

NIETZ

Industrial Network Solutions

Product Brochure



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ZDS-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 °C
- Small and compact metal housing
- IP40 Protection level

Introduction

The ZDS-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°C ~75 °C , 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.

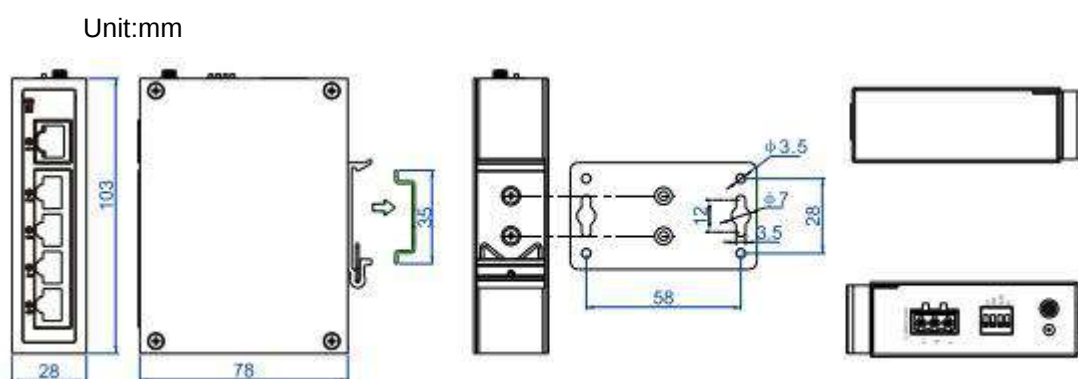
The ZDS-1050 switch can be quickly deployed without complex configuration, simplifying the installation process and reducing the total cost of ownership. Whether it is used in factory automation, video surveillance or transportation, the ZDS-1050 can provide a stable data communication solution. It is 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 100Base-TX, follow IEEE 802.3u 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 MAC address : 2K Backplane bandwidth : 1G Switching delay : < 10 μs
Power supply	12~48VDC or 24VAC, 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 Full load power consumption :1.0W@24VDC
Work environment	Operating temperature:-40~75℃ Storage temperature:-40~85℃ Relative humidity :5 %~95 % (No condensation)
Mechanical structure	Housing: IP40 protection grade, metal housing Installation: DIN rail or wall mount Dimensions (width x height x depth) :28mm× 103mm× 78mm
Industry standards	IEC61000-4-2(ESD),Level3 Air discharge : ± 8kV Contact discharge: ± 6kV IEC61000-4-4(EFT),Level3 Power supply : ± 2kV Ethernet interface : ± 1kV IEC61000-4-5(Surge),Level3 Power supply : common mode± 2kV,differential mode ± 1kV Ethernet interface : commonmode± 2kV,differential mode ± 1kV Shock:IEC60068-2-27 Free fall:IEC60068-2-32 Shock:IEC60068-2-6
Certification	CE,FCC,ROHS
Warranty	5 years
Mean time between failures	510465hrs

Appearance size



Ordering information

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

ZDS-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 ZDS-1041F series switch has an operating temperature of -40°C ~80°C, 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 ZDS-1041F a plug-and-play industrial grade device, providing users with a reliable and portable solution for Ethernet device networking.

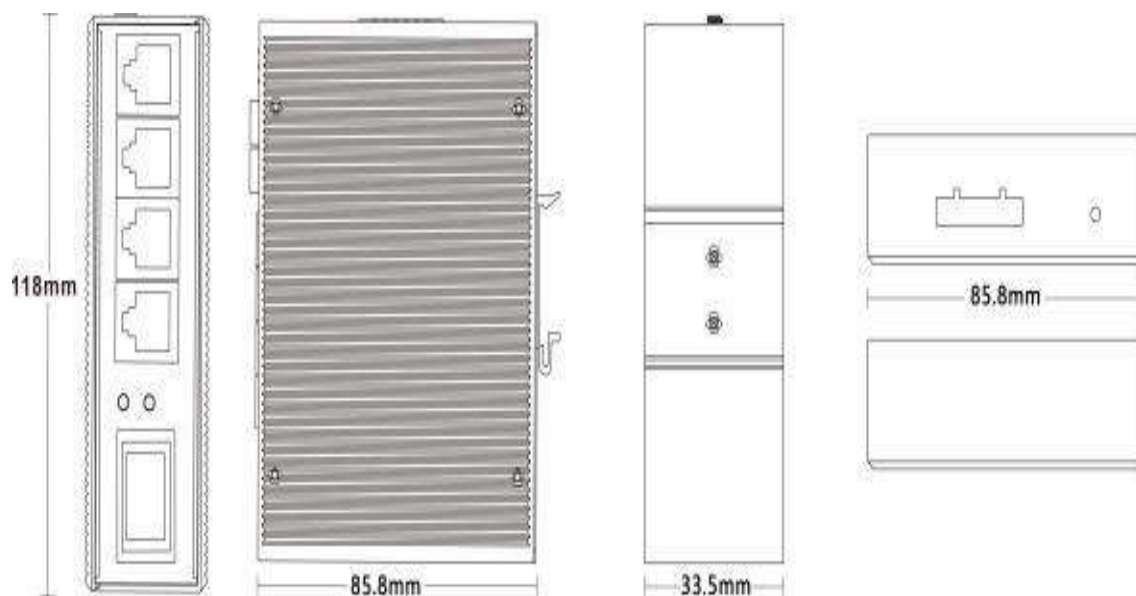
Specification

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	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u; 100Base-TX/FX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X; IEEE802.3x; IEEE802.3af; IEEE802.3at

Work environment	Operating temperature: -40~80°C (-40~180°F) Storage temperature: -40~80°C (-40~180°F) Relative humidity: 5%~95% (No condensation)
Industry standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC (EN) 61000-4-2 (ESD): ± 8kV contact discharge, ± 12kV air discharge IEC (EN) 61000-4-3 (RS): 10V/m (80~1000MHz) IEC (EN) 61000-4-4 (EFT): relative humidity: ± 2kVCM/± 1kVDM: IEC (EN) 61000-4-5 (Surge): relative humidity: ± 2kVCM/± 1kVDM; IEC (EN) 61000-4-6 (radio frequency conduction): 3V (10kHz~150kHz), 10V (150kHz~80MHz) IEC (EN) 61000-4-16 (common mode conduction): 30V cont. 300V, 1s Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6
Exchange properties	Transmission method : store and forward MAC address: 2K Cache: 1Mbit Backplane bandwidth: 1.6G Switching delay: < 10 μs Power consumption: < 3W
Power supply	Input voltage: DC 12-52V (dual power supply redundant backup) Access terminal: phoenix terminal Support dual power supply redundancy Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical properties	Housing: IP40 protection grade, metal housing Installation: DIN rail, wall mount Heat dissipation method: natural cooling, no fan Weight: 0.36Kg Dimensions: 118×85.8×33.5mm (width×depth×height)
LED indicators	Power indicator: PWR 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

Appearance size

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



Ordering information

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

ZDS-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 ZDS-1080 switch has an operating temperature of -40°C ~80°C 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 ZDS-1080 a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

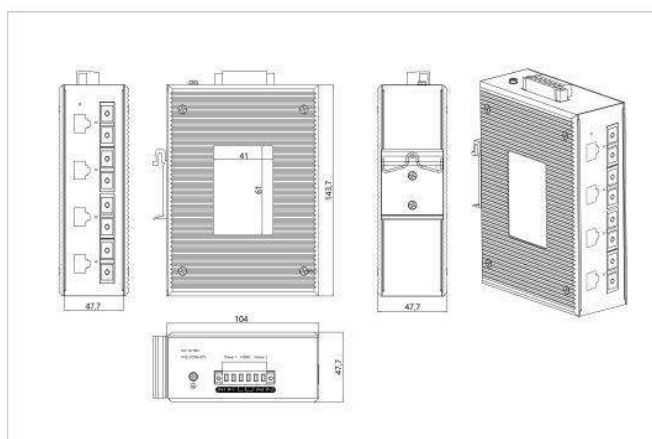
Specification

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 10Base-T;IEEE802.3u;100Base-TX/FX; IEEE802.3ab1000Base-T;IEEE802.3z1000Base-X;IEEE802.3x; IEEE802.3af,IEEE802.3at
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~80°C (-40~180°F) Relative humidity:5%~95%(No condensation)
Exchange properties	Transmission method :store and forward Cache:1Mbit MAC address: 2K Backplane bandwidth:1.6G: 1.6G Switching delay: <10 μs Power consumption: < 5W

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

Appearance size

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



Ordering information

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

ZDS-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(8/20 μs)

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 ZDS-1062F series switch has an operating temperature of -40°C ~ 80°C , 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 ZDS-1062F a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

