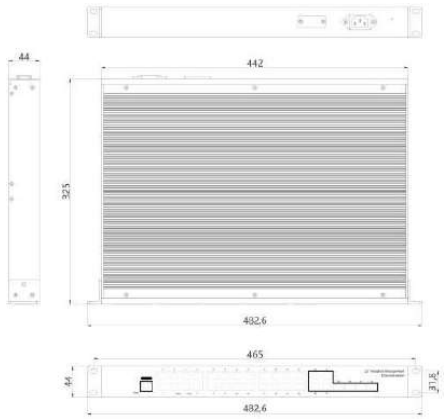
## Specification

| | |
|---|---|
| **Management port** | 1 console port |
| **Reset button** | 1 factory reset button |
| **Switching capacity** | 1.2Tbps |
| **Packet forwarding rate** | 406Mpps |
| **MAC address** | Support 32K MAC address table; support automatic update, two-way learning; |
| **Input voltage** | AC/DC 110-240V, DC36-72V (dual power supply)<br>Support built-in overcurrent 4.0A protection |
| **Power consumption of the whole machine** | <30W |
| **Port aggregation** | Support static aggregation and dynamic aggregation |
| **Port mirroring** | Support many-to-one port mirroring, with no limit on the number of mirror source ports |
| **Loop protection** | Supports loop detection/loop avoidance |
| **Ring network protocol** | Support industrial-grade ring network protocol ERPS |
| **Port flow control** | Support half-duplex based on back pressure control; |
| **Port speed limit** | Support full-duplex based on PAUSE frame; |
| **IP routing** | Support port-based input/output bandwidth management<br>Support static routing;<br>Support dynamic routing RIP, RIPng, OSFP, OSPFv3;<br>Support VRRP (Virtual Routing Redundancy Protocol) |
| **QOS** | SP (Strict Priority), strict priority rotation algorithm;<br>WFQ (Weighted Fair Queuing) weighted fair queuing;<br>WRR (Weighted Round Robin), weighted priority rotation algorithm;<br>Random Early Detect (RED), random early detection algorithm;<br>Weighted Random Early Detection (WRED),weighted random early detection algorithm;<br>Head Of Line, anti-congestion mechanism; Best-Effort Service, best-effort service;<br>First come first served, first come first served algorithm;<br>802.1p port queue priority algorithm; Cos/Tos, QOS marking; |
| **Cable sequence** | Support Auto-MDIX function, automatically identify straight-through cable and crossover cable |
| **System maintenance** | Support configuration file upload/download; Support upgrade package upload;<br>Support WEB to restore factory configuration; Support system log function;<br>Support Ping detection, tracert detection, and network cable detection;<br>Support WEB interface management (supports http and https protocols);<br>Support CLI interface management; Support Telnet remote management;<br>Support SSH 2.0; Supports SNMP network management;<br>Support RMON; Support LLDP; |
| **VLAN** | Support up to 4096 VLANs;<br>Support VLANs in accordance with the 802.1Q standard;<br>Support QinQ<br>Support Voice VLAN, MAC VLAN, and IP VLAN; |

| | |
|---|---|
| **Storm suppression** | Support suppression of broadcast,multicast, and unicast, etc. |
| **Spanning Tree** | Support STP Spanning Tree Protocol;<br>Support RSTP Rapid Spanning Tree Protocol;<br>Support MSTP Multiple Spanning Tree Protocol; |
| **Supported Protocol Standards** | IEEE 802.3ad, link aggregation protocol; IEEE 802.3, 10BASE-T Ethernet;<br>IEEE 802.3u, Fast Ethernet standard;IEEE 802.3ab, Gigabit Ethernet standard;<br>IEEE 802.3z,Gigabit Ethernet fiber standard;IEEE 802.3ae, 10G Ethernet standard;<br>IEEE 802.3x, full-duplex Ethernet data link layer flow control;<br>IEEE 802.3az, EEE energy-efficient Ethernet standard; |
| **Negotiation mode** | Electrical port supports 10/100/1000M auto-negotiation<br>Optical port supports 1G/2.5G/10G multiple rate modes |
| **Multicast control** | Support IGMP Snooping;<br>Support MLD Snooping (Multicast Listener Discovery Snooping); |
| **Security Features** | Hardware supports IP ACL, MAC ACL, VLAN ACL, and supports ACL functions based on three and four layers;<br>Support IP Source Guard; Supports ARP Detection function;<br>Support IEEE 802.1x port authentication; Supports Radius authentication; |
| **Multicast control** | Support NTP<br>Support PTP (1588v2) |
| **DHCP** | Support DHCP Client; Support DHCP Server;<br>Support DHCP Snooping; Support DHCP Relay; |
| **Work environment** | Operating temperature: -40 to 80 ° C<br>Storage temperature: -40 to 85 ° C<br>Operating humidity: 10% to 95% (no condensation)<br>Storage humidity: 5% to 95% (no condensation) |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x width x height (mm): 442*325*44mm




## Ordering information

| Model | Interface | Power Supply |
|---|---|---|
| RGS-3240-4XF | 4 10G optical 24 Gigabit electrical | AC/DC 110-240V, DC36-72V (dual power supply)<br>Support built-in overcurrent 4.0A protection |

# RGS-3168GC-4XF Series 10G Layer 3 Managed Industrial Switch

## Features and benefits

- Interface Specifications: 4 10G optical ports + 24 1G electrical port
- Wide operating temperature range: -40° C~80° C ultra-wide operating temperature range
- Wide voltage operation: AC/DC 110-240V, DC36-72V
- Network redundancy: Support STP/RSTP/MSTP, support ERPS (self-healing time＜20ms
- Multicast management: Support IGMP Snooping/MLD Snooping
- VLAN: Support 802.1Q VLAN, QinQ, Voice VLAN, MAC VLAN, IP VLAN
- Link aggregation: Support link static/dynamic aggregation, provide perfect bandwidth utilization
- Clock synchronization: Support PTP protocol
- Security management: Support ACL access control list, support 802.1X
- Management function: Support WEB, CLI, SNMP and other management methods
- Monitoring and maintenance: support port mirroring, interface status monitoring, log management

