

A collage of images illustrating various industries and technologies. It includes a close-up of welding sparks, a row of wind turbines, solar panels in a field, workers on a solar panel array, a modern high-speed train in motion, a commercial airplane in flight, and a busy highway with multiple lanes of traffic.

3onedata
Make network communication more reliable

Selection Guide Industrial Networking Solutions

3onedata
Make network communication more reliable

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About 3onedata

About 3onedata

Shenzhen 3onedata Technology Co., Ltd.(referred to as 3onedata for short) is the only enterprise awarded the well-known brands in the field of industrial Ethernet communication. Established in 2001, it has successively rolled out thousands of products such as industrial Ethernet switches, industrial PoE switches, embedded industrial Ethernet switch modules, serial device servers, modbus gateways, media converters, interface converters and lightening protection equipment.



Scope of business

Provide reliable industrial communications products, professional industry solutions and high-quality after-sales technical services to worldwide.

【Product coverage】 Industrial Ethernet switch, embedded Ethernet switches module, serial device server, media converter, interface converter, protocol converter, surge protector.

【Application area】

Power, Renewable Energy, Transportation, Coal mine, Railway, Rail transit, Highway, Aviation Industry, Oil, Chemical, Factory Automation, Water Treatment and Special Industry, etc.

3onedata advantages

【Strong R&D strength】

- Have technologic cooperation with Southeast University, Nanjing University of Science and Technology , Sun Yat-Sen University, and Electric Power Research Institute etc.
- Has a domestic first-class R&D team of more than 80 peoples.

【Leading technology in the industry】

- First company introduced the concept of Embedded Industrial Ethernet switch module in China.
- The industry's first launch of a CAN Bus, serial port and re-development of Industrial Ethernet switch core module.
- Owned more than 100 of invention patents, utility model patents, software copyrights.

【Perfect service system】

- 12 branches of the country, fast and professional local service support.
- Appointed person of Hotline Advisory Answer, anytime, anywhere network remote assistance service.
- One-stop customer service, meet the special requirements of customer's system design.

Corporate Culture

【Vision】 Become a global leading brand in the field of industrial network communication.

【Mission】 Make network communication more reliable.

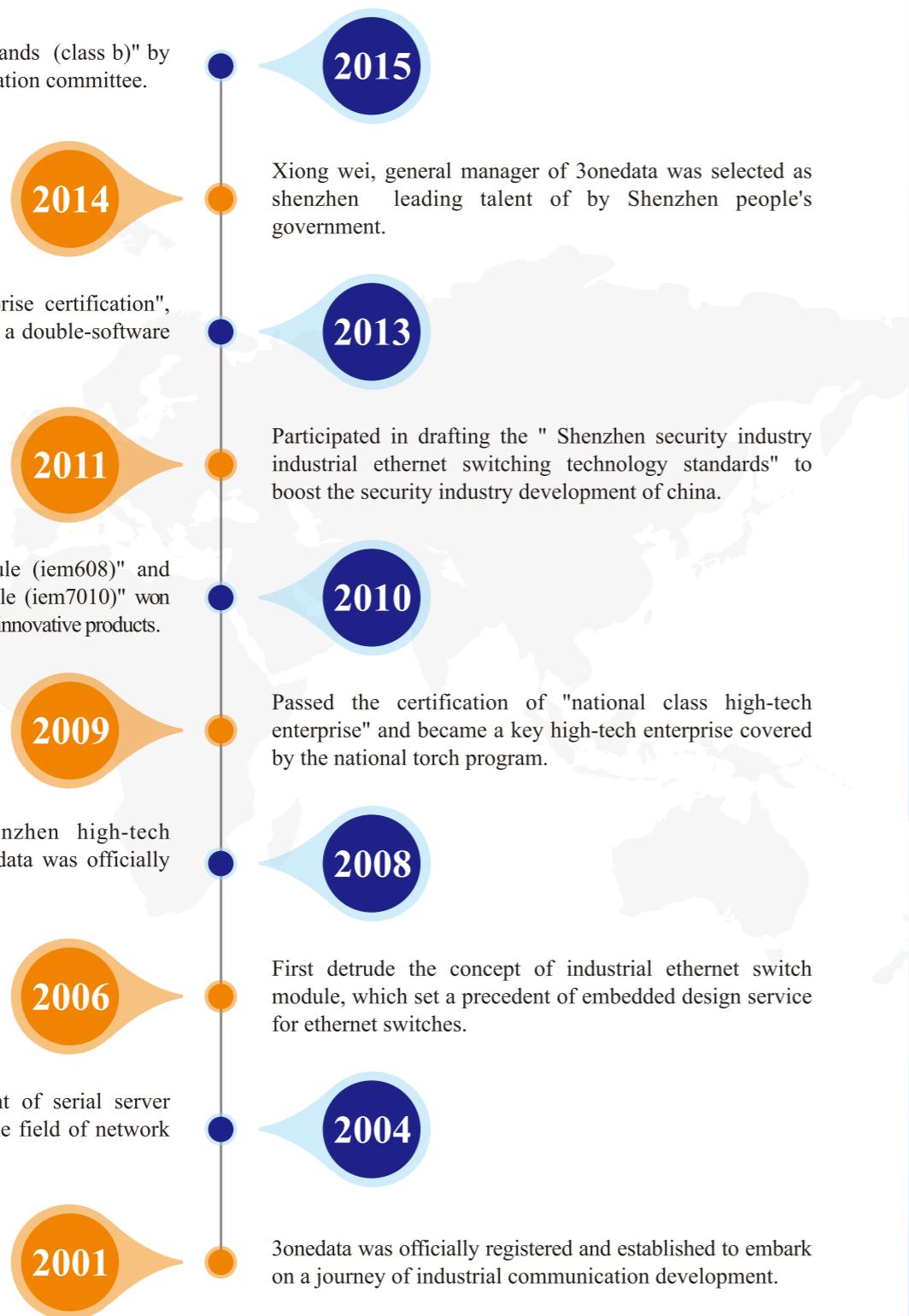
【Core Values】 Customer oriented, sustainable innovation, win-win cooperation and for the future.

【Core Concepts】 Committed to the field of Ethernet communication and transmission, leading the development of industrial IP network.