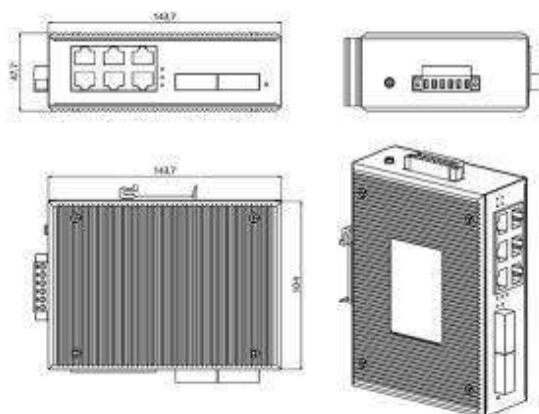
Specification

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 10Base-T;IEEE802.3u;100Base-TX/FX; IEEE802.3ab1000Base-T;IEEE802.3z1000Base-X;
Industry standards	EMI:FCCPart15SubpartBClassA,EN55022ClassA EMS:IEC(EN)61000-4-2(ESD):±8kVcontact discharge,±15kVair discharge IEC(EN)61000-4-3(RS):10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT):power cord:±2kV;data cable:±1kV IEC(EN)61000-4-5(Surge):power cord:±1kVCM/±2kVDM;data cable:±2kV IEC(EN)61000-4-6(radio frequency conduction):3V(10kHz~150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(common mode conduction):30Vcont. 300V,1s IEC(EN)61000-4-8 Shock:IEC60068-2-27 Freefall:IEC60068-2-32 Vibration:IEC60068-2-6

Work environment	Operating temperature: -40~80°C(-40~180°F) Storage temperature: -40~80°C(-40~180°F) Relative humidity:5%~95%(No condensation)
Exchange properties	Transmission method :store and forward MAC address: 2K Cache: 1Mbit Backplane bandwidth: 1.6G Switching delay: <10 μs Power consumption: < 5W
Power supply	Input voltage: DC12-52V (dual power supply redundant backup) Access terminal: phoenix terminal Support dual power supply redundancy Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical properties	Housing: IP40 protection grade, metal housing Installation: DIN rail, wall mount Heat dissipation method: natural cooling, no fan Weight: 0.64Kg Dimensions: 143.7× 104× 47.7mm (width× depth× height)
LED indicators	Power indicator: PWR 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

Appearance size

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



Ordering information

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

ZDS-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(8/20 μ s)

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 ZDS-1044F switch has an operating temperature of -40°C ~ 80°C 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 ZDS-1044F a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

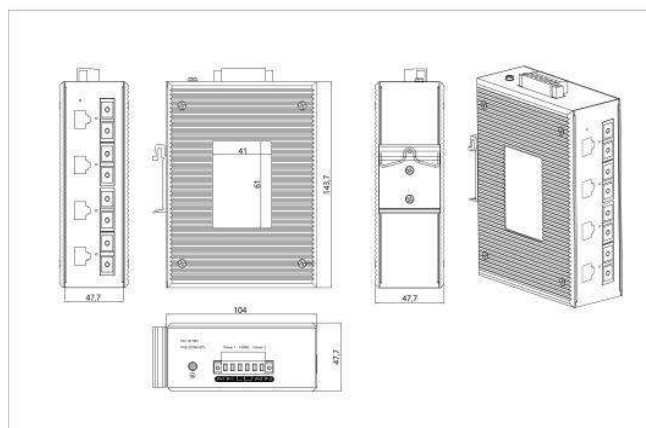
Specification

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 EMS:IEC(EN)61000-4-2(ESD): ± 8 kVcontact discharge, ± 15 kVair discharge IEC(EN)61000-4-3(RS):10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT):power cord: ± 2 kV;data cable: ± 1 kV IEC(EN)61000-4-5(Surge):power cord: ± 2 kVCM/ ± 1 kV DM;data cable: ± 1 kV IEC(EN)61000-4-6(radio frequency conduction):3V(10kHz~150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(common mode conduction):30V cont.300V,1s IEC(EN)61000-4-8 Shock:IEC60068-2-27 Freefall:IEC60068-2-32 Vibration:IEC60068-2-6

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

Appearance size

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



Ordering information

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

ZDS-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 ZDS-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 ZDS-1081F an easy-to-use industrial-grade device, providing a reliable and convenient solution for users to connect their Ethernet devices.

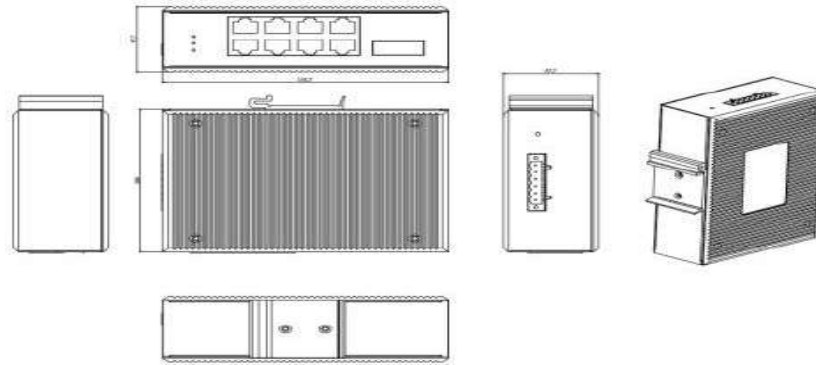
Specification

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 10Base-T;IEEE802.3u;100Base-TX/FX; IEEE802.3ab 1000Base-T;IEEE802.3z 1000Base-X;IEEE802.3x;
Industry standards	EMI : FCC Part 15 Subpart B Class A , EN 55022 Class A EMS : IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 15kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT) : power cord : ± 2kV ; USB cable : ± 1kV IEC(EN)61000-4-5(Surge) : power cord : ± 1kV CM/ ± 2kV DM ;USB cable:± 2kV IEC(EN)61000-4-6(Radiofrequency conduction) : 3V(10kHz~150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC(EN)61000-4-8 Shock : IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration :IEC 60068-2-6

Work environment	Operating temperature: -40 to 80 ° C (-40 to 180 ° F) Storage temperature: -40 to 80 ° C (-40 to 180 ° F) Relative humidity: 5% to 95% (no condensation)
Exchange attributes	Transmission mode: Store-and-forward MAC address: 4K Cache: 1.25 Mbit Backplane bandwidth: 1.8G Switching delay: <10 μs Power consumption: <5W
Power supply	Input voltage: DC12-52V (with dual power supply redundancy backup) Access terminal: Phoenix terminal Supports dual power redundancy Supports built-in overcurrent protection of 4.0A Support reverse connection protection
Mechanical characteristics	Shell: IP40 protection grade, metal casing Installation: DIN rail mounting, wall-mounted installation Cooling method: Natural cooling, without fan Weight: 0.64 Kg Dimensions: 143.7 x 104 x 47.7mm (Length x Width x Height)
LED indicators	Power indicator light: PWR 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

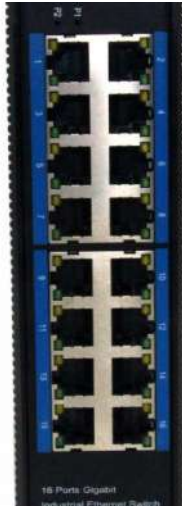


Ordering information

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

ZDS-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 ZDS-1160 an immediately plug-and-play industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

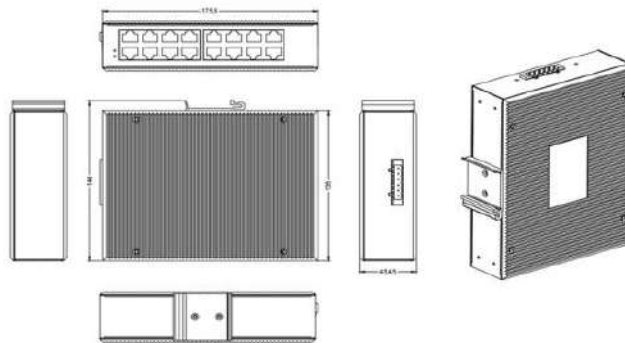
Specification

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

Exchange attributes	Transmission mode: Store-and-forward MAC address: 8K Cache: 4Mbit Backplane bandwidth: 3.2G Switching delay: <10μs Power consumption: <10W
Power supply	Input voltage: DC12-52V (with dual power supply redundancy backup) Access terminal: Phoenix terminal Supports dual power redundancy Supports built-in overcurrent protection of 4.0A Support reverse connection protection
Mechanical characteristics	Shell: IP40 protection grade, metal casing Installation: DIN rail mounting, wall-mounted installation Cooling method: Natural cooling, without fan Weight: 1 Kg Dimensions: 175.6 x 135 x 45.5 mm (width x depth x height)
LED indicators	Power indicator light: PWR 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

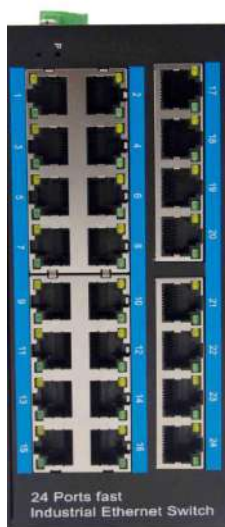


Ordering information

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

ZDS-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 ZDS-1240F 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-mounted installation feature, wide temperature operation range, IP40 level of protection for the enclosure, and LED indicator lights make the ZDS-1240F an easy-to-use industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