## Introduction

RGS-3168GC-4XF switch is a 10G three-layer switch launched by our company, equipped with 4pcs 10G SFP + optical ports and 24pcs 10/100/1000M Base-T adaptive electrical ports and 8pcs multiplexed optical port, with advanced hardware processing capabilities and the richest business features. Supporting IPv4/IPv6 hardware dual stack and hardware processing capabilities can calmly cope with the upcoming IPv6 era and provide high-capacity switching hardware processing capabilities switch has an operating temperature of -40° C~85° C, and has super strong robustness to adapt to various harsh environments. The rail-mounted installation feature and wide temperature operation make the RGS-3168GC-4XF switch a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for Ethernet device networking

## Features

### Rich port types, flexible port expansion

RGS-3168GC-4XF switch supports diversified ports, which can meet the different networking requirements of large network aggregation or small and medium-sized network core.

### Powerful processing power

RGS-3168GC-4XF switch is based on the powerful and stable processing power of VCore-III MIPS-based CPU;

### Perfect security control strategy

Supports port-based user IP+MAC address authentication, port-based 802.1X authentication,
Supports ACL functions based on three and four layers, effectively defending ARP attacks and viruses;
Supports perfect storm control function, which can suppress broadcast, multicast, and unicast storms.
Supports unique ARP intrusion detection function, which can effectively prevent hackers or attackers from implementing the increasingly popular "ARP spoofing attack" through ARP packets;
Supports IP Source Guard feature to prevent illegal address spoofing including MAC spoofing, IP spoofing, MAC/IP spoofing, and DoS attacks caused by large-volume address spoofing.
Provides DHCP Snooping function. By establishing and maintaining the DHCP Snooping binding table, it can snoop the MAC address, IP address, lease period and other information of the access user,solving the IP and port tracking and positioning problem of DHCP users.

### Complete reliability protection mechanism and convenient management and maintenance

The RGS-3168GC-4XF switch uses the CPU protection strategy to classify and limit the flow of messages sent to the CPU to avoid attacks on the CPU and resource consumption by illegal attack messages;

Supports multiple spanning tree protocols such as STP, RSTP, and MSTP, fast convergence, improved fault tolerance, ensures stable operation of the network and load balancing of links, reasonably uses network channels, and improves the utilization rate of redundant links;

Supports industrial Ethernet ring network protocol ERPS, provides millisecond-level fast service switching performance, and ensures uninterrupted service. Moreover, the protocol is simple and reliable, the switching performance is high, the maintenance is convenient, and the topology is flexible, which can greatly facilitate users to manage and plan the network;

It uses industrial-grade components, has lightning protection, overvoltage protection, surge protection design, and dual power input to ensure the normal operation of the network in bad natural weather and unstable voltage environment.

Through a simple visual WEB interface (supporting http and https protocols), various functions of the switch can be operated simply and conveniently;

Support SNMP V1/V2/V3 network management to configure and manage the device;

Support command line configuration (CLI), management through Telnet and Console port;

Support SSH2.0 and other encryption methods to make management safer;

Support LLDP protocol to make network management simpler;

Support NTP clock protocol to automatically synchronize network time.

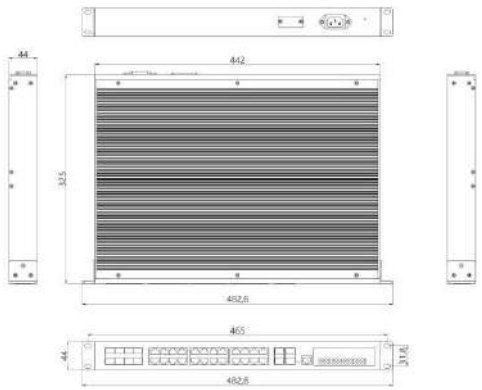
## Specification

| | |
|---|---|
| **Management port** | 1 console port |
| **Reset button** | 1 factory reset button |
| **Switching capacity** | 1.2Tbps |
| **Packet forwarding rate** | 406Mpps |
| **MAC address** | Support 32K MAC address table; support automatic update, two-way learning; |
| **Input voltage** | AC/DC 110-240V, DC36-72V (Redundant dual power supply)<br>Support built-in overcurrent 4.0A protection |
| **Power consumption of the whole machine** | <30W |
| **Port aggregation** | Support static aggregation and dynamic aggregation |
| **Port mirroring** | Support many-to-one port mirroring, with no limit on the number of mirror source ports |
| **Loop protection** | Supports loop detection/loop avoidance |
| **Ring network protocol** | Support industrial-grade ring network protocol ERPS |
| **Port flow control** | Support half-duplex based on back pressure control; |
| **Port speed limit** | Support full-duplex based on PAUSE frame; |
| **IP routing** | Support port-based input/output bandwidth management<br>Support static routing;<br>Support dynamic routing RIP, RIPng, OSFP, OSPFv3;<br>Support VRRP (Virtual Routing Redundancy Protocol) |
| **QOS** | SP (Strict Priority), strict priority rotation algorithm;<br>WFQ (Weighted Fair Queuing) weighted fair queuing;<br>WRR (Weighted Round Robin), weighted priority rotation algorithm;<br>Random Early Detect (RED), random early detection algorithm;<br>Weighted Random Early Detection (WRED),weighted random early detection algorithm;<br>Head Of Line, anti-congestion mechanism; Best-Effort Service, best-effort service;<br>First come first served, first come first served algorithm;<br>802.1p port queue priority algorithm; Cos/Tos, QOS marking; |
| **Cable sequence** | Support Auto-MDIX function, automatically identify straight-through cable and crossover cable |
| **System maintenance** | Support configuration file upload/download; Support upgrade package upload;<br>Support WEB to restore factory configuration; Support system log function;<br>Support Ping detection, tracert detection, and network cable detection;<br>Support WEB interface management (supports http and https protocols);<br>Support CLI interface management; Support Telnet remote management;<br>Support SSH 2.0; Supports SNMP network management;<br>Support RMON; Support LLDP; |
| **VLAN** | Support up to 4096 VLANs;<br>Support VLANs in accordance with the 802.1Q standard;<br>Support QinQ<br>Support Voice VLAN, MAC VLAN, and IP VLAN; |