Company Information

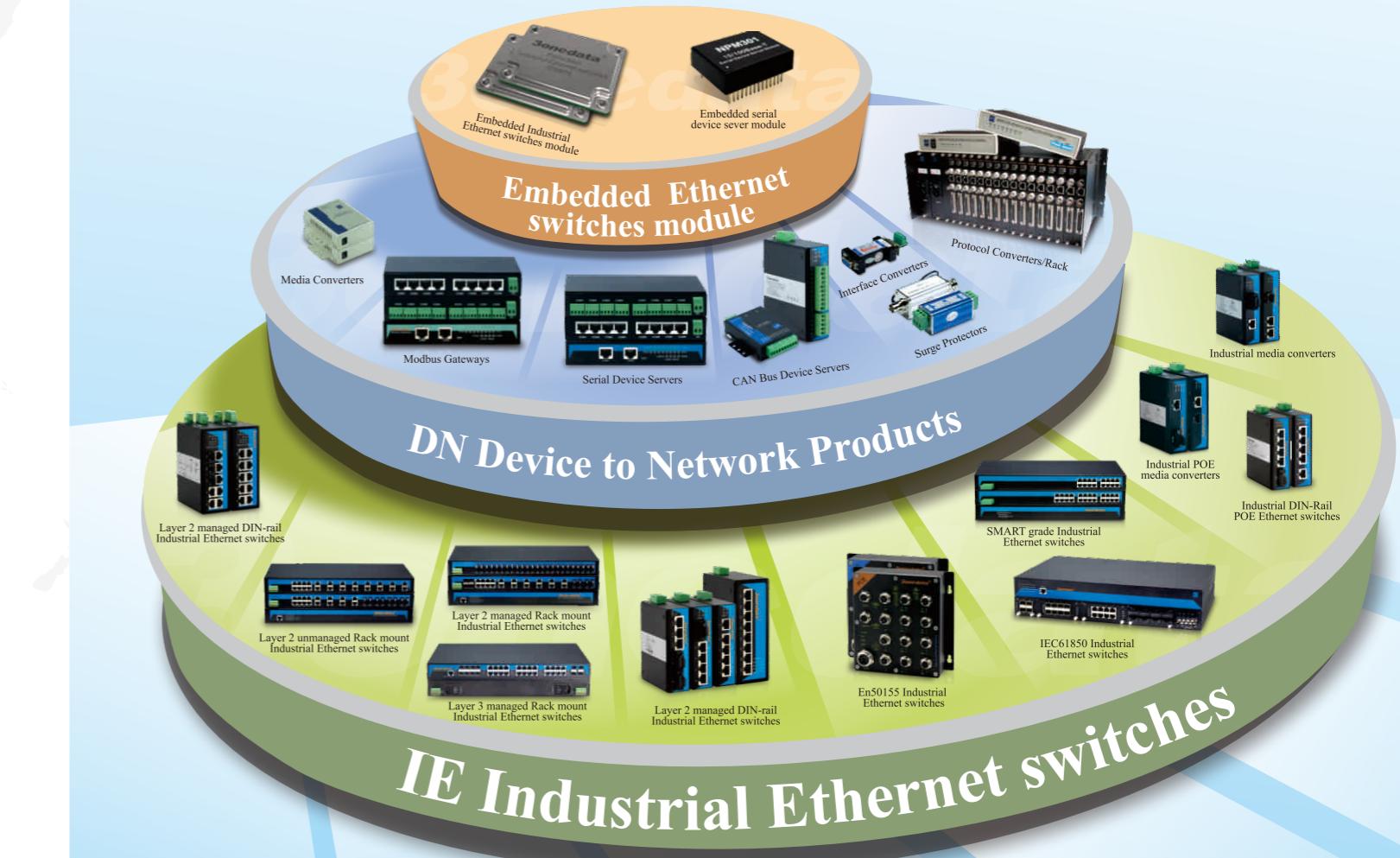
Milestone

Selected as "Shenzhen well-known brands (class b)" by the shenzhen well-known brand evaluation committee.



Product Coverage

3onedata has 3 product lines including Industrial Ethernet switches(IE), Embedded module(EM) and device to network(DN). These products have strong industrial characteristics, configuration operation is easy to understand, superior safety performance, focusing on industry customized and other advantages. 3onedata provide a one-stop solution for industrial communication, which can build a secure and reliable network communication platform for customers.



Global Sales and Services

Since its established, 3onedata adhere to technological innovation oriented, keen grasp the market demand, with the leading technology and professional service, focusing on Intelligent Transportation, Rail Transportation, Smart Grid, New Energy, Coal Mine, Factory Automation, Security, Military and other industries, and get a series of good results. 3onedata business scope covering various provinces and nationwide cities , and throughout Southeast Asia, Middle East, Europe, Americas and Africa, totally more than 30 countries and regions.



3onedata is not only the world's leading provider of industrial Ethernet solutions, but also the era of the Internet facilitator



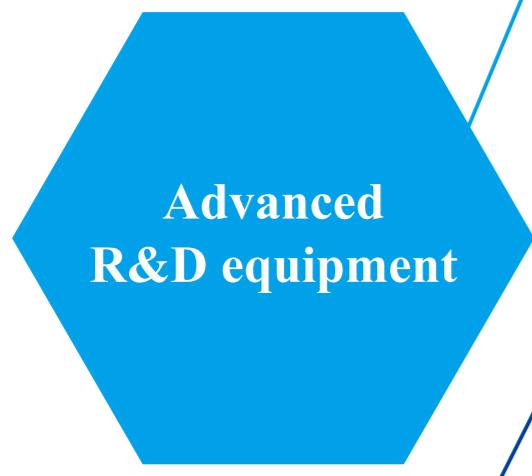
Quality Assurance

3onedata communication has always been adhering to the "excellence" of product concept.3onedata always pay attention to the products quality, from research and development to components purchasing , from production to shipping detection, from installation and debugging to after-sales service, We focus on every detail of the quality control and tracking, to ensure that the factory production of reliable quality.



R&D Quality Assurance

Produce Quality Control



To ensure the authenticity and scientific of product specifications, 3onedata purchase many test instruments and laboratory equipments, and so on software testing system, power interference.



Adopted new R&D management process to ensure a reasonable and orderly conduct of each research and development project, strictly control every detail of the research to ensure the quality of new products.

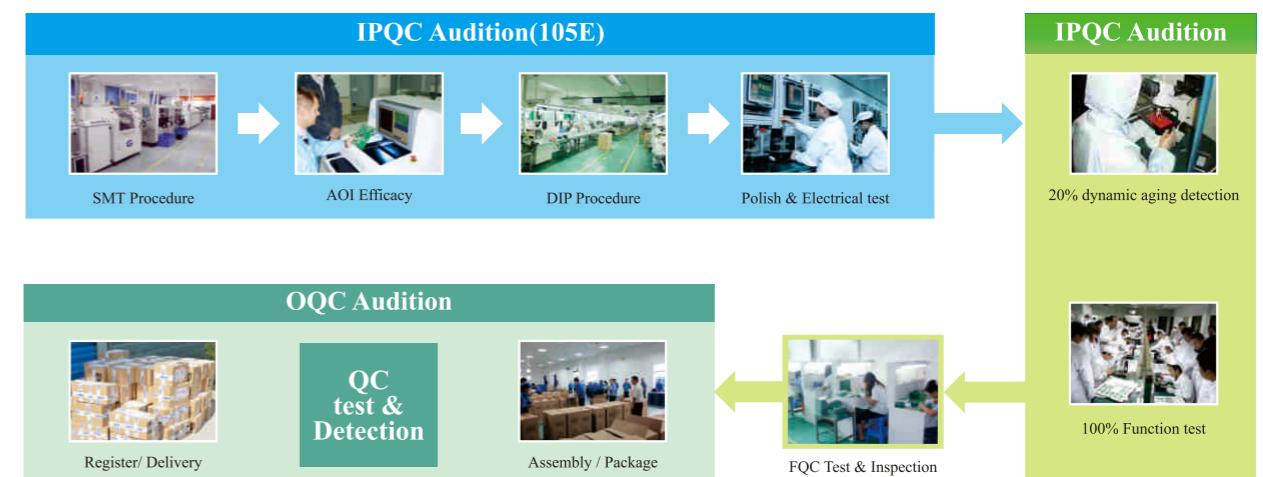


3onedata set up R&D center. There are software, hardware, testing, structure and other special departments. Total more than 80 people and can provide personalized professional customized service for customers.

Standardized quality management system

3onedata has successively passed international certification system ISO9001:2008 and "quality, service, reputation" AAA enterprise certification and the Chinese Quality Miles certification. To ensure a reliable high-quality products for customers, 3onedata has established a standard, strict, standardized quality management system and a strictly quality control process via 5S site management measures.

Standardized quality management system



Comprehensive quality certification system

3onedata series of communications products have met technical specification requirements such as IEC61850, IEC61158 and IEEE1613, and passed a number of domestic and international certifications such as CE, FCC, RoHS. Some products have passed the electric power industry "State Grid A class certification" and the coal industry safety certification.

Customer Service

Pre-sales consulting:

Understanding and value the different needs of each customer to provide comprehensive and meticulous analysis and consultation. So provide customer customizing system and differentiated solutions.

01



Sales system customization:

To achieve customized quality products and services for customer,3onedata provided systematic customized services,such as product,module and function customization.

02



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Make network communication more reliable

04



After-sales service:

3onedata provided all-around, one to one and closed service. Whenever and wherever, 3onedata wish to solve any problem to ensure customers' network work perfect and smooth.