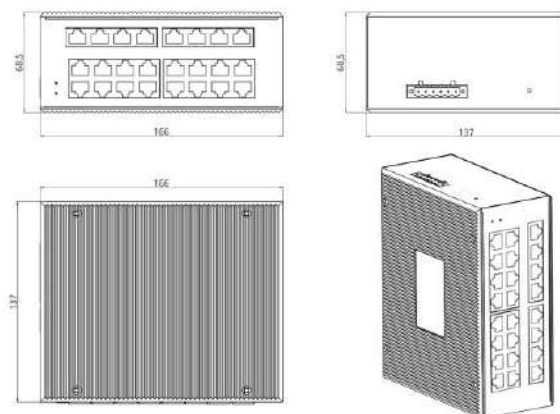
Specification

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

Exchange attributes	Transmission mode: Store-and-forward MAC address: 8K Cache: 4Mbit Backplane bandwidth: 4.8G Switching delay: <10 μs Power consumption: <10W
Power supply	Input voltage: DC12-52V (with dual power supply redundancy backup) Access terminal: Phoenix terminal Supports dual power redundancy Supports built-in overcurrent protection of 4.0A Support reverse connection protection
Mechanical characteristics	Shell: IP40 protection grade, metal casing Installation: DIN rail mounting, wall-mounted installation Cooling method: Natural cooling, without fan Weight: 1.5 Kg Dimensions: 166x137x68.5mm (width x depth x height)
LED indicators	Power indicator light: PWR 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
ZDS-1240F	24 Gigabit Ethernet	12-52 Dual Power Redundancy

ZDGS-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 ZDGS-1050 switch has a working temperature range of -40°C to 80°C, 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 ZDGS-1050 an easy-to-use industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

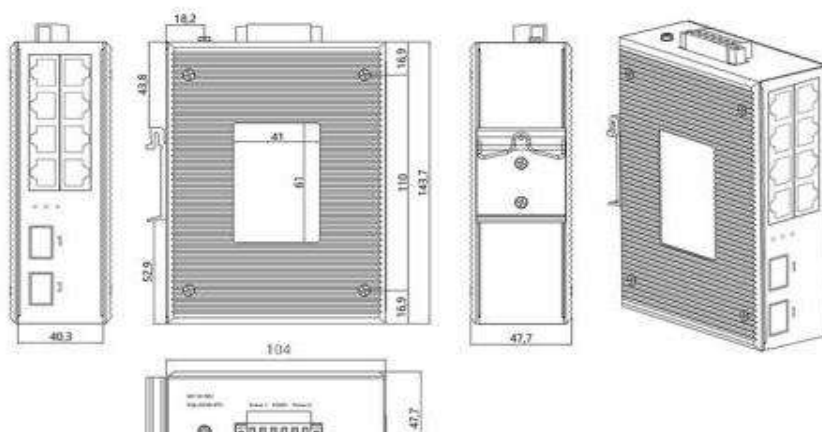
Specification

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

Exchange attributes	Transmission mode: Store-and-forward MAC address: 2K Cache: 1.2Mbit Backplane bandwidth: 14G Switching delay: <10μs Power consumption: <3W
Power supply	Input voltage: DC12-52V (with dual power supply redundancy backup) Access terminal: Phoenix terminal Supports dual power redundancy Supports built-in overcurrent protection of 4.0A Support reverse connection protection
Mechanical characteristics	Shell: IP40 protection grade, metal casing Installation: DIN rail mounting, wall-mounted installation Cooling method: Natural cooling, without fan Weight: 0.36 Kg Dimensions: 118 x 85.8 x 33.5mm (width x depth x height)
LED indicators	Power indicator light: PWR 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
ZDGS-1050	5 Gigabit Full Speed	12-52 Dual Power Redundancy

ZDGS-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 ZDGS-1041 GF Series 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 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 ZDGS-1041GF Series an easy-to-use industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

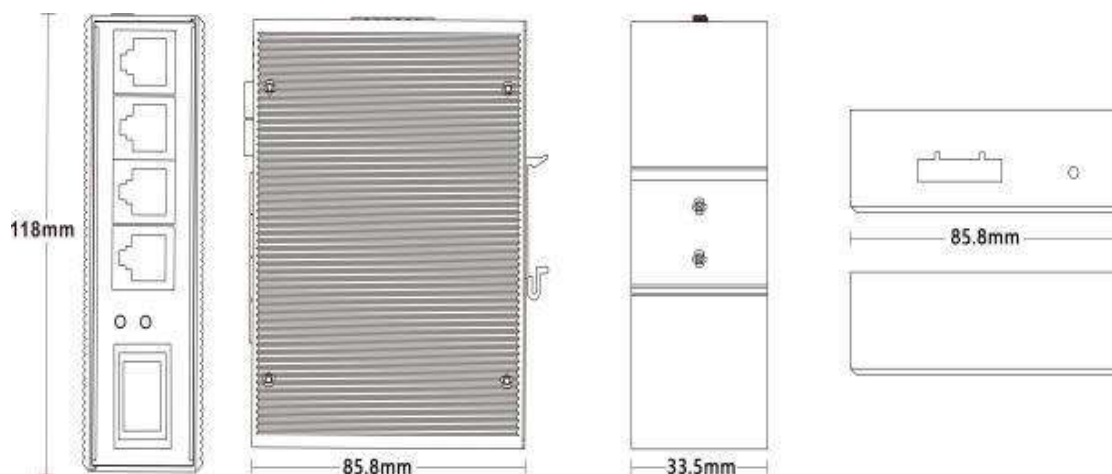
Specification

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 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) Storage temperature: -40 to 80 ° C (-40 to 180 ° F) Relative humidity: 5% to 95% (no condensation)
Industry standards	EMI :FCC Part 15 Subpart B Class A , EN 55022 Class A EMS : IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 12kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT):power cord:± 2kV ; USB cable:± 1kV IEC(EN)61000-4-5(Surge) : net gape : ± 2kV CM//± 1kV DM ; IEC(EN)61000-4-6(Radiofrequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz ~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC(EN)61000-4-8 Shock: IEC 60068-2-27 Freefall : IEC 60068-2-32 Vibration :IEC 60068-2-6

Exchange attributes	Transmission mode: Store-and-forward MAC address: 2K Cache: 1.2Mbit Backplane bandwidth: 14G Switching delay: <10μs Power consumption: <3W
Power supply	Input voltage: DC12-52V (with dual power supply redundancy backup) Access terminal: Phoenix terminal Supports dual power redundancy Supports built-in overcurrent protection of 4.0A Support reverse connection protection
Mechanical characteristics	Shell: IP40 protection grade, metal casing Installation: DIN rail mounting, wall-mounted installation Cooling method: Natural cooling, without fan Weight: 0.36 Kg Dimensions: 118 x 85.8 x 33.5mm (width x depth x height)
LED indicators	Power indicator light: PWR 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
ZDGS-1041GF	1 Light 4 Electricity Gigabit	12-52 Dual Power Redundancy

ZDGS-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°C
- Supports IP40 level of protection

Introduction

ZDGS-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 ZDGS-1080 to continuously work in extreme temperature conditions, especially suitable for various demanding environments in industrial sites.

As a non-managed switch, ZDGS-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, ZDGS-1080 is an ideal choice. It not only provides outstanding performance and durability but also ensures reliable data communication in various complex environments. In summary, ZDGS-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.

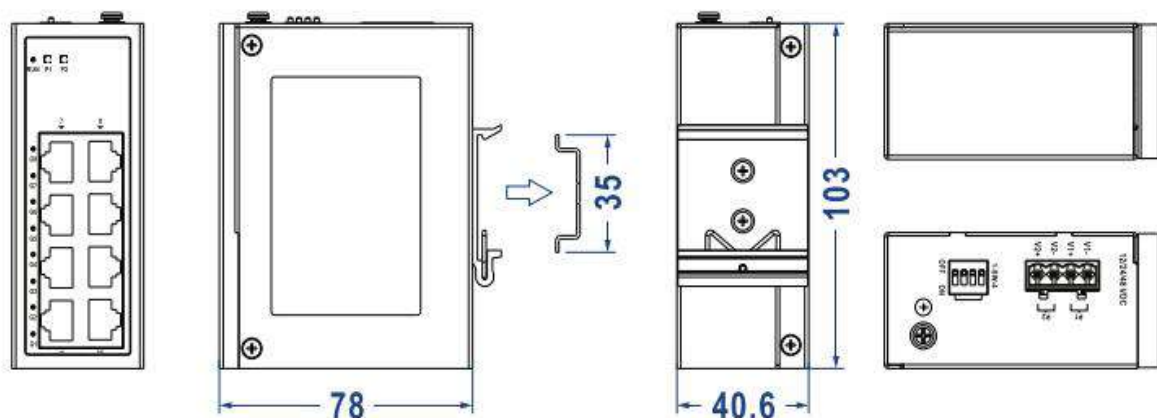
Specification

Standards and protocols	10Base-T,follow IEEE 802.3 ; 100Base-TX ,follow IEEE 802.3u 1000Base-T,follow IEEE 802.3ab ; Flow control,follow IEEE 802.3x 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 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 MAC address: 4K Cache: 1.5Mbit Backplane bandwidth: 16G 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 Full-load: 3.0W @ 12VDC

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

Appearance size

unit: mm

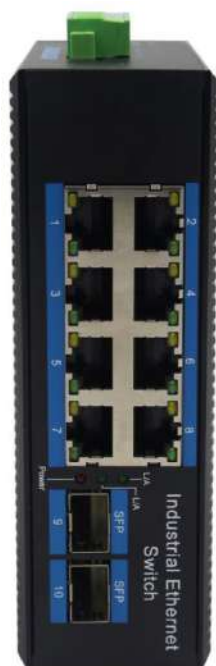


Ordering information

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

ZDGS-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 μ s)

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 ZDGS-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 ZDGS-1082GF an easy-to-use industrial-grade device, providing a reliable and convenient solution for users to connect their Ethernet devices.