| | |
|---|---|
| **Storm suppression** | Support suppression of broadcast,multicast, and unicast, etc. |
| **Spanning Tree** | Support STP Spanning Tree Protocol;<br>Support RSTP Rapid Spanning Tree Protocol;<br>Support MSTP Multiple Spanning Tree Protocol; |
| **Supported Protocol Standards** | IEEE 802.3ad, link aggregation protocol; IEEE 802.3, 10BASE-T Ethernet;<br>IEEE 802.3u, Fast Ethernet standard;IEEE 802.3ab, Gigabit Ethernet standard;<br>IEEE 802.3z,Gigabit Ethernet fiber standard;IEEE 802.3ae, 10G Ethernet standard;<br>IEEE 802.3x, full-duplex Ethernet data link layer flow control;<br>IEEE 802.3az, EEE energy-efficient Ethernet standard; |
| **Negotiation mode** | Electrical port supports 10/100/1000M auto-negotiation<br>Optical port supports 1G/2.5G/10G multiple rate modes |
| **Multicast control** | Support IGMP Snooping;<br>Support MLD Snooping (Multicast Listener Discovery Snooping); |
| **Security Features** | Hardware supports IP ACL, MAC ACL, VLAN ACL, and supports ACL functions based on three and four layers;Hardware supports port-based IP+MAC binding;<br>Support IP Source Guard; Supports ARP Detection function;<br>Support IEEE 802.1x port authentication; Supports Radius authentication; |
| **Multicast control** | Support NTP<br>Support PTP (1588v2) |
| **DHCP** | Support DHCP Client; Support DHCP Server;<br>Support DHCP Snooping; Support DHCP Relay; |
| **Work environment** | Operating temperature: -40 to 80 ° C<br>Storage temperature: -40 to 85 ° C<br>Operating humidity: 10% to 90% (no condensation)<br>Storage humidity: 5% to 95% (no condensation) |
| **Mean time between failures** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x width x height (mm): 442*194*44mm



## Ordering information

| Model | Interface | Power Supply |
|---|---|---|
| RGS-3168GC-4XF | 410G optical 16 Gigabit electrical 8 optical and electrical Multiplexing | AC/DC 110-240V, DC36-72V (Redundant dual power supply)<br>Support built-in overcurrent 4.0A protection |

# RGS-3486XF Series 10G Layer 3 Managed Industrial Switch

## Features and benefits

- Interface Specifications: 6 10G optical ports + 48 1G electrical ports
- Wide voltage operation: AC/DC 110-240V
- Layer 3 routing function: static routing, dynamic routing (OSPF, RIP)
- Network redundancy: support STP/RSTP/MSTP, support ERPS
- Multicast management: support IGMP Snooping/MLD Snooping
- VLAN: support 802.1Q VLAN, QinQ, Voice VLAN, MAC
- VLAN, IP VLAN
- Link aggregation: support static/dynamic link aggregation, provide perfect bandwidth utilization
- Security management: support ACL access control list, support 802.1X
- Management function: support WEB, CLI, SNMP, serial console and other management methods
- Monitoring and maintenance: support port mirroring, interface

## Introduction

Layer 3 managed switch with 48pcs 10/100/1000device designed for industrial environm optical interfaces. Each RJ45 port supports MDI/MDIX automatic flipping and line-speed forwarding. It supports Layer 3 routing,static and dynamic routing.