Service Content

- Module customization
- Function customization
- Software testing
- Technical support
- Training service
- Product customization
- Product certification services
- Processing services
- After-sales service guarantee

After-sales service

- DIP switch automatic diagnosis
- Artificial door-to-door service
- Hotline service
- Remote assistance service

Customer Service Standard

- No rest of 365 days
- Remote assistance whenever and wherever
- Global localization service
- Respond within 2 hours
- Five years warranty

Star Product Highlights

Industrial Ethernet Switches



IES3020-4GS Series

Industrial 20-port unmanaged Ethernet switch with 4 gigabit SFP socket

- 16x10Base-T/100Base-TX/1000Base-TX ports and 4x1000 Base-X SFP slots
- Ethernet port support full/half duplex mode, MDI/MDI-X
- 56Gbps backboard bandwidth
- Redundant 12~48VDC power input,reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



IES3012G-4GS

Industrial 12-port unmanaged gigabit Ethernet switch with 4 gigabit SFP socket

- 8x10Base-T/100Base-TX/1000Base-TX ports and 4x1000 Base-X SFP slots
- Ethernet port support full/half duplex mode, MDI/MDI-X
- Redundant 12~48VDC power input, over-current and reverse polarity protection
- Operating temperature range from -40~75°C
- IP40 protection, DIN-rail mounting



ES1016

Industrial 16-port unmanaged Ethernet switch

- 16x10Base-T/100Base-TX ports
- Full/Half duplex mode, MDI/MDI-X self-adaption
- Support 8K MAC address table
- IP30 protection, 0~70°C working temperature
- Standard 1U 19 inch rack mounting



ES1024

Industrial 24-port unmanaged Ethernet switch

- 24x10Base-T/100Base-TX ports
- Support IEEE802.3/802.3u/802.3x standards
- Full/Half duplex mode, MDI/MDI-X self-adaption
- IP30 protection, 0~70°C working temperature
- Standard 1U 19 inch rack mounting



IES3016G

Industrial 16-port unmanaged gigabit Ethernet switch

- 16x10Base-T/100Base-TX/1000Base-TX ports
- 56Gbps backboard bandwidth
- Redundant 12~48VDC power input, reverse polarity protection
- Operating temperature range from -40~75°C
- IP40 protection, DIN-rail mounting



IES7112G-4GS
Industrial 12-port managed gigabit Ethernet switch with 4 gigabit SFP socket

- 8x10Base-T/100Base-TX/1000Base-TX ports and 4x1000 Base-X SFP slots
- SW-Ring ring network patent technology (Fault recovery time<20ms)
- Support WEB, SNMP and Telnet configuration
- Redundant 12~48VDC power input, reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



IES7116G
Industrial 16-port managed gigabit Ethernet switch

- 16x10Base-T/100Base-TX/1000Base-TX ports
- Support RSTP, SW-Ring ring network patent technology
- Support WEB, SNMP and Telnet configuration
- Redundant 12~48VDC power input, reverse polarity protection
- Operating temperature range from -40~75°C
- IP40 protection, DIN-rail mounting



IES7120G-4GS
Industrial 20-port managed gigabit Ethernet switch with 4 gigabit SFP socket

- 16x10Base-T/100Base-TX/1000Base-TX ports and 4x1000 Base-X SFP slots
- Support RSTP, SW-Ring ring network patent technology
- Support WEB, SNMP and Telnet configuration
- Redundant 12~48VDC power input, reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting

EN50155 Ethernet Switches



TNS5812-4GT-D
Industrial 12-port managed layer 3 Ethernet switch with 4 gigabit ports, M12 connector

- 8x10/100Base-T(X) and 4x10/100/1000Base-T(X) ports, M12 connector
- Support STP/RSTP/MSTP, SW-Ring ring network patent technology
- Support IEEE802.1X, HTTPS, and SSH, increasing the network security
- Support RIPv1/v2, RIPng, BGP4, BGP4+ for IPv6 routing
- Wall mounting, -40~75°C working temperature



TNS5512-4GT
Industrial 12-port managed Ethernet switch with 4 gigabit ports, M12 connector

- 8x10/100Base-T(X) and 4x10/100/1000Base-T(X) ports, M12 connector
- SW-Ring ring network patent technology (Fault recovery time<20ms)
- Support rate control and broadcast storm suppression
- Support 802.1X, password management
- Standard 1U 19 inch rack mounting



IPMC101 Series
Industrial 1-port 10/100M PoE media converter

- 1x10/100Base-T(X) port and 1x100Base-FX port
- Compatible with both IEEE802.3at(30W) and IEEE802.3af (15.4W)
- RJ45 port support 10/100M self-adaption and PoE function
- 44~55VDC power input, reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, high strength iron shell, DIN-rail mounting

Industrial PoE Switches



IPMC101GT Series
Industrial 1-port gigabit PoE media converter

- 1x10/100/1000Base-T(X) port and 1x1000Base-FX port
- Compatible with both IEEE802.3at(30W) and IEEE802.3af (15.4W)
- Support LFP (Link Fault Pass-Through) function
- 44~55VDC power input, reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, high strength iron shell, DIN-rail mounting



TNS5512-4GT-8PoE-D
Industrial 12-port managed PoE switch with 4 gigabit ports and 8-port PoE, M12 connector

- 4x10/100/1000Base-T(X) and 8x10/100Base-T(X) PoE ports, M12 connector
- Compatible with IEEE802.3at(30W) and IEEE802.3af(15.4W) standards
- Support RSTP, SW-Ring ring network patent technology
- Support rate control and broadcast storm suppression
- One power input and one relay alarm output
- Wall mounting, -40~75°C working temperature



TNS5512-4GT-8PoE
Industrial 12-port managed PoE switch with 4 gigabit ports and 8-port PoE, M12 connector

- 4x10/100/1000Base-T(X) and 8x10/100Base-T(X) PoE ports, M12 connector
- Compatible with IEEE802.3at(30W) and IEEE802.3af(15.4W) standards
- SW-Ring ring network patent technology (Fault recovery time <20ms)
- Support rate control and broadcast storm suppression
- Support 802.1X, password management
- Standard 1U 19 inch rack mounting



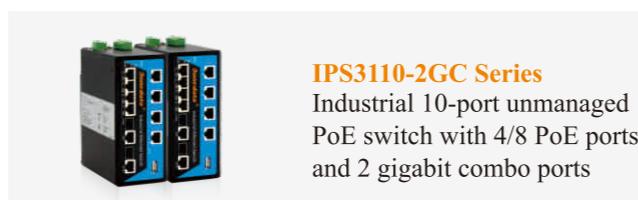
IPS215-4PoE Series
Industrial 5-port unmanaged PoE switch with 4-port PoE

- 5-port 10/100M Ethernet(including 4 PoE ports)
- Compatible with both IEEE802.3at(30W) and IEEE802.3af (15.4W)
- RJ45 port support 10/100M self-adaption and PoE function
- 44~55VDC power input, reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



IPS205G-4PoE series
Industrial 5-port unmanaged gigabit PoE switch with 4-port PoE

- 1x10/100/1000Base-T(X) and 4x10/100/1000Base-TX PoE ports
- Compatible with both IEEE802.3at(30W) and IEEE802.3af(15.4W)
- Single PoE port maximum consumption: 30W@48VDC
- 44~55VDC power input, reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail or wall mounting



IPS3110-2GC Series
Industrial 10-port unmanaged PoE switch with 4/8 PoE ports and 2 gigabit combo ports

- 8x10/100Base-T(X) ports(including 4/8 port PoE) with 2 gigabit combo ports
- Compatible with both IEEE802.3at(30W) and IEEE802.3af(15.4W)
- Single PoE port maximum consumption: 30W@48VDC
- 44~55VDC power input, reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