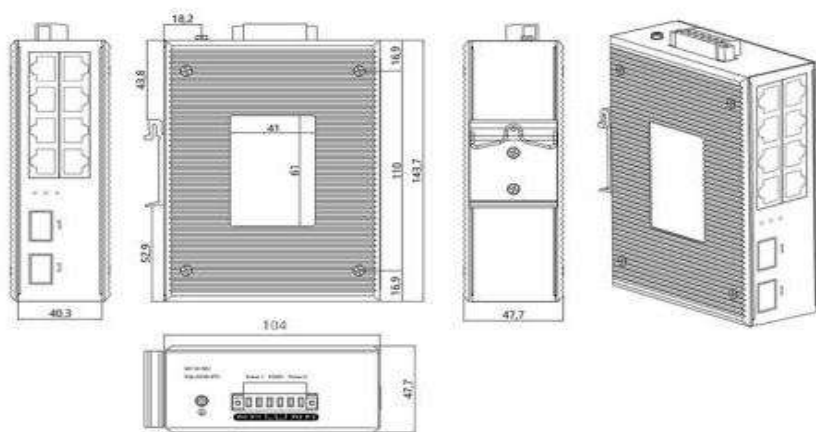
Specification

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; IEEE802.3i10Base-T;IEEE802.3u;100Base-TX/FX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;IEEE802.3x;
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~80°C (-40~180°F) Relative humidity :5 %~95 % (No condensation)
Industrial standard	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS :IEC(EN)61000-4-2(ESD) : ± 8 kV contact discharge, ± 12 kV air discharge IEC(EN)61000-4-3(RS): 10V/m(80~1000MHz) IEC(EN)61000-4-5(Surge) : net gape : ± 2 kV CM// ± 1 kV DM ; IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz ~ 80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1sI EC(EN)61000-4-8 Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6

Exchange properties	Transmission mode: Store-and-forward MAC address: 8K Cache: 2 Mbit Backplane bandwidth: 20G Switching delay: < 10 μs Power consumption: <8W
Power Supply	Input voltage: DC 12-52V. Support dual power redundancy Support built-in overcurrent protection (4.0A) Support reverse connection protection
Mechanical structure	Housing: IP40 protection grade, metal housing Installation: DIN rail, wall-mounted installation Cooling method: Natural cooling, no fan Weight: 0.64 Kg Dimensions: 143.7×104mm×47.7mm(length x width x height)
LED indicators	Power Light: PWR 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
ZDGS-1082GF	2 optical 8 electrical all Gigabit	12-52 Dual Power Supply Redundancy

ZDGS-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 (8/20 μ s)

Introduction

ZDGS-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 ZDGS-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 ZDGS-1028GF an easy-to-use industrial-grade device, providing a reliable and convenient solution for users to connect their Ethernet devices.

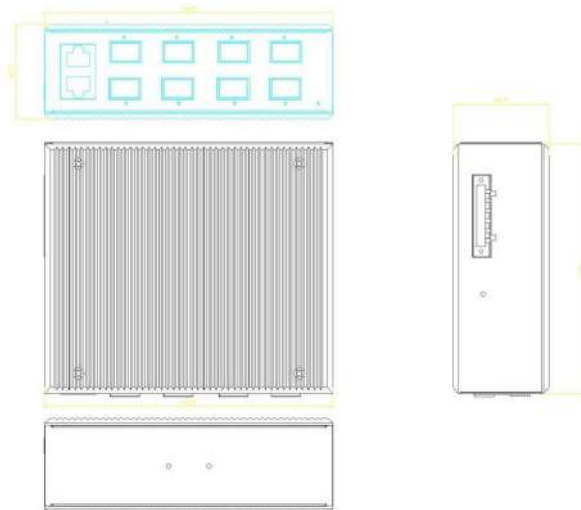
Specification

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 10Base-T;IEEE802.3u;100Base-TX/FX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X; IEEE802.3x;
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~80°C (-40~180°F) Relative humidity :5 %~95 % (No condensation)
Industrial standard	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8 kV contact discharge, ± 12 kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT) : Power cable : ± 4 kV ; data cable : ± 2 kV EC(EN)61000-4-5(Surge) : net gape : ± 4 kV CM// ± 2 kV DM ; IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6

Exchange properties	Transmission mode: Store-and-forward MAC address: 8K Cache: 2 Mbit Backplane bandwidth: 20G Switching delay: < 10 μs Power consumption: <10W
Power Supply	Input voltage: DC 12-52V. Support dual power redundancy Support built-in overcurrent protection (4.0A) Support reverse connection protection
Mechanical structure	Housing: IP40 protection grade, metal housing Installation: DIN rail, wall-mounted installation Cooling method: Natural cooling, no fan Weight: 0.82 Kg Dimensions: 143.7×125mm×47.7mm(length x width x height)
LED indicators	Power Light: PWR 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
ZDGS-1028GF	8 optical 2 electrical full Gigabit	12-52 Dual power supply redundancy

ZDGS-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 (8/20 μ s)

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 ZDGS-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 ZDGS-1162GF an easy-to-use industrial-grade device, providing a reliable and convenient solution for users' Ethernet equipment networking.

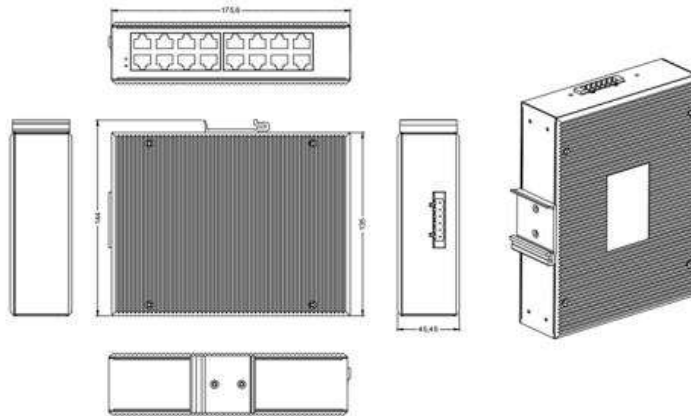
Specification

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 10Base-T;IEEE802.3u;100Base-TX/FX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;IEEE802.3x;
Work environment	Operating temperature:-40~80°C Storage temperature:-40~80°C Relative humidity :5 %~95 % (No condensation)
Industrial standard	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8 kV contact discharge, ± 15 kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT) : Power line : ± 4 kV ; date cable : ± 2 kV EC(EN)61000-4-5(Surge) : Power line : ± 2 kV CM/ ± 1 kV DM ; USB cable : ± 1 kV IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6

Exchange properties	Transmission mode: Store-and-forward MAC address: 8K Cache: 4 Mbit Backplane bandwidth: 56G Switching delay: < 10 μs Power consumption: <10W
Power Supply	Input voltage: DC 12-52V (Dual Power Supply redundant backup) Connection terminals: Phoenix terminals Support dual power redundancy Support built-in overcurrent protection (4.0A) Support reverse connection protection
Mechanical structure	Housing: IP40 protection grade, metal housing Installation: DIN rail, wall-mounted installation Cooling method: Natural cooling, no fan Weight: 0.65 Kg Dimensions: 175.6×135mm×45.5mm(width x depth x height)
LED indicators	Power Light: PWR 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
ZDGS-1162GF	2 optical 16 electrical full Gigabit	12-52 Dual power supply redundancy

ZDGS-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 (8/20 μ s)

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 ZDGS-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 ZDGS-1240 a plug-and-play industrial-grade device, providing users with 24-a reliable and convenient solution for networking Ethernet devices.

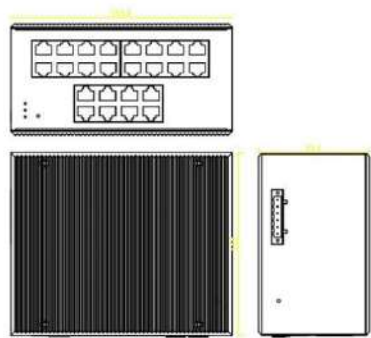
Specification

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

Power Supply	Input voltage: DC 12-52V Support built-in overcurrent protection (4.0A)
Mechanical structure	Housing: IP40 protection grade, metal housing Installation: rail Cooling method: Natural cooling, no fan Weight: < 2 Kg Dimensions: 166×137×83.5mm(width x depth x height)
LED indicators	Power Light: PWR 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
ZDGS-1240	24 Gigabit	DC12-52V

ZDGS-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 ZDGS-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 ZDGS-1242GF a plug-and-play industrial-grade device, providing users with a reliable and 25-convenient solution for networking Ethernet devices.