## Specification

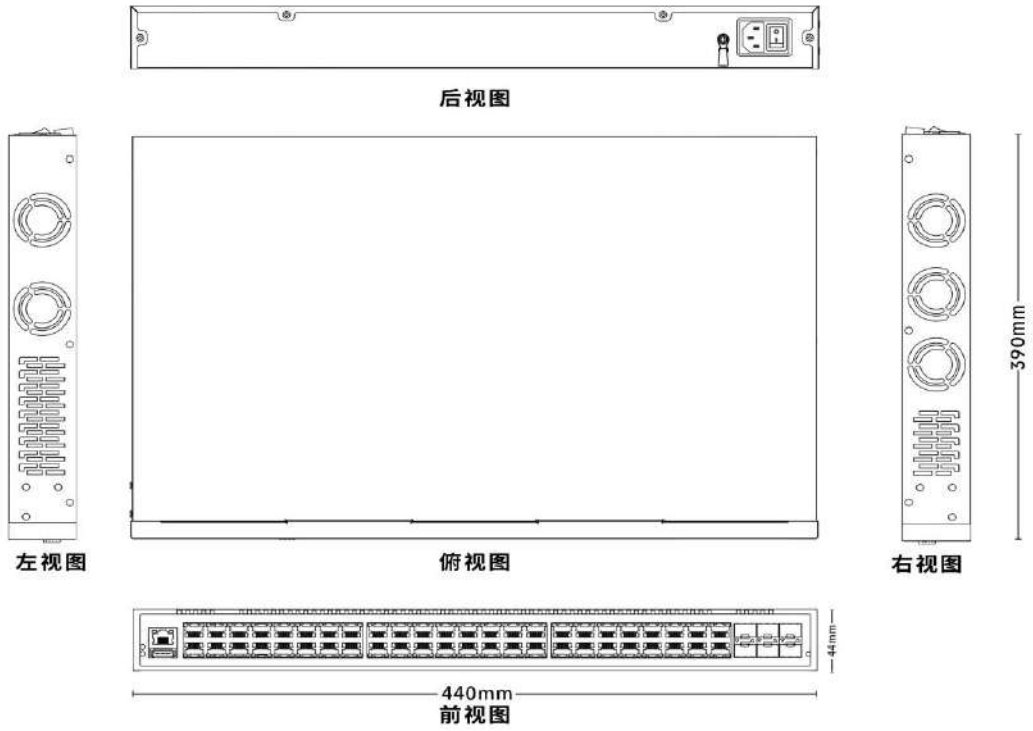
| | |
|---|---|
| **Interface** | Service interface: 6*10G<br>Base-X+48*10/100/1000 Base-T<br>Management interface: Support console<br>Power interface: 220V/AC interface<br>LED lights: PWR, SYS, Link/ACT LED |
| **Cable type and distance** | Twisted pair: 0-100m (CAT5e, CAT6)<br>Single-mode fiber: 20/40/60/80/100KM<br>Multimode fiber: 550m |
| **Electrical characteristics** | Input voltage: AC 100-240V 50/60Hz<br>Power consumption:≤400W |
| **Access Control List** | Support MAC standard/extended ACL<br>Support IPv4 standard/extended ACL<br>Support IPv4 standard/extended ACL |
| **Quality of Service** | Support QOS re-marking<br>Support port trust<br>Support port speed limit<br>Support egress queue speed limit<br>Support SP, WRR scheduling algorithm<br>Support COS mapping, DSCP mapping, IP priority mapping |
| **Management functions** | Support User management<br>Support System log<br>Support Firmware upgrade<br>Support File upgrade<br>Support SNMP Support SNMP V1/V2/V3<br>Support WEB management<br>Support Management serial port<br>Support Command line<br>Support Telnet/SSH<br>Support RMON |
| **Device diagnostics** | Support Console log<br>Support RAM log<br>Support Flash log<br>Port mirroring Support 1:1 or 1:M<br>Support Ping<br>Support Traceroute<br>Support Electrical port test<br>Support Optical module information<br>Support UDLD protocol |

| | |
|---|---|
| **Layer 2 switching** | Switching capacity: 216Gbps<br>Packet forwarding rate: 160.7Mpps<br>MAC address table: 32K<br>Packet buffer: 16M<br>Forwarding delay: <10us<br>Support polarity inversion<br>VLAN support and quantity: 3k<br>Support GARP VLAN registration protocol<br>Support Protocol VLAN<br>Support Voice VLAN<br>Support Video VLAN<br>Support MAC VLAN<br>Support Ethernet channel / link aggregation<br>Support Link aggregation control protocol<br>Support Interface rate<br>Support Duplex mode<br>Support Flow control<br>Support Jumbo frame<br>Support DHCP server<br>Support DHCP client<br>Support DNS server<br>Support DNS client<br>Support SNTP Client<br>Support Port statistics<br>Support Port isolation<br>Support High-performance Ethernet<br>Support Ethernet ring protection switching ERPS<br>Support Link layer discovery protocol<br>Support LLDP 802.1 type-length-value<br>Support Multiple spanning trees / Rapid<br>Spanning trees / Spanning trees<br>Support Spanning tree BPDU filtering<br>Support Spanning tree BPDU Protection<br>Support Spanning Tree Edge Port<br>Support IGMP Snooping<br>Support MLD Snooping<br>Support MVR |
| **Layer 3 functions** | Support IPV4 management address<br>Support IPV6 management address<br>Support IPV4 dynamic routing OSPF, RIP<br>Support Static IPv6 routing<br>Support Address resolution protocol<br>Support Loopback interface |
| **Management functions** | Support User management<br>Support System log<br>Support Firmware upgrade<br>Support File upgrade<br>Support SNMP Support SNMP V1/V2/V3<br>Support WEB management<br>Support Management serial port<br>Support Command line<br>Support Telnet/SSH<br>Support RMON |
| **Mechanical structure** | Size: 440*270*44mm<br>Installation method: Rack-mounted installation<br>Weight: 4KG |
| **Relative humidity** | Working humidity: 10% to 90% RH<br>Storage humidity: 5% to 90% RH |
| **Security** | Support Management channel configuration<br>Support AAA authentication<br>Support 802.1X authentication<br>Support MAC-Based authentication<br>Support WEB-Based authentication<br>Support DOS attack prevention<br>Support Dynamic ARP inspection<br>Support DHCP Snooping<br>Support IP Source Guard<br>SSupport Port security<br>Support Protected ports<br>Support Storm control |

| | |
|---|---|
| **Temperature** | Operating temperature: -10° C~50° C<br>Storage temperature: -40° C~75° C |
| **Cooling method** | Fan forced cooling |
| **MTBF** | 100,000 hours |
| **Protection** | Power surge protection: Common mode 4KV, differential mode 2KV<br>Network port surge protection: Common mode 6KV, differential mode 2KV<br>Anti-static interference: Contact 8K, air 15K<br>Free fall: 0.5m |
| **Supporting equipment** | Equipment, AC power cord, certificate, manual, dust plug |