IPS7110-2GC Series
Industrial 10-port managed PoE switch with 4/8 PoE ports and 2 gigabit combo ports

- 8x10/100Base-T(X) ports(including 4/8 port PoE) with 2 gigabit combo ports
- Compatible with both IEEE802.3at(30W) and IEEE802.3af(15.4W)
- Support RSTP, SW-Ring ring network patent technology
- Support WEB, SNMP and Telnet configuration
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



GW1104-4D Series
4-port RS-232/485/422 to Ethernet Modbus gateway

- 1 port 10/100M Ethernet and 4 ports RS-232 or RS-485/422
- 300bps~115200bps baud rate and nonblocking communication
- Support WEB and Telnet configuration
- Support cross-gateway and cross-router communication
- IP30 protection, -40~75°C working temperature, wall mounting



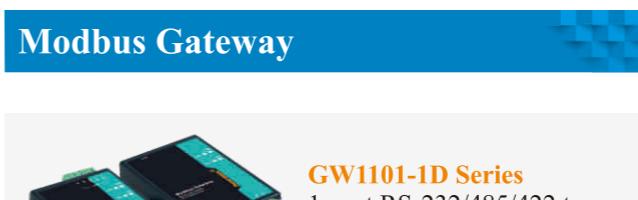
IPS318 Series
Industrial 8-port unmanaged PoE switch with 4/8 PoE ports

- 8x10/100Base-T(X) ports(including 4/8 port PoE)
- Compatible with both IEEE802.3at(30W) and IEEE802.3af(15.4W)
- Single PoE port maximum consumption: 30W@48VDC
- 44~55VDC power input, reverse polarity protection
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



IPS618 Series
Industrial 8-port managed PoE switch with 4/8 PoE ports

- 8x10/100Base-T(X) ports(including 4/8 port PoE)
- Compatible with both IEEE802.3at(30W) and IEEE802.3af(15.4W)
- Support RSTP, SW-Ring ring network patent technology
- Support WEB, SNMP and Telnet configuration
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



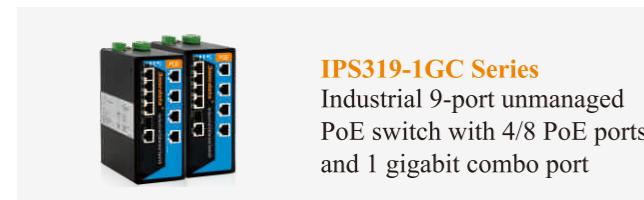
GW1101-1D Series
1-port RS-232/485/422 to Ethernet Modbus gateway

- 1 port 10/100M Ethernet and 1 port RS-232 or RS-485/422
- 300bps~115200bps baud rate and non-blocking communication
- Support WEB and Telnet configuration
- Support RTU Slave/Master, ASCII Slave/Master working modes
- IP40 protection, -40~75°C working temperature, wall mounting



GW1108-8D Series
8-port RS-232/485/422 to Ethernet Modbus gateway

- 1 port 10/100M Ethernet and 8 ports RS-232 or RS-485/422
- 300bps~115200bps baud rate and non-blocking communication
- Support WEB and Telnet configuration
- Support cross-gateway and cross-router communication
- IP30 protection, -40~75°C working temperature, wall mounting



IPS319-1GC Series
Industrial 9-port unmanaged PoE switch with 4/8 PoE ports and 1 gigabit combo port

- 8x10/100Base-T(X) ports(including 4/8 port PoE) with 1 gigabit combo port
- Compatible with both IEEE802.3at(30W) and IEEE802.3af(15.4W)
- Single PoE port maximum consumption: 30W@48VDC
- 44~55VDC power input, reverse polarity protection
- Industrial grade design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



IPS719-1GC Series
Industrial 9-port managed PoE switch with 4/8 PoE ports and 1 gigabit combo port

- 8x10/100Base-T(X) ports(including 4/8 port PoE) with 1 gigabit combo port
- Compatible with both IEEE802.3at(30W) and IEEE802.3af(15.4W)
- SW-Ring ring network patent technology (Fault recovery time<20ms)
- Support WEB, SNMP and Telnet configuration
- Industrial grade 4 design, -40~75°C working temperature
- IP40 protection, DIN-rail mounting



GW1102-2D Series
2-port RS-232/485/422 to Ethernet Modbus gateway

- 1 port 10/100M Ethernet and 2 ports RS-232 or RS-485/422
- 300bps~115200bps baud rate and nonblocking communication
- Support WEB and Telnet configuration
- Support cross-gateway and cross-router communication
- IP40 protection, -40~75°C working temperature, wall mounting



IMF208-2F-8DI(RS-485)
8-port RS-485 to fiber optic converter

- 8 channel RS-485 and 2 port 100Base-FX Fiber
- Support Redundancy ring, recovery time<20ms
- Support Windows serial driver procedure format
- Provide Windows configuration tools, easy to use and install
- Industrial grade design, IP30 protection
- -40~75°C working temperature, wall mounting or rack mounting

Industry Solutions



Power

Power has become the indispensable energy of the modern society, and provides basic services for other infrastructure and public facilities, so the stability and reliability of power system will play a vital role. At the whole stage of electricity, including power generation, transmission, distribution and power supply, 3onedata provides a reliable solution

- 1.Agricultural power network distribution automation system
- 2.Transmission line On-line monitoring system
- 3.Photovoltaic box-type transformer substation monitoring
- 4.Wind turbine power monitoring system
- 5.Hydro power industrial monitoring system
- 6.Thermal power DCS system
- 7.Smart Charging pile system
- 8.Smart meter reading system