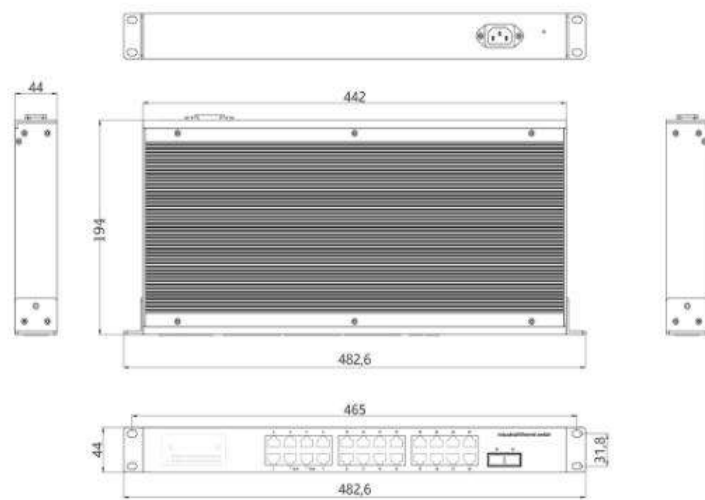
Specification

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 10Base-T;IEEE802.3u;100Base-TX/FX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;IEEE802.3x;
Work environment	Operating temperature:-40~80°C Storage temperature:-40~85°C Relative humidity :5 %~95 % (No condensation)
Industrial standard	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 15kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT) : Power line : ± 2kV ; USB cable : ± 1kV EC(EN)61000-4-5(Surge) : Power line : ± 2kV CM/ ± 1kV DM ; USB cable : ± 1kV IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6

Exchange properties	Transmission mode: Store-and-forward MAC address: 8K Cache: 4 Mbit Backplane bandwidth: 56G Switching delay: < 10 μs Power consumption: <15W
Power Supply	Input voltage: AC 110-240V Support built-in overcurrent protection (4.0A) Support reverse connection protection
Mechanical structure	Housing: IP40 protection grade, metal housing Installation: rack-mounted installation Cooling method: Natural cooling, no fan Weight: 2.66Kg Dimensions: 442×194×44mm(width x depth x height)
LED indicators	Power Light: PWR 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
ZDGS-1242GF	2 optical 24 electrical full Gigabit	12-52 Dual power supply redundancy

ZDS-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

ZDS-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.

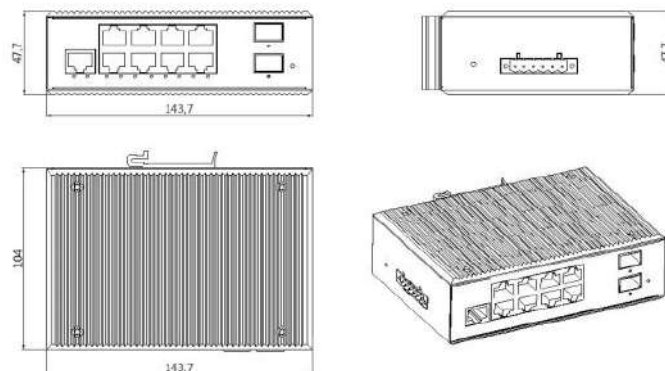
Specification

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, IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX, IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol, IEEE802.1D-Spanning Tree Protocol, IEEE802.1w-Rapid Spanning Tree Protocol, IEEE802.1Q -VLAN Tagging, IEEE802.1p -Class of Service, IEEE802.1X-Port Based Network Access Control, etc.
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~85°C (-40~185°F) Relative humidity :5 %~95 % (No condensation)
Industry standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 12kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT): Ethernet port: ± 4kV CM//± 2kV DM; IEC(EN)61000-4-5(Surge): Ethernet port: ± 4kV CM//± 2kV DM ; IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6

Exchange properties	Transmission mode: Store-and-forward MAC address: 4K Switching capacity: 12.8Gbps Packet forwarding rate: 9.5Mpps Switching delay: < 10 μs Power consumption: <10W
Network security	Support IEEE 802.1x Support HTTP Support RADIUS Support MAC address binding
Management and maintenance	Support Console, Telnet, WEB management methods Support SNMP v1/v2/v3
Power Supply	Input voltage: DC12-52V (dual power supply redundant backup) Access terminal: Phoenix terminal Support dual power supply redundancy Support reverse connection protection
Mechanical structure	Housing: IP40 protection grade, metal housing Dimensions: 143.7× 104× 47.7mm Weight: 0.6Kg Installation: DIN rail installation, wall-mounted installation Cooling method: Natural cooling, no fan
Redundancy technology	Support STP/RSTP/MSTP Support ERPS
Multicast technology	IGMP snooping MLD snooping
Switching function	Support port speed limit Support port aggregation Support port flow control Support port VLAN, IEEE 802.1Q VLAN Support broadcast storm suppression Optical port supports Gigabit/100M
LED indicators	Power Light: PWR 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
ZDS-2082GF	Gigabit 2 optical 100M 8 electrical	DC12-52V (dual power supply redundancy backup)

ZDGS-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

ZDGS-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.

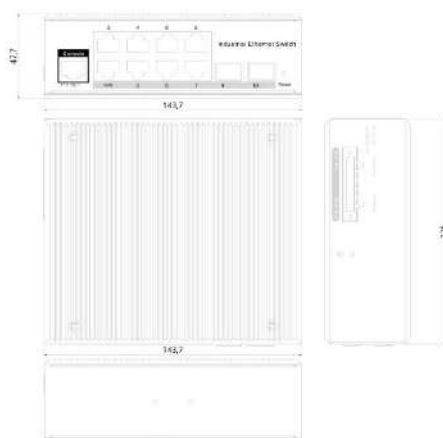
Specification

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 MAC address: 8K Cache: 12Mbit Backplane bandwidth: 38G Switching delay: < 10 μs Power consumption: <10W
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~80°C (-40~180°F) Relative humidity :5 %~95 % (No condensation)
Ethernet standards	IEEE802.3-10BaseT, IEEE802.3u-100BaseTX/100Base-FX, IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX, IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol, IEEE802.1D-Spanning Tree Protocol, IEEE802.1w-Rapid Spanning Tree Protocol, IEEE802.1Q -VLAN Tagging, IEEE802.1p -Class of Service, IEEE802.1X-Port Based Network Access Control, etc.
Industry standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 12kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz)

	IEC(EN)61000-4-4(EFT): Ethernet port: $\pm 4\text{kV CM}/\pm 2\text{kV DM}$; IEC(EN)61000-4-5(Surge): Ethernet port: $\pm 4\text{kV CM}/\pm 2\text{kV DM}$; IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 Shock: IEC 60068-2-27 Firewall: IEC 60068-2-32 Vibration: IEC 60068-2-6
Network security	Support IEEE 802.1x Support HTTP Support RADIUS Support MAC address binding
Management and maintenance	Support Console, Telnet, WEB management methods Support SNMP v1/v2/v3
Power Supply	Input voltage: DC12-52V (dual power supply redundant backup) Access terminal: Phoenix terminal Support dual power supply redundancy Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical structure	Housing: IP40 protection grade, metal housing Dimensions: 143.7×125×47.7mm Weight: 0.64Kg Installation: DIN rail installation, wall-mounted installation Cooling method: Natural cooling, no fan
Redundancy technology	Support STP/RSTP/MSTP Support ERPS
Multicast technology	IGMP snooping Support static multicast
Switching function	Support port speed limit Support port aggregation Support port flow control Support port VLAN, IEEE 802.1Q VLAN Support broadcast storm suppression
LED indicators	Power Light: PWR 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
ZDGS-2082GF	2 optical 8 electrical all Gigabit	DC12-52V (dual power supply redundancy backup)

ZDGS-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

ZDGS-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.

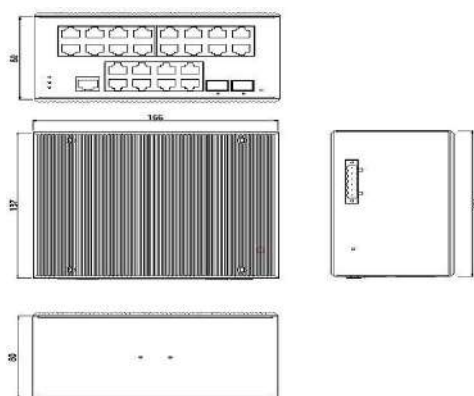
Specification

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, IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX, IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol, IEEE802.1D-Spanning Tree Protocol, IEEE802.1w-Rapid Spanning Tree Protocol, IEEE802.1Q -VLAN Tagging, IEEE802.1p -Class of Service, IEEE802.1X-Port Based Network Access Control, etc.
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~85°C (-40~185°F) Relative humidity :5%~95 % (No condensation)
Industry standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 12kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT): Ethernet port: ± 4kV CM//± 2kV DM; IEC(EN)61000-4-5(Surge): Ethernet port: ± 4kV CM//± 2kV DM ; IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6

Exchange properties	Transmission mode: Store-and-forward MAC address: 8K Cache: 12Mbit Backplane bandwidth: 56G Switching delay: < 10 μs Power consumption: <20W
Network security	Support IEEE 802.1x Support HTTP Support MAC address binding Anti-attack
Management and maintenance	Support Console, Telnet, WEB management methods Support SNMP v1/v2/v3
Power Supply	Input voltage: DC12-52V Access terminal: Phoenix terminal Support dual power redundancy Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical structure	Housing: IP40 protection grade, metal casing Dimensions:166*137*80mm Weight: 1.25Kg Installation: DIN rail installation, wall-mounted installation Cooling method: Natural cooling, no fan
Redundancy technology	Support STP/RSTP/MSTP Support ERPS
Multicast technology	IGMP snooping
Switching function	Support port speed limit Support port aggregation Support port flow control Support port VLAN, IEEE 802.1Q VLAN Support broadcast storm suppression
LED indicators	Power Light: PWR 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
ZDGS-2244GF	4 optical 24 electrical full Gigabit	DC12-52V

ZDGS-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

ZDGS-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.