## Appearance size

Length x width x height (mm): 420*270*44mm




## Ordering information

| Model | Port | Power supply |
|---|---|---|
| RGS-3486XF | 6 10G optical 48 1G electrical 8 optical/electrical multiplexing | AC100~240V/50-60HZ |

# EC-101 Series 100M 1 Optical 1 Electrical Industrial Ethernet Switch

## Features and benefits

- Use high-quality optoelectronic integrated modules to provide good optical and electrical characteristics
- Ensure reliable data transmission and long service life
- Support full-duplex or half-duplex mode with automatic negotiation capability
- Network port supports fully automatic cross-recognition
- Built-in store-and-forward mechanism, supports multiple protocols
- Meet industrial operation standards, with an average trouble-free working time more than 300,000 hours
- Working power supply: DC 12-52V with reverse connection protection
- Use SC/FC/ST/SFP optical fiber interface
- Lightning surge protection (power supply): 5000A (8/20μs)

## Introduction

1 100M electrical port and 1 100M FX optical port industrial Ethernet switch, supports 1pcs 10Base-T/100Base-TX electrical port and 1pcs 100Base-X optical port. The product complies with FCC, CE, and ROHS standards. The MC-101 series switches have an operating temperature range of -40° C to 80° C, are extremely rugged and can adapt to a variety of harsh environments, and can also be easily placed in a compact control box. The rail installation features, wide temperature operation IP40 protection grade housing, and LED indicators make the MC-101a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

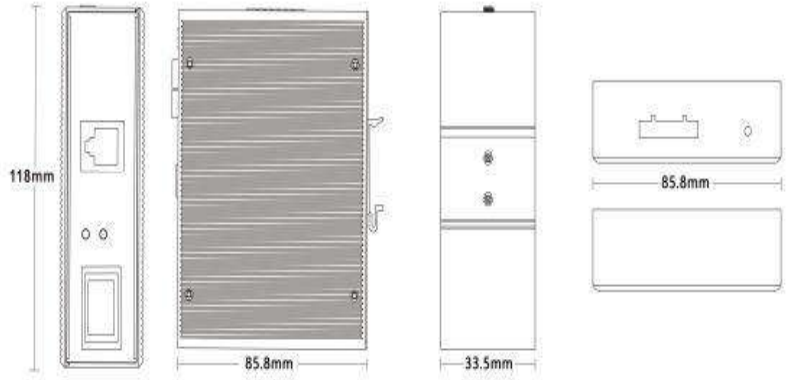
## Specification

| | |
|---|---|
| **Fiber optic port** | 100BaseFX port (SC/FC/ST/SFP optional) |
| **RJ45 port** | 10/100BaseT (X) automatic detection, full/half duplex<br>MDI/MDI-X self-adaptation |
| **Network protocol** | IEEE802.3 10BASE-T; IEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;<br>IEEE802.3x; |
| **Industry Standards** | EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A<br>EMS:<br>IEC(EN)61000-4-2(ESD): ± 8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS): 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT): Ethernet port: ± 2kV CM//± 1kV DM;<br>IEC(EN)61000-4-5(Surge): Ethernet port: ± 2kV CM//± 1kV DM;<br>IEC(EN)61000-4-6(RF conduction): 3V (10kHz~150kHz),10V(150KHZ~80MHZ)<br>IEC(EN)61000-4-16 (common mode conduction): 30V cont. 300V,1s<br>IEC(EN)61000-4-8<br>Shock: IEC 60068-2-27<br>Freefall: IEC 60068-2-32<br>Vibration: IEC 60068-2-6 |
| **Working environment** | Working temperature: -40~80 ° C (-40~180 ° F)<br>Storage temperature: -40~80 ° C (-40~180 ° F)<br>Relative humidity: 5%~95% (no condensation) |
| **Switching properties** | Transmission mode: store and forward MAC address: 2K<br>Cache: 1Mbit Backplane bandwidth: 1.6G<br>Switching delay: <10μs Power consumption: <3W |
| **LED indicators** | Power indicator: PWR<br>Interface indicator: electrical port, optical port (Link/ACT) |

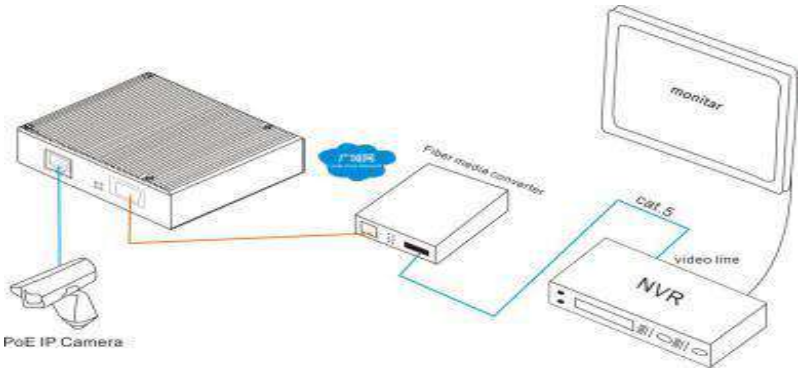
| | |
|---|---|
| **Power supply** | Input voltage: DC12-52V (dual power supply redundant backup)<br>Access terminal: Phoenix terminal<br>Support dual power supply redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical characteristics** | Casing: IP40 protection level, metal casing<br>Installation: DIN rail type, wall-mounted installation<br>Cooling method: natural cooling, no fan<br>Weight: 0.36Kg<br>Dimensions: 118 x 85.8 x 33.5mm (length x width x height) |
| **Protection level** | IP40 |
| **Certification Certified:** | CE, FCC, Rohs, |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x width x height (mm): 118*85.8*33.5mm