【Key Products】



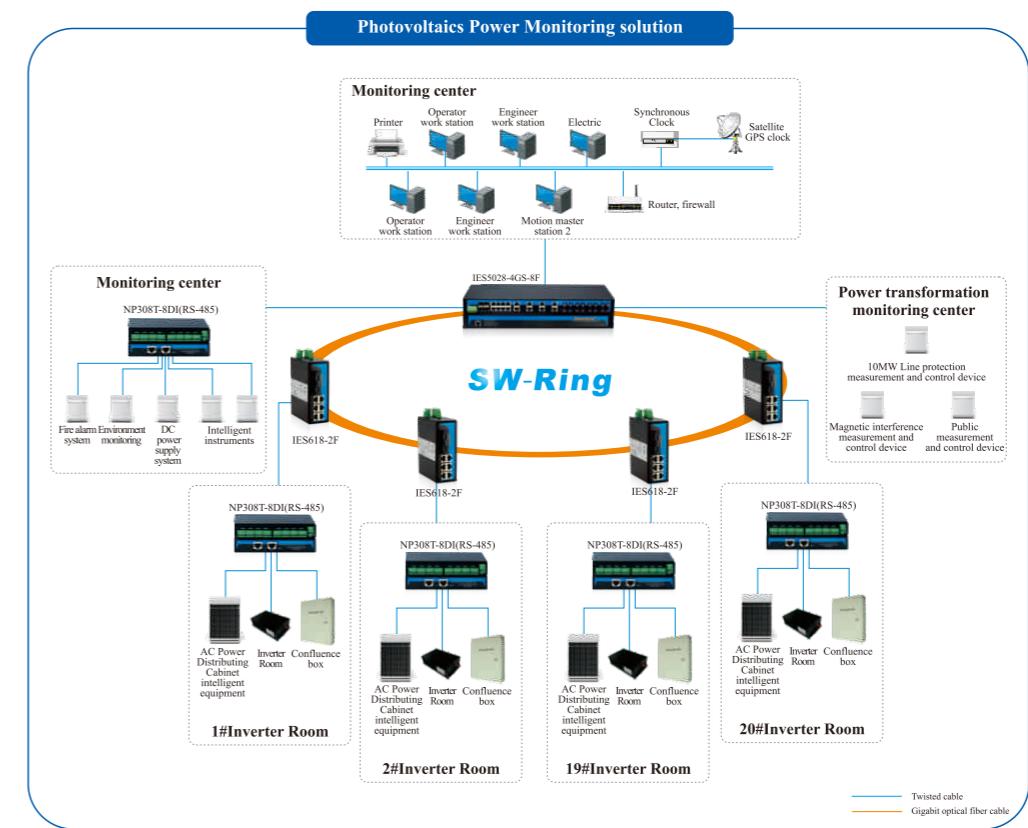
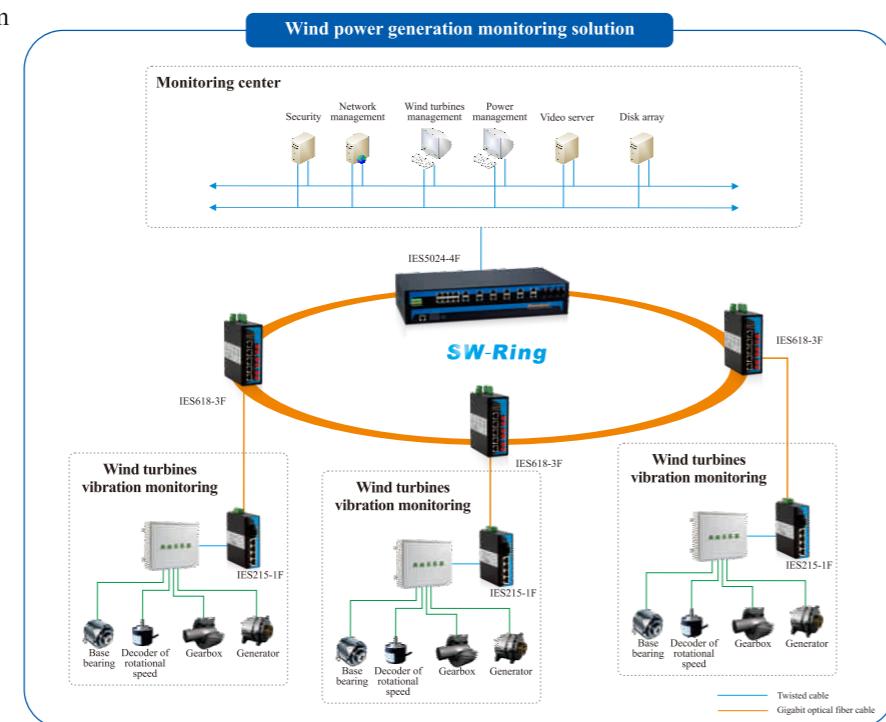
IES5024-4F
• 20 port 10/100M Ethernet, 4 port 100M Fiber
• Industrial 4 class design
• Wide temperature design: -40~75°C
• Support ring network protocol



IES618-3F
• 5 port 10/100M Ethernet, 3 port 100M Fiber
• Industrial 4 class design
• Wide temperature design: -40~75°C
• Support ring network protocol



IES215-1F
• 4 port 10/100M Ethernet, 1 port 100M Fiber
• Industrial 4 class design
• Wide temperature design: -40~75°C



【Key Products】



IES5028-4GS-8F
• 4 port Gigabit SFP+16 port 10/100M Ethernet+8 port 100M optic fiber
• Industrial 4 class design
• Wide temperature design: -40~75°C



IES618-2F
• 6 port 10/100M Ethernet+2 port 100M optic fiber
• Industrial 4 class design
• Wide temperature design: -40~75°C



NP308T-8DI(RS-485)
• Provide 8 port RS-485 to 1 port 100M Ethernet
• Industrial class design,IP30
• Wide temperature design: -40~75°C



Twisted cable

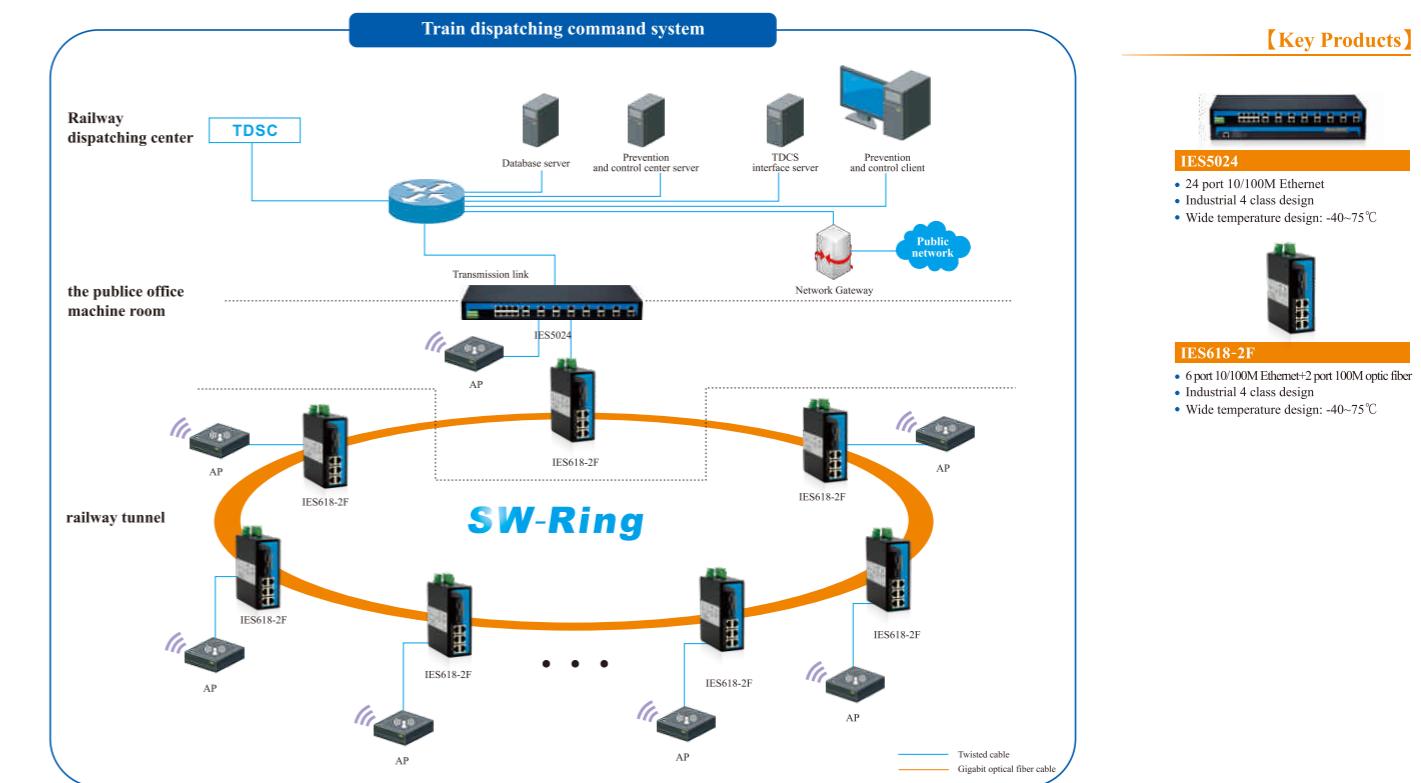
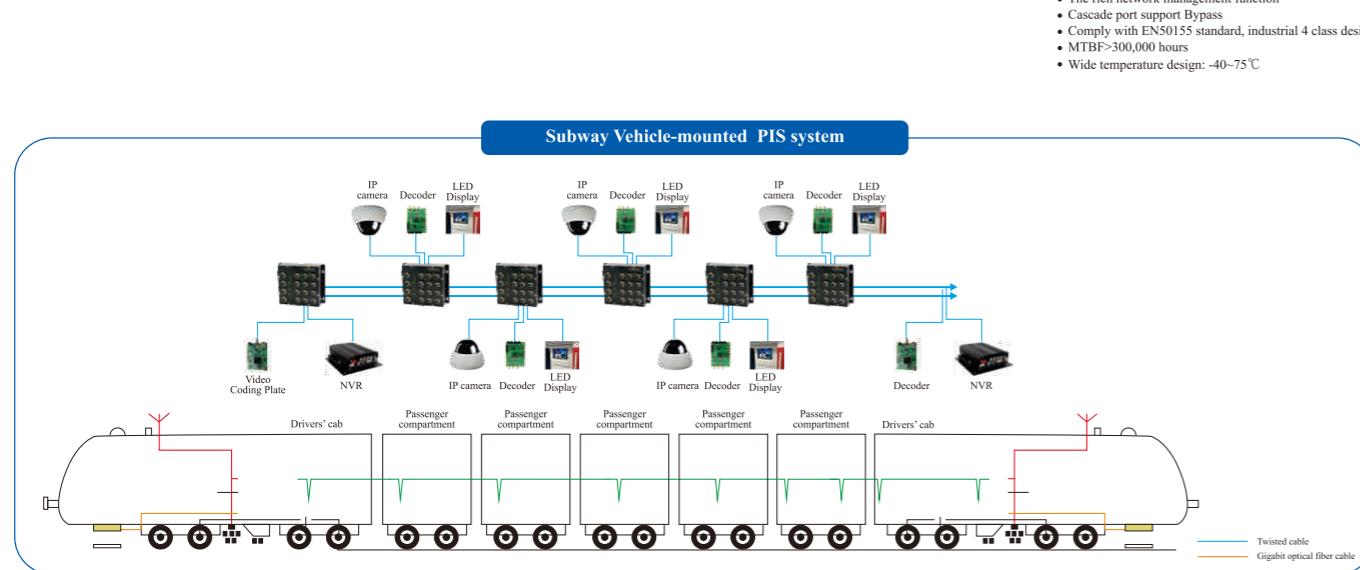