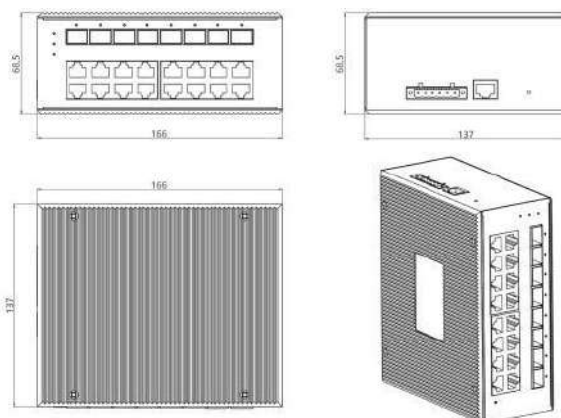
Specification

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, IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX, IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol, IEEE802.1D-Spanning Tree Protocol, IEEE802.1w-Rapid Spanning Tree Protocol, IEEE802.1Q -VLAN Tagging, IEEE802.1p -Class of Service, IEEE802.1X-Port Based Network Access Control, etc.
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~80°C (-40~185°F) Relative humidity :5%~95 % (No condensation)
Industry standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 12kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT): Ethernet port: ± 2kV CM/± 1kV DM; IEC(EN)61000-4-5(Surge): Ethernet port: ± 2kV CM/± 1kV DM ; IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6

Exchange properties	Transmission mode: Store-and-forward MAC address: 8K Cache: 12Mbit Backplane bandwidth: 56G Switching delay: < 10 μs Power consumption: <20W
Network security	Support IEEE 802.1x Support HTTP Support RADIUS Support MAC address binding Anti-attack
Management and maintenance	Support Console, Telnet, WEB management methods Support SNMP v1/v2/v3
Power Supply	Input voltage: DC12-52V Access terminal: Phoenix terminal Support dual power redundancy Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical characteristics	Casing: IP40 protection grade, metal casing Dimensions:166*137*68.5mm Weight: 1.25Kg Installation: DIN rail installation, wall-mounted installation 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 Support port VLAN, IEEE 802.1Q VLAN Support broadcast storm suppression
LED indicators	Power Light: PWR 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
ZDGS-2168GF	8 optical 16 electrical all Gigabit	DC12-52V

ZRS-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

ZRS-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.

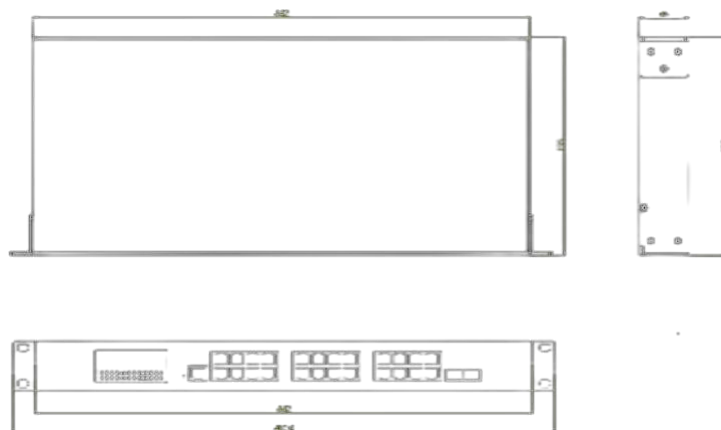
Specification

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, IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX, IEEE802.3ab-1000BaseTX, IEEE802.1D-Spanning Tree Protocol; IEEE802.1w-Rapid Spanning Tree Protocol; IEEE802.1Q -VLAN Tagging, IEEE802.1p -Class of Service, IEEE802.1X-Port Based Network Access Control, etc.
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~80°C (-40~180°F) Relative humidity :5%~95 % (No condensation)
Industry standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 15kV air discharge IEC(EN)61000-4-3(RS) : 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT): Power line:± 2kVCM/± 4kVDM;Data line:± 2kV IEC(EN)61000-4-5(Surge):Power line:± 2kVCM/± 4kVDM;Data Line:± 2kV IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 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 Packet forwarding rate 9.5Mpps VLAN ID range: 1 ~ 4096 Multicast master number: 512 MAC address table size: 4K Switching delay: < 5 μs Power consumption: < 400W
Network security	Support IEEE 802.1x Support HTTPS Support MAC address binding Anti-attack
Management and maintenance	Support Console, Telnet, WEB management methods Support SNMP v1/v2/v3
Power Supply	Input voltage: AC100-240V Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical characteristics	Casing: IP40 protection grade, metal casing Dimensions: 442×194×44mm Weight: 4Kg Installation: DIN rail installation, wall installation 67 Heat dissipation method: natural cooling, fanless
Redundancy technology	Support STP/RSTP/MSTP Support ERPS
Multicast technology	IGMP snooping, MLD snooping
Switching function	Support port speed limit Support port aggregation Support port flow control Support port VLAN, IEEE 802.1Q VLAN Support broadcast storm suppression
LED indicators	Power Light: PWR 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
ZRS-2242GF	2 optical 24 electrical full Gigabit	AC100-240V

ZRGS-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

ZRGS-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 for fast and stable network terminal access networks in industrial application fields such as factory automation, intelligent transportation, and video surveillance.

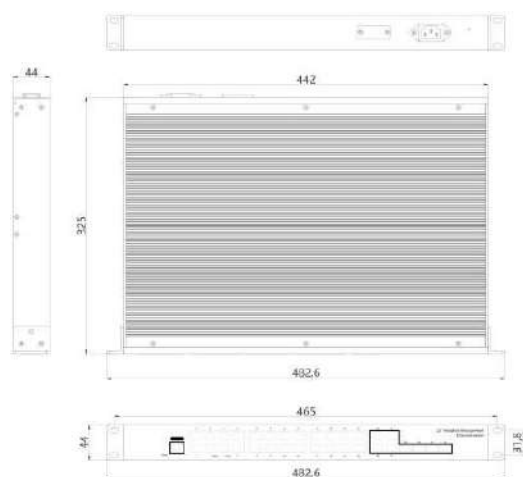
Specification

RJ45 Port	10/100/1000M automatic 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, IEEE802.3x-Flow Control, IEEE802.3z-1000BaseLX, IEEE802.3ab-1000BaseTX, IEEE802.1ab Logical Link Discovery Protocol, IEEE802.1D-Spanning Tree Protocol, IEEE802.1w-Rapid Spanning Tree Protocol, IEEE802.1Q -VLAN Tagging, IEEE802.1p -Class of Service, IEEE802.1X-Port Based Network Access Control, etc.
Work environment	Operating temperature:-40~80°C (-40~180°F) Storage temperature:-40~80°C (-40~180°F) Relative humidity :5%~95 % (No condensation)
Industry standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC(EN)61000-4-2(ESD) : ± 8kV contact discharge, ± 15kV air discharge IEC(EN)61000-4-3(RS): 10V/m(80~1000MHz) IEC(EN)61000-4-4(EFT): Power line:± 1kVCM/± 2kVDM; Data line:± 2kV IEC(EN)61000-4-5(Surge): Power line:± 1kVCM/± 2kVDM; Data Line:± 2kV IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz ~ 150kHz),10V(150kHz~80MHz) IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s IEC (EN) 61000-4-8 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 Packet forwarding rate 131Mpps VLAN ID range: 1 ~ 4096 Multicast master number: 512 MAC address table size: 16K Packet buffer size: 16Mbits Switching delay: < 5 μs Power consumption: < 45W
Network security	Support IEEE 802.1x Support HTTP Support RADIUS Support MAC address binding Anti-attack
Management and maintenance	Support Console, Telnet, WEB management methods Support SNMP v1/v2c/v3
Power Supply	Input voltage: AC220V Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical characteristics	Casing: IP40 protection grade, metal casing Dimensions: 442×325×44mm Weight: 3.12Kg Installation method: rack installation Heat dissipation method: natural cooling, no fan 70
Redundancy technology	Support STP/RSTP/MSTP Support ERPS
Multicast technology	IGMP snooping
Switching function	Support port speed limit Support port aggregation Support port flow control Support port VLAN, IEEE 802.1Q VLAN Support broadcast storm suppression
LED indicators	Power indicator: PWR 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
ZRGS-2244GF	4 optical 24 electrical 4 optical electrical composite full Gigabit	AC220V

ZRGS-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 ZRGS-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 ZRGS-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 ZRGS-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

ZRGS-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

ZRGS-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 ZRGS-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.