## Product application diagram




## Ordering information

| Model | Port | Power supply |
|---|---|---|
| EC-101 | 1 optical 1 electrical 100M | 12-52 Dual power supply redundancy |

# MGC-101 Series

**Gigabit 1 optical 1 electrical industrial grade fiber optic transceiver**

## Features and benefits

- Use high-quality optoelectronic integrated modules to provide good optical and electrical characteristics
- Ensure reliable data transmission and long service life
- Support full-duplex or half-duplex mode with automatic negotiation capability
- Network port supports fully automatic cross-recognition
- Built-in store-and-forward mechanism, supports multiple protocols
- Meet industrial operation standards, with an average trouble-free working time more than 300,000 hours
- Working power supply: DC 12-52V with reverse connection protection
- Use SC/FC/ST/SFP optical fiber interface
- Lightning surge protection (power supply): 5000A (8/20μs)

## Introduction

1 Gigabit electrical port and 1 Gigabit FX optical port industrial Ethernet switch, supports 1pcs 10Base-T/100 Base-T/1000Base-TX electrical port and 1pcs 1000Base-X optical port. The product complies with FCC, CE, and ROHS standards. The MGC-101 series switches have an operating temperature of -40° C to 80° C, are extremely rugged and can adapt to various harsh nvironments, and can also be easily placed in a compact control box.

The rail installation characteristics, wide temperature operation, IP40 protection grade housing and LED indicators ke the MGC-101 a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

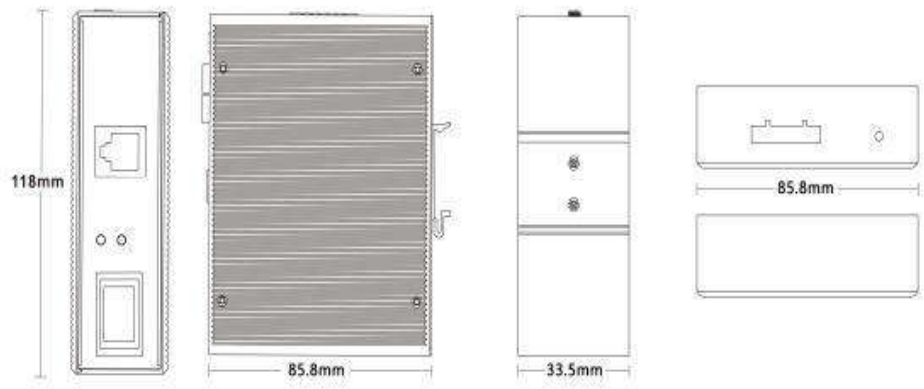
## Specification

| | |
|---|---|
| **Port Description** | 1pcs RJ45 port and 1pcs fiber optic interface |
| **RJ45 port** | 10/100/1000BaseT (X) automatic detection, full/half duplex<br>MDI/MDI-X |
| **Fiber optic port** | 1000BaseFX port (SC/FC/ST/SFP optional) |
| **Network protocol** | IEEE802.3 10BASE-T; IEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;<br>IEEE802.3x; |
| **Working environment** | Working temperature: -40~80 ° C (-40~180 ° F)<br>Storage temperature: -40~80 ° C (-40~180 ° F)<br>Relative humidity: 5%~95% (no condensation)<br>EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A |
| **Industry Standards** | EMS:<br>IEC(EN)61000-4-2(ESD): ± 8kV contact discharge, ± 12kV air discharge<br>IEC(EN)61000-4-3(RS): 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT): Power line: ± 2kV; Data line: ± 1kV<br>IEC(EN)61000-4-5(Surge): Network port: ± 2kV CM//± 1kV DM;<br>IEC(EN)61000-4-6(RF conduction): 3V (10kHz~150kHz), 10V(150KHZ~80MHZ)<br>IEC(EN)61000-4-16 (common mode conduction): 30V cont. 300V,1s<br>IEC(EN )61000-4-8<br>Shock: IEC 60068-2-27<br>Freefall: IEC 60068-2-32<br>Vibration: IEC 60068-2-6 |
| **Switching properties** | Transmission mode: store and forward MAC address: 2K<br>Cache: 1.2Mbit Backplane bandwidth: 14G<br>Switching delay: <10μs Power consumption: <3W |

| | |
|---|---|
| **Power supply** | Input voltage: DC12-52V (dual power supply redundant backup)<br>Access terminal: Phoenix terminal<br>Support dual power supply redundancy<br>Support built-in overcurrent 4.0A protection<br>Support reverse connection protection |
| **Mechanical characteristics** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall-mounted<br>Cooling method: natural cooling, no fan<br>Weight: 0.36Kg<br>Dimensions: 118 x 85.8 x 33.5mm (length x width x height) |
| **LED indicators** | Power indicator: PWR<br>Interface indicator: electrical port, optical port (Link/ACT) |
| **Protection level** | IP40 |
| **Certification Certified:** | CE, FCC, Rohs, |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x width x height (mm): 118*85.8*33.5mm




## Ordering information

| Model | Port | Power supply |
|---|---|---|
| MGC-101 | 1 optical 1 electrical Gigabit | 12-52 Dual power supply redundancy |

# DPS-1080 Series 100M 8-port industrial POE switch


## Features and Advantages

- Provide 8 POE electrical ports, which can provide 30W output power
- Power can be supplied to the device through the network cable
- Use high-quality optoelectronic integrated modules to provide good optical and electrical characteristics
- Ensure reliable data transmission and long service life
- Support full-duplex or half-duplex mode with automatic negotiation capability
- The network port supports fully automatic cross-recognition
- Built-in storage and forwarding mechanism, supports multiple protocols
- Meet industrial-grade operation standards, with an average trouble-free
- Working time of more than 300,000 hours
- Working power supply: DC 12-52V, reverse connection protection is provided
- Lightning surge protection (power supply): 5000A (8/20μs)