Gigabit optical fiber cable



Application speed, reliability and safety of industrial Ethernet solution in rail transit automation is an important factor for the economic and efficient operation of rail transit system. Modern rail transit system is composed of many complex distributed subsystems. These subsystems need to realize centralized monitoring, 3onedata provides efficient, stable and reliable communications products to ensure the operation and management of the whole intelligent system.

- 1.Railway Communication Dispatching System
- 2.Subway traction power SCADA system
- 3.Subway station CCTV system
- 4.Subway station AFC system
- 5.Subway Vehicle-mounted PIS system





In the field of Intelligent Transportation system, the distance between equipment is far, and the environment is harsh. 3onedata provided high performance and tailor-made industrial Ethernet products with special, wide temperature and high protection level.

- 1.Road information public communication system
- 2.Bayonet monitoring system
- 3.Tunnel Monitoring System
- 4.Electronic police system

【Key Products】



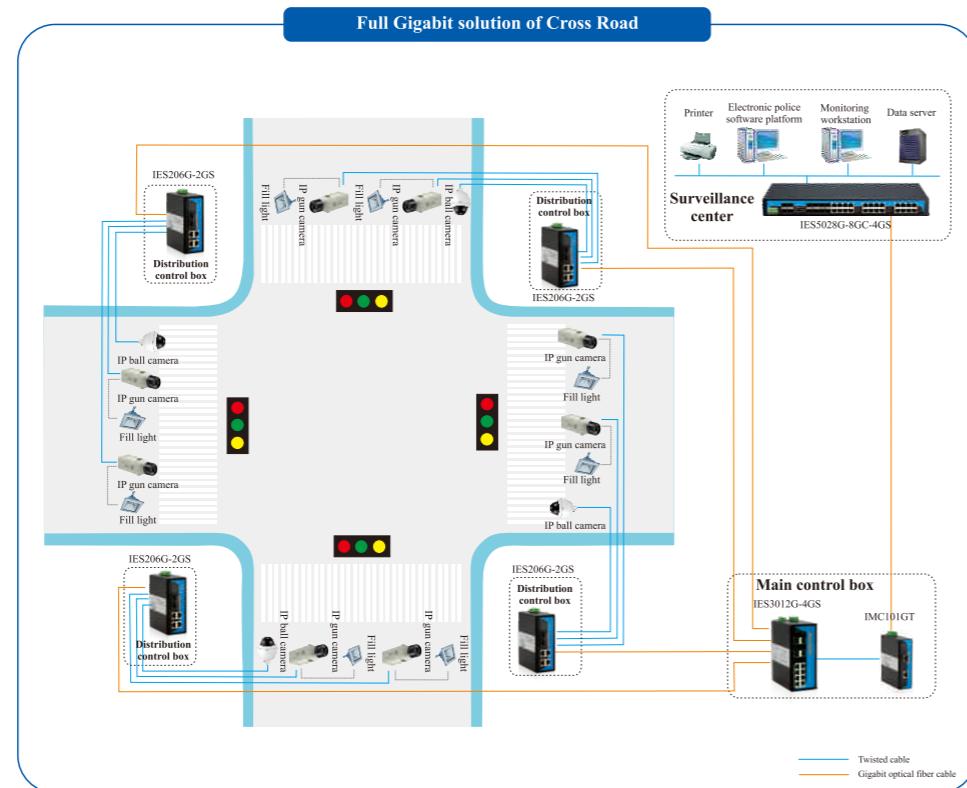
IES3012G-4GS

- 8 port Gigabit Ethernet +4 port Gigabit SFP
- Industrial 4 class design
- Wide temperature design: -40~75°C



IES206G-2GS

- 4 port Gigabit Ethernet+4 port gigabit SFP
- Industrial 4 class design
- Wide temperature design: -40~75°C



【Key Products】



- 16 port Gigabit Ethernet +4 port gigabit SFP +8 port Gigabit Combo
- Industrial 4 class design
- Wide temperature design: -40~75°C



- 8 port Gigabit Ethernet+4 port gigabit SFP
- Industrial 4 class design
- Wide temperature design: -40~75°C



- 8 port 10/100M Ethernet +2 port gigabit SFP
- Industrial 4 class design
- Wide temperature design: -40~75°C



3onedata communication products used in 4.0 industrial solutions. Products have high temperature resistant, high protection level and can reduce the fan wearing parts. Products are widely used in metallurgy, steel, sewage treatment and other industrial field.

1. Factory Automation Energy Management and Control System
2. Factory Air Purification monitoring and Control System
3. Pipeline Flow Monitoring System
4. Production Process Automation System
5. Sewage Treatment Monitoring System