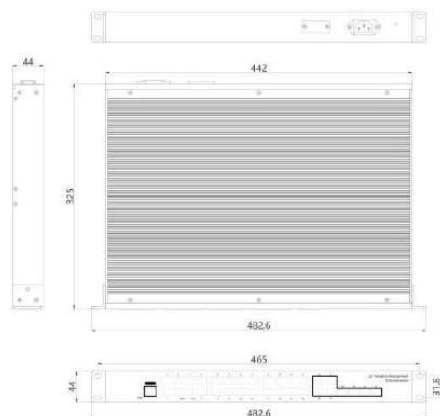
Specification

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) 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 Support static routing; Support dynamic routing RIP, RIPv6, OSPF, OSPFv3; Support VRRP (Virtual Routing Redundancy Protocol)
QOS	SP (Strict Priority), strict priority rotation algorithm; WFQ (Weighted Fair Queuing) weighted fair queuing; WRR (Weighted Round Robin), weighted priority rotation algorithm; Random Early Detect (RED), random early detection algorithm; Weighted Random Early Detection (WRED), weighted random early detection algorithm; Head Of Line, anti-congestion mechanism; Best-Effort Service, best-effort service; First come first served, first come first served algorithm; 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; Support WEB to restore factory configuration; Support system log function; Support Ping detection, traceroute detection, and network cable detection; Support WEB interface management (supports http and https protocols); Support CLI interface management; Support Telnet remote management; Support SSH 2.0; Supports SNMP network management; Support RMON; Support LLDP;
VLAN	Support up to 4096 VLANs; Support VLANs in accordance with the 802.1Q standard; Support QinQ 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; Support RSTP Rapid Spanning Tree Protocol; Support MSTP Multiple Spanning Tree Protocol;
Supported Protocol Standards	IEEE 802.3ad, link aggregation protocol; IEEE 802.3, 10BASE-T Ethernet; IEEE 802.3u, Fast Ethernet standard;IEEE 802.3ab, Gigabit Ethernet standard; IEEE 802.3z,Gigabit Ethernet fiber standard;IEEE 802.3ae, 10G Ethernet standard; IEEE 802.3x, full-duplex Ethernet data link layer flow control; IEEE 802.3az, EEE energy-efficient Ethernet standard;
Negotiation mode	Electrical port supports 10/100/1000M auto-negotiation Optical port supports 1G/2.5G/10G multiple rate modes
Multicast control	Support IGMP Snooping; 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; Support IP Source Guard; Supports ARP Detection function; Support IEEE 802.1x port authentication; Supports Radius authentication;
Multicast control	Support NTP Support PTP (1588v2)
DHCP	Support DHCP Client; Support DHCP Server; Support DHCP Snooping; Support DHCP Relay;
Work environment	Operating temperature: -40 to 80 ° C Storage temperature: -40 to 85 ° C Operating humidity: 10% to 95% (no condensation) 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
ZRGS-3240-4XF	4 10G optical 24 Gigabit electrical	AC/DC 110-240V, DC36-72V (dual power supply) Support built-in overcurrent 4.0A protection

ZRGS-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

ZRGS-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 ZRGS-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

ZRGS-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

ZRGS-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 ZRGS-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.

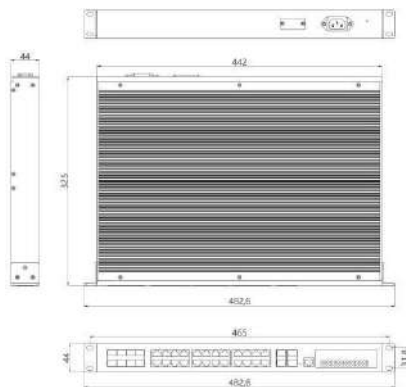
Specification

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) 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 Support static routing; Support dynamic routing RIP, RIPvng, OSPF, OSPFv3; Support VRRP (Virtual Routing Redundancy Protocol)
QOS	SP (Strict Priority), strict priority rotation algorithm; WFQ (Weighted Fair Queuing) weighted fair queuing; WRR (Weighted Round Robin), weighted priority rotation algorithm; Random Early Detect (RED), random early detection algorithm; Weighted Random Early Detection (WRED), weighted random early detection algorithm; Head Of Line, anti-congestion mechanism; Best-Effort Service, best-effort service; First come first served, first come first served algorithm; 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; Support WEB to restore factory configuration; Support system log function; Support Ping detection, traceroute detection, and network cable detection; Support WEB interface management (supports http and https protocols); Support CLI interface management; Support Telnet remote management; Support SSH 2.0; Supports SNMP network management; Support RMON; Support LLDP;
VLAN	Support up to 4096 VLANs; Support VLANs in accordance with the 802.1Q standard; Support QinQ 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; Support RSTP Rapid Spanning Tree Protocol; Support MSTP Multiple Spanning Tree Protocol;
Supported Protocol Standards	IEEE 802.3ad, link aggregation protocol; IEEE 802.3, 10BASE-T Ethernet; IEEE 802.3u, Fast Ethernet standard;IEEE 802.3ab, Gigabit Ethernet standard; IEEE 802.3z,Gigabit Ethernet fiber standard;IEEE 802.3ae, 10G Ethernet standard; IEEE 802.3x, full-duplex Ethernet data link layer flow control; IEEE 802.3az, EEE energy-efficient Ethernet standard;
Negotiation mode	Electrical port supports 10/100/1000M auto-negotiation Optical port supports 1G/2.5G/10G multiple rate modes
Multicast control	Support IGMP Snooping; 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; Support IP Source Guard; Supports ARP Detection function; Support IEEE 802.1x port authentication; Supports Radius authentication;
Multicast control	Support NTP Support PTP (1588v2)
DHCP	Support DHCP Client; Support DHCP Server; Support DHCP Snooping; Support DHCP Relay;
Work environment	Operating temperature: -40 to 80 ° C Storage temperature: -40 to 85 ° C Operating humidity: 10% to 90% (no condensation) 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
ZRGS-3168GC-4XF	410G optical 16 Gigabit electrical 8 optical and electrical Multiplexing	AC/DC 110-240V, DC36-72V (Redundant dual power supply) Support built-in overcurrent 4.0A protection

ZRGS-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

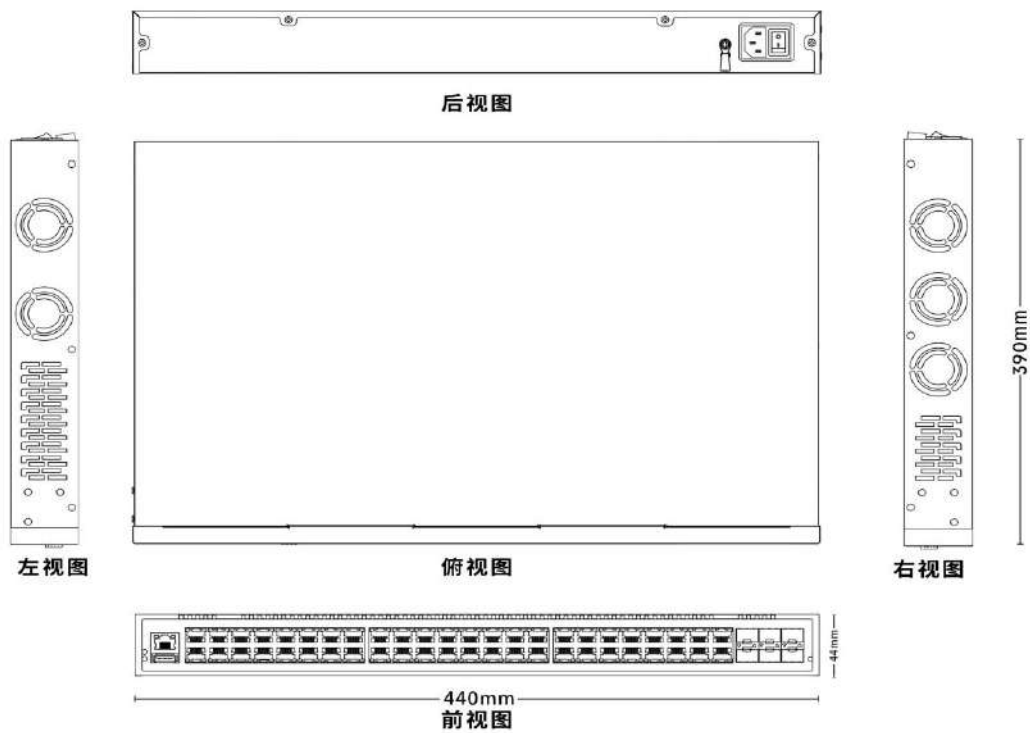
Interface	Service interface: 6*10G Base-X+48*10/100/1000 Base-T Management interface: Support console Power interface: 220V/AC interface LED lights: PWR, SYS, Link/ACT LED
Cable type and distance	Twisted pair: 0-100m (CAT5e, CAT6) Single-mode fiber: 20/40/60/80/100KM Multimode fiber: 550m
Electrical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

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

Temperature	Operating temperature: -10° C~50° C 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 Network port surge protection: Common mode 6KV, differential mode 2KV Anti-static interference: Contact 8K, air 15K 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
ZRGS-3486XF	6 10G optical 48 1G electrical 8 optical/electrical multiplexing	AC100~240V/50-60HZ

ZEC-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 ZMC-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 ZMC-101a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