## Introduction

8-way 100M electrical port industrial Ethernet switch, supports 8pcs 10Base-T/100Base-TX electrical ports. The product complies with FCC, CE, and ROHS standards. The DPS-1080 switch has an operating temperature range of -40° C to 80° C, is extremely rugged and can adapt to a variety of harsh environments, and can also be easily placed in a compact control box. The rail installation characteristics, wide temperature operation, IP40 protection grade housing and LED indicators make the DPS-1080 a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

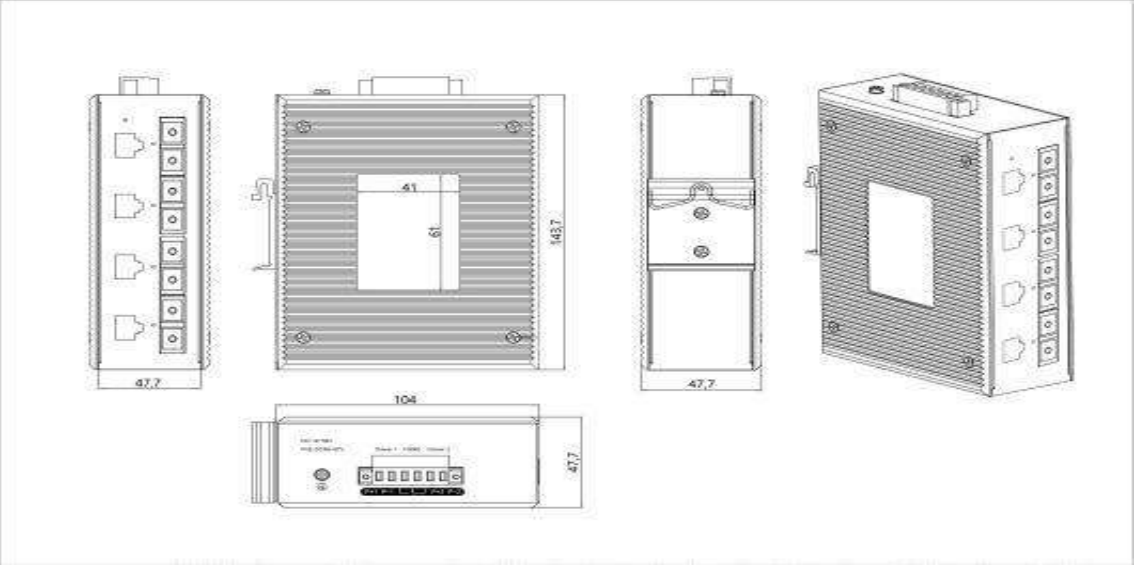
## Specification

| | |
|---|---|
| **Port Description** | 8pcs RJ45 ports |
| **RJ45 Port** | 10/100BaseT (X) automatic detection, full/half duplex MDI/MDI-X adaptive |
| **Network protocol** | IEEE802.3 10BASE-TIEEE802.3i<br>10Base-T;IEEE802.3u;100Base-TX/FX;<br>IEEE802.3ab1000Base-T;IEEE802.3z1000Base-X;IEEE802.3x;<br>IEEE802.3af, IEEE802.3at |
| **POE power supply** | Compatible with IEEE 802.3af (Basic Poe), IEEE802.3at (Poe+) standards<br>IEEE802.3af: Maximum output power is 15.4W (actually available about 12.95W)<br>IEEE802.3at: Increase power to 30W (actually available about 25.5W)<br>802.3af: Voltage range 44-57V DC, maximum current 350mA<br>802.3at: Voltage range 50-57V DC, maximum current increased to 600mA |
| **Work environment** | Operating temperature:-40~80°C (-40~180°F)<br>Storage temperature:-40~80°C (-40~180°F)<br>Relative humidity :5 %~95 % (No condensation) |
| **Industry Standards** | IEC(EN)61000-4-2(ESD): ±8kV contact discharge, ±12kV air discharge<br>IEC(EN)61000-4-3(RS): 10V/m(80~1000MHz)<br>IEC(EN)61000-4-4(EFT): Ethernet port: ±2kV CM//±1kV DM;<br>IEC(EN)61000-4-5(Surge): Ethernet port: ±2kV CM//±1kV DM;<br>IEC(EN)61000-4-6(RF conduction): 3V(10kHz~150kHz),10V(150kHz~80MHz)<br>IEC(EN)61000-4-16(Common mode conduction): 30V cont. 300V,1s<br>Shock: IEC 60068-2-27<br>Freefall: IEC 60068-2-32<br>Vibration: IEC 60068-2-6 |

| | | |
|---|---|---|
| **Exchange properties** | Transmission mode: Store-and-forward<br>Cache: 1 Mbit<br>Switching delay: < 10 μs | MAC address: 2K<br>Backplane bandwidth: 1.6G<br>Power consumption: <5W |
| **Power Supply** | Input voltage: DC 12-52V(dual power supply redundant backup)<br>Access terminal: Phoenix terminal<br>Support dual power redundancy<br>Support built-in overcurrent protection (4.0A)<br>Support reverse connection protection | |
| **Mechanical structure** | Housing: IP40 protection grade, metal housing<br>Installation: DIN rail, wall-mounted installation<br>Cooling method: Natural cooling, no fan<br>Weight: 0.64 Kg<br>Dimensions: 143.7× 104mm× 47.7mm(length x width x height) | |
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port, optical port (Link) | |
| **Level of protection** | IP40 | |
| **Certification** | Pass the Certification: CE, FCC, ROHS | |
| **MTBF** | 300,000 hours | |
| **Warranty** | 5 years | |