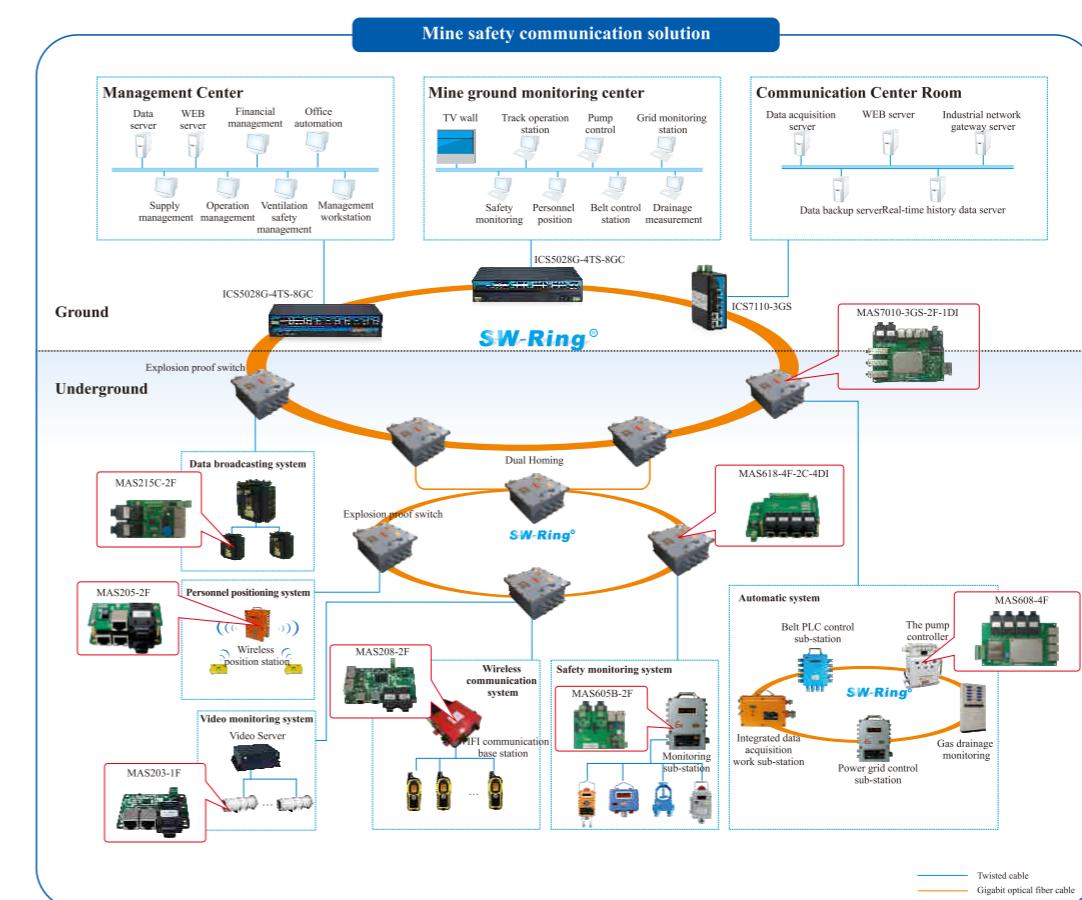
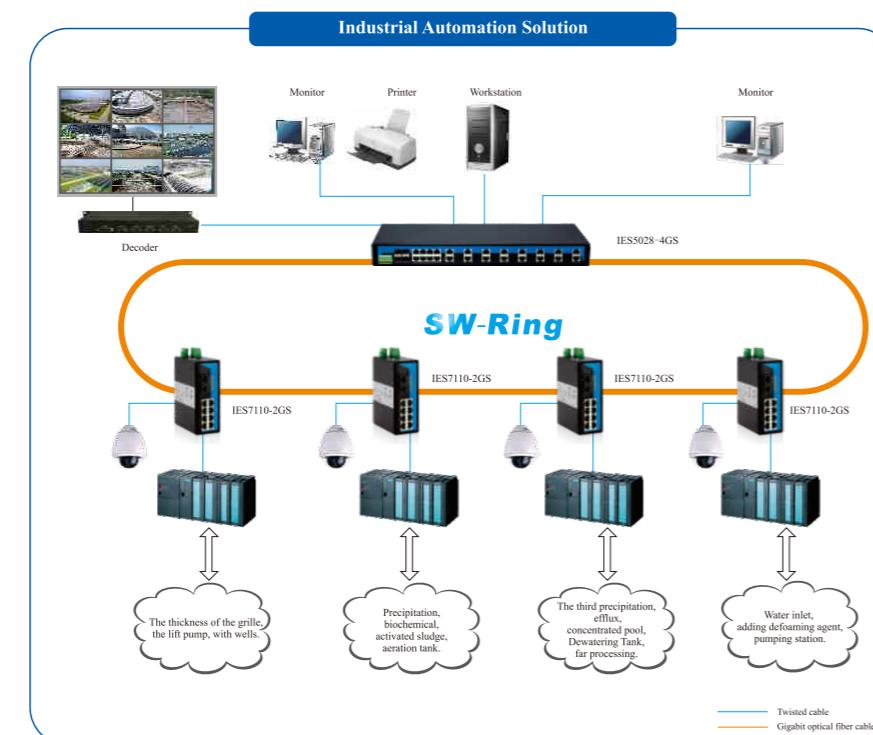
【Key Products】



IES5028-4GS
• 24 port 10/100M Ethernet+4 port gigabit SFP
• Industrial 4 class design
• Wide temperature design: -40~75°C



IES7110-2GS
• 8 port 10/100M Ethernet+2 port gigabit SFP
• Industrial 4 class design
• Wide temperature design: -40~75°C



【Key Products】



ICS5028G-4TS-8GC
• 16 port Gigabit Ethernet+8 port gigabit combo+4 port 10G SFP
• Industrial 4 class design
• Wide temperature design: -40~75°C



MAS7010-3GS-2F-1DI
• 4 port 10/100M Ethernet+2 port 100M Fiber+3 port gigabit SFP+1 port RS-485
• Design of the safety in mine
• Wide temperature design: -40~75°C



MAS608-4F
• 4 port 10/100M Ethernet+4 port 100M Fiber
• Design of the safety in mine
• Wide temperature design: -40~75°C

Product Selection Guide

Unmanaged DIN-Rail Ethernet Switches

Unmanaged DIN-Rail Ethernet Switches							
Port	ES208G	IES205G	IES206-2GS	IES206G-2GS	ES209G-1GF	ES2010G-2GF	ES2010G-2GS
Gigabit Ethernet, 10/100/1000 Mbps	8	5	—	4	8	8	8
Fast Ethernet, 10/100 Mbps	—	—	4	—	—	—	—
Gigabit Fiber Ethernet, 1000 Mbps	—	—	2	2	1	2	2
Console	—	—	—	—	—	—	—
Alarm	—	—	√	—	—	—	—
Exchange attribute	—	—	148810pps	—	—	—	—
100M forward speed	—	—	148810pps	—	—	—	—
1000M forward speed	1488100pps						
Transmit mode	Store And Forward						
Switching Fabric Capacity	16G	10G	4.8G	12G	18G	20G	20G
Memory	1M						
MAC address table	8K	2K	8K	1K	8K	8K	8K
Power supply	24VDC(12~48VDC)						
Input Voltage	0.16A	0.2A	0.25A	0.2A	0.33A	0.35A	0.35A
Input Current	Single power supply	Single power supply	Dual power supply				
Power redundancy	Terminal block	Terminal block	Terminal block	Terminal block	Terminal block	Terminal block	Terminal block
Working environment							
Working temperature	-25~70°C	-40~75°C	-40~75°C	-40~75°C	0~55°C	0~55°C	0~55°C
Storage temperature	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-10~65°C	-10~65°C	-10~65°C
Relative Humidity	5%~95%(no condensation)						
Dimensions							
Size(W×H×D)	138×53×110 (mm)	110×35×95 (mm)	136×53×105 (mm)	138×53×110 (mm)	115×50×80 (mm)	115×50×80 (mm)	115×50×80 (mm)

Unmanaged DIN-Rail Ethernet Switches

Unmanaged DIN-Rail Ethernet Switches						
Port	IES215 Series	IES308 Series	IES2010-2GS Series	IES3016 Series	IES3020-4GS Series	IES3012G-4GS
Gigabit Ethernet, 10/100/1000 Mbps	—	—	—	—	—	8
Fast Ethernet, 10/100 Mbps	5	8	8	16	16	—
Gigabit Fiber Ethernet, 1000 Mbps	—	—	2	—	4	4
Console	—	—	—	—	—	√
Alarm	—	√	√	√	√	√
Exchange attribute						
100M forward speed	148810pps					
1000M forward speed	—	—	1488100pps	—	1488100pps	1488100pps
Transmit mode	store and forward					
Switching Fabric Capacity	1G	1.6G	5.6G	3.2G	11.2G	24G
Memory	512Kbits	1M	1M	4M	4M	4M
MAC address table	2K	2K	8K	8K	8K	8K
Power supply						
Input Voltage	24VDC(12~48VDC)					
Input Current	0.3A	0.35A	0.4A	0.25A	0.25A	0.43A
Power redundancy	Single power supply	Single power supply	Dual power supply	Dual power supply	Dual power supply	Dual power supply
Power Connector	Terminal block					
Working environment						
Working temperature	-40~75°C					
Storage temperature	-40~85°C					
Relative Humidity	5%~95%(no condensation)					
Dimensions						
Size(W×H×D)	110×35×95 (mm)	136×53×105 (mm)	136×53×105 (mm)	160×70×130 (mm)	160×70×130 (mm)	160×70×130 (mm)