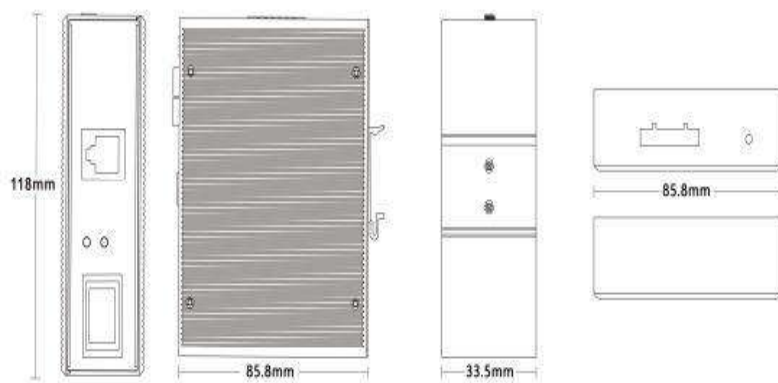
Specification

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

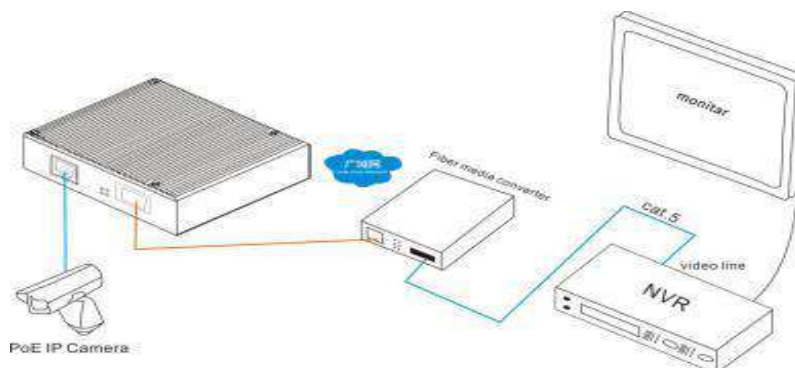
Power supply	Input voltage: DC12-52V (dual power supply redundant backup) Access terminal: Phoenix terminal Support dual power supply redundancy Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical characteristics	Casing: IP40 protection level, metal casing Installation: DIN rail type, wall-mounted installation Cooling method: natural cooling, no fan Weight: 0.36Kg 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
ZEC-101	1 optical 1 electrical 100M	12-52 Dual power supply redundancy

ZMGC-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/100Base-T/1000Base-TX electrical port and 1pcs 1000Base-X optical port. The product complies with FCC, CE, and ROHS standards. The ZMGC-101 series switches have an operating temperature of -40° C to 80° C, are extremely rugged and can adapt to various 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 ZMGC-101 a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

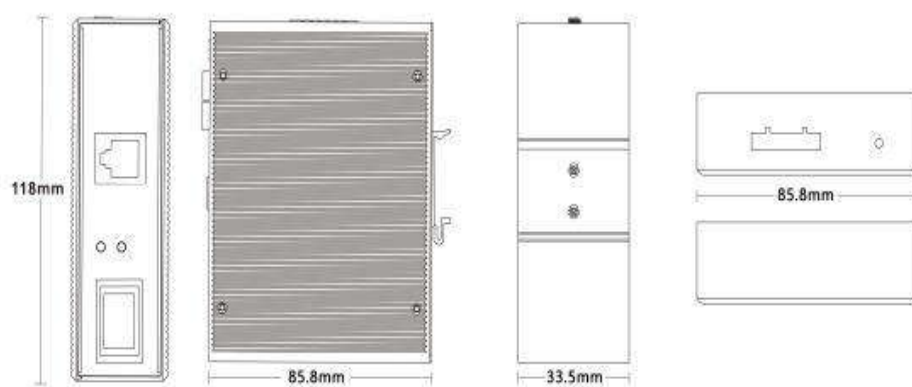
Specification

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

Power supply	Input voltage: DC12-52V (dual power supply redundant backup) Access terminal: Phoenix terminal Support dual power supply redundancy Support built-in overcurrent 4.0A protection Support reverse connection protection
Mechanical characteristics	Housing: IP40 protection grade, metal housing Installation: DIN rail, wall-mounted Cooling method: natural cooling, no fan Weight: 0.36Kg Dimensions: 118 x 85.8 x 33.5mm (length x width x height)
LED indicators	Power indicator: PWR 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
ZMGC-101	1 optical 1 electrical Gigabit	12-52 Dual power supply redundancy

ZDPS-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 (8/20 μs)

° C to 80° C,

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 ZDPS-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 ZDPS-1080 a plug-and-play industrial-grade device, providing users with a reliable and convenient solution for networking Ethernet devices.

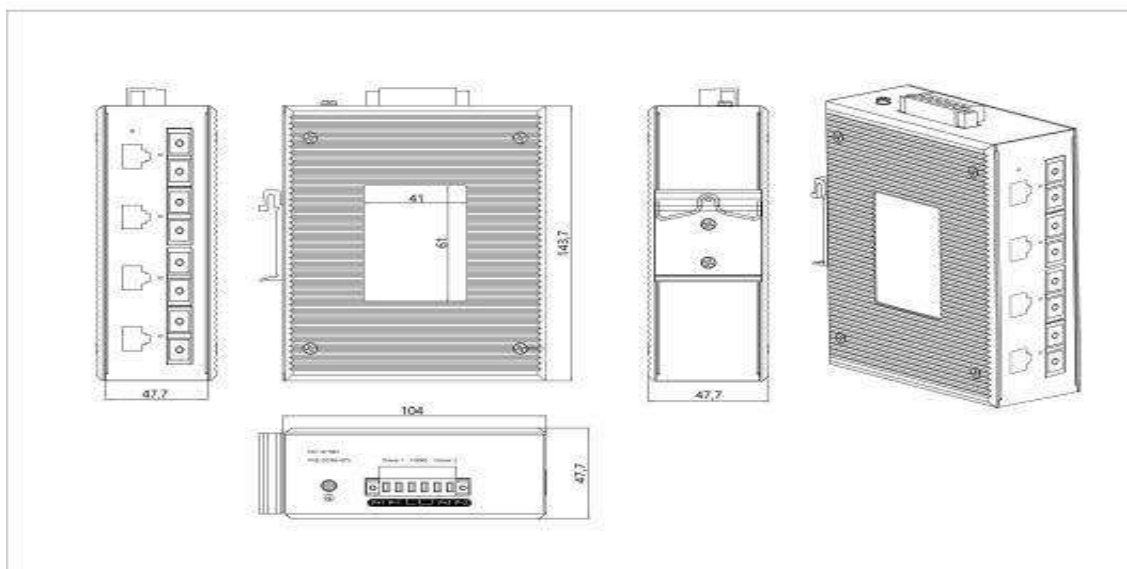
Specification

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

Exchange properties	Transmission mode: Store-and-forward Cache: 1 Mbit Switching delay: < 10 μs	MAC address: 2K Backplane bandwidth: 1.6G Power consumption: <5W
Power Supply	Input voltage: DC 12-52V(dual power supply redundant backup) Access terminal: Phoenix terminal Support dual power redundancy Support built-in overcurrent protection (4.0A) Support reverse connection protection	
Mechanical structure	Housing: IP40 protection grade, metal housing Installation: DIN rail, wall-mounted installation Cooling method: Natural cooling, no fan Weight: 0.64 Kg Dimensions: 143.7×104mm×47.7mm(length x width x height)	
LED indicators	Power Light: PWR 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
ZDPS-1080	8 100M electrical ports	12-52 Dual Power Supply Redundancy

ZDGS-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 ZDGS-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 ZDGS-1082GF an easy-to-use industrial-grade device, providing a reliable and convenient solution for users to connect their Ethernet devices.

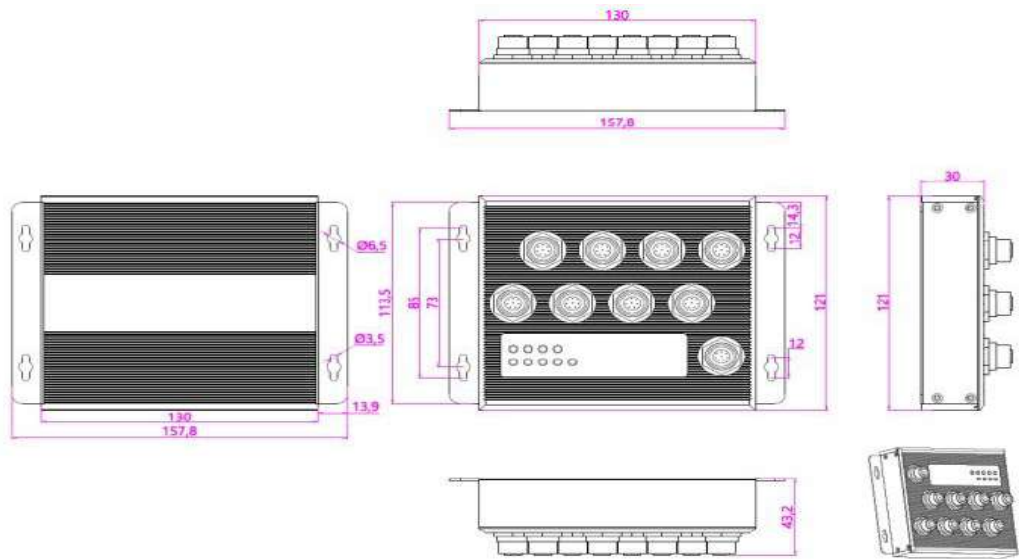
Specification

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

LED indicators	Power Light: PWR 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
ZDGS-1080-M12	Gigabit 8 ports	12-52 Dual Power Supply Redundancy