## Appearance size

Length x Width x Height (mm): 143.7 x 104 x 47.7mm




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DPS-1080 | 8 100M electrical ports | 12-52 Dual Power Supply Redundancy |

# DGS-1080-M12 Series Gigabit 8-port rugged industrial switch

## Features and Advantages

- M12 interface, Gigabit port is M12 X-Coded type
- Wall-mounted installation
- Support full-duplex or half-duplex mode, with automatic negotiation capability
- Network port supports fully automatic cross-identification
- Store and forward, support multiple protocols
- Meet industrial-grade operation standards, average trouble-free operation time is more than 300,000 hours
- Working power supply: non-PoE DC 12-52V

## Introduction

Industrial Ethernet switch with 1000Mbps electrical ports + 2 1000Mbps fiber optic ports. It supports 8 100Base-T/1000 Base-TX electrical ports and 2 1000Base-X fiber optic ports. The product complies with FCC, CE, and ROHS standards. The DGS-1082GF switch has an operating temperature range of -40° C to 80° C. It has extremely strong durability and can adapt to various harsh environments. It can also be conveniently installed in a compact control box. The rail installation feature, wide temperature operation, and the IP40 level of protection of the enclosure and LED indicator lights make the DGS-1082GF an easy-to-use industrial-grade device, providing a reliable and convenient solution for users to connect their Ethernet devices.

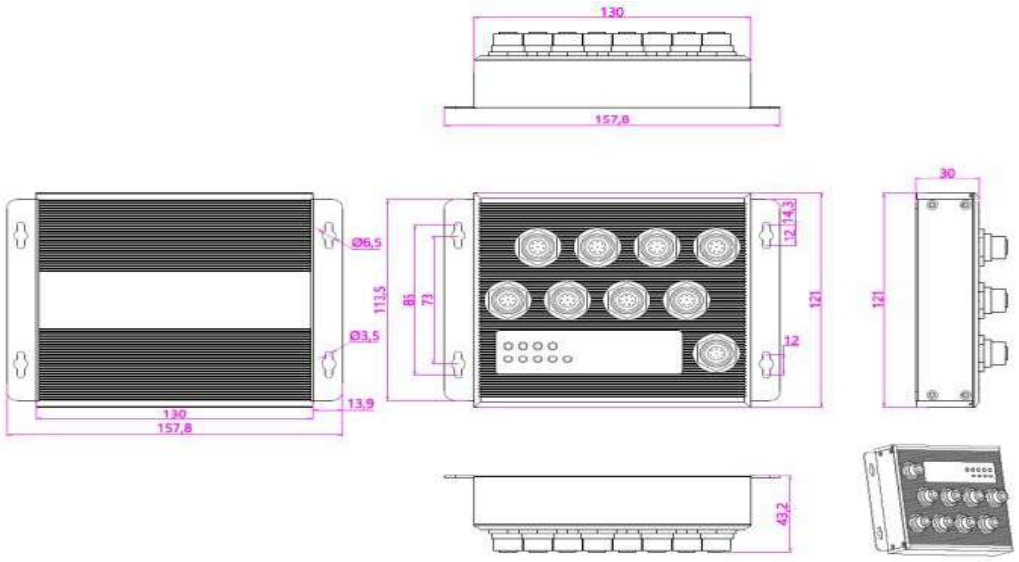
## Specification

| | |
|---|---|
| **Port Description** | Gigabit port: 10/100/1000Base-T(X), M12 X-Coded interface |
| **Network protocol** | IEEE802.3 10BASE-T;<br>IEEE 802.3u(100Base-TX)<br>IEEE802.3ab(1000Base-T) |
| **Work environment** | Operating temperature:-40~85℃ (-40~185℉)<br>Storage temperature:-40~85℃ (-40~185℉)<br>Relative humidity :5 %~95 % (No condensation) |
| **Industrial standard** | EMI: FCC Part 15, CISPR (EN55022) class A<br>EMS : EN61000-4-2 (ESD), Level 4 EN61000-4-3 (RS), Level 3<br>EN61000-4-4 (EFT), Level 4 EN61000-4-5 (Surge), Level 4<br>EN61000-4-6 (CS), Level 3 EN61000-4-8, Level 5<br>Shock: IEC60068-2-27<br>Free fall: IEC 60068-2-32<br>Vibration: IEC60068-2-6 |
| **Exchange properties** | Transmission mode: Store-and-forward<br>MAC address: 8K<br>Cache: 2 Mbit<br>Backplane bandwidth: 20G<br>Switching delay: < 10μs<br>Power consumption: <5W |
| **Power Supply** | Input voltage: Non-PoE DC 12-52V.<br>Power interface: M12 (Male), 4-Pin-A Coded<br>Support overload protection<br>Support reverse connection protection |
| **Mechanical structure** | Housing: metal housing<br>Installation: wall-mounted installation<br>Cooling method: Natural cooling, no fan<br>Weight: 0.65 Kg<br>Dimensions: 157.8× 121× 43.2mm(length x width x height) |

| | |
|---|---|
| **LED indicators** | Power Light: PWR<br>Interface indicator light: Electrical port(Link) |
| **Level of protection** | IP64 |
| **Certification** | Pass the Certification: CE, FCC, ROHS |
| **MTBF** | 300,000 hours |
| **Warranty** | 5 years |

## Appearance size

Length x Width x Height (mm): 157.8 x 121 x 43.2mm




## Ordering information

| Model | Interface | Power supply |
|---|---|---|
| DGS-1080-M12 | Gigabit 8 ports | 12-52 Dual Power Supply Redundancy |