Unmanaged Rackmount Ethernet Switches

Unmanaged Rackmount Ethernet Switches				
	ES1016/ES1024		ES1026-2F	
	IES1024 Series		IES1028-4GS Series	
Port	ES1016/ES1024	ES1026-2F	IES1024 Series	IES1028-4GS Series
Gigabit Ethernet, 10/100/1000 Mbps	—			
Fast Ethernet, 10/100 Mbps	16 / 24	26	24	24
Fast Ethernet, 10/100 Mbps	—	—	—	4
Console	√	—	√	√
Alarm	√	—	√	√
Exchange attribute	ES1016/ES1024	ES1026-2F	IES1024 Series	IES1028-4GS Series
100M forward speed	148810pps			
1000M forward speed	—	—	—	1488100pps
Transmit mode	store and forward			
Switching Fabric Capacity	4.8G	5.2G	4.8G	12.8G
Memory	4M			
MAC address table	8K			
Power supply	ES1016/ES1024	ES1026-2F	IES1024 Series	IES1028-4GS Series
Input Voltage	100~240VAC/DC			
Input Current	0.25A			
Power redundancy	Single power supply	Single power supply	Single/Dual power supply	Single/Dual power supply
Power Connector	Terminal block			
Working environment	ES1016/ES1024	ES1026-2F	IES1024 Series	IES1028-4GS Series
Working temperature	0~70°C	0~70°C	-40 ~75°C	-40~75°C
Storage temperature	-40~85°C	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5%~95%(no condensation)			
Dimensions	ES1016/ES1024	ES1026-2F	IES1024 Series	IES1028-4GS Series
Size(W×H×D)	441.6×208.9×44.6 (mm)	441.6×208.9×44.6 (mm)	441.6×208.9×45 (mm)	441.6×208.9×45 (mm)

Managed DIN-Rail Ethernet Switches

Managed DIN-Rail Ethernet Switches				
	IES608 Series		IES6116 Series	
	IES716-2GS		IES7110-2GS Series	IES7110-3GS
Port	IES608 Series	IES6116 Series	IES716-2GS	IES7110-2GS Series
Gigabit Ethernet, 10/100/1000 Mbps	—	—	—	—
Fast Ethernet, 10/100 Mbps	8	16	4	8
Gigabit Fiber Ethernet, 1000 Mbps	—	—	2	2
Console	√	√	√	√
Alarm	√	√	√	√
Exchange attribute	IES608 Series	IES6116 Series	IES716-2GS	IES7110-2GS Series
100M forward speed	148810pps	148810pps	148810pps	148810pps
1000M forward speed	—	—	1488100pps	1488100pps
Transmit mode	store and forward	store and forward	store and forward	store and forward
Switching Fabric Capacity	1.6G	3.2G	4.8G	5.6G
Memory	1M	4M	1M	1M
MAC address table	8K	8K	8K	8K
Power supply	IES608 Series	IES6116 Series	IES716-2GS	IES7110-2GS Series
Input Voltage	24VDC(12~48VDC)	24VDC(12~48VDC)	24VDC(12~48VDC)	24VDC(12~48VDC)
Input Current	0.2A	0.25A	0.2A	0.3A
Power redundancy	Dual power supply			
Power Connector	Terminal block			
Working environment	IES608 Series	IES6116 Series	IES716-2GS	IES7110-2GS Series
Working temperature	—	—	—	—
Storage temperature	—	—	—	—
Relative Humidity	5%~95%(no condensation)			
Network Management and Control	IES608 Series	IES6116 Series	IES716-2GS	IES7110-2GS Series
IGMP Snooping	√			
SNMP	√			
RSTP	√			
Port Trunking	√			
SW-Ring	√			
VLAN	√			
QoS	√			
Port Mirroring	√			
Relay Warning	√			
Dimensions	IES608 Series	IES6116 Series	IES716-2GS	IES7110-2GS Series
Size(W×H×D)	136×53×105 (mm)	160×70×130 (mm)	138×53×110 (mm)	138×53×110 (mm)

Managed DIN-Rail Ethernet Switches

	Managed DIN-Rail Ethernet Switches	RS-232/485 Ethernet Switches		
				
Port	IES7120-4GS Series	IES7112G-4GS	IES605-2D Series	IES618-4D Series
Gigabit Ethernet, 10/100/1000 Mbps	—	8	—	—
Fast Ethernet, 10/100 Mbps	16	—	5	8
Gigabit Fiber Ethernet, 1000 Mbps	4	4	—	—
Console	√	√	√	√
Alarm	√	√	√	√
RS-232/485	—	—	2	4
Exchange attribute				
100M forward speed	148810pps	—	148810pps	148810pps
1000M forward speed	1488100pps	1488100pps	—	—
Transmit mode	store and forward			
Switching Fabric Capacity	11.2G	24G	1.2G	2G
Memory	3M	4M	1M	1M
MAC address table	8K	8K	2K	2K
Power supply				
Input Voltage	24VDC(12~48VDC)	24VDC(12~48VDC)	24VDC(12~48VDC)	24VDC/100~240VAC/DC
Input Current	0.43A	0.43A	0.2A	0.25A
Power redundancy	Dual power supply			
Power Connector	Terminal block			
Working environment				
Working temperature	-40~75°C			
Storage temperature	-40~85°C			
Relative Humidity	5%~95%(no condensation)			
Network Management and Control				
IGMP Snooping	√			
SNMP	√			
STP/RSTP	√			
Port Trunking	√			
SW-Ring	√			
VLAN	√			
QOS	√			
Port Mirroring	√			
Relay Warning	√			
Dimensions				
Size(W×H×D)	160×70×130 (mm)	160×70×130 (mm)	136×53×105 (mm)	160×70×130 (mm)

Managed Rackmount Ethernet Switches

	Layer3 Ethernet Switches	Managed Rackmount Ethernet Switches		
				
Port	ICS5028G-4TS	ICS5028G-4TS -8GC	IERS5024 Series	IERS5028-4GS Series
10 Gigabit Ethernet	4	4	—	—
Gigabit Ethernet, 10/100/1000 Mbps	24	16+8Combo	—	24
Fast Ethernet, 10/100 Mbps	—	—	24	24
Gigabit Fiber Ethernet, 1000 Mbps	—	—	4	4
Console	√	√	√	√
Alarm	√	√	√	√
Exchange attribute				
100M forward speed	—	—	148810pps	148810pps
1000M forward speed	1488100pps	1488100pps	1488100pps	1488100pps
10000M forward speed	14881000pps	14881000pps	—	—
Transmit mode	store and forward	store and forward	store and forward	store and forward
Switching Fabric Capacity	128G	128G	4.8G	12.8G
Memory	12M	12M	4M	4M
MAC address table	16K	16K	8K	8K
Power supply				
Input Voltage	100 ~ 240VAC/DC/48VDC			
Input Current	0.74A	0.74A	0.25A	0.25A
Power redundancy	Dual power supply	Dual power supply	Single/Dual power supply	Single/Dual power supply
Power Connector	Terminal block	Terminal block	Terminal block	Terminal block
Working environment				
Working temperature	-35~70°C	-35~70°C	-40~75°C	-40~75°C
Storage temperature	-40~85°C	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)
Network Management and Control				
Layer 3 Switching (Static routing, VRRP, RIPv1/v2, RIPng, OSPFv2/v3, BGP...)	√	√	—	—
IPv6	√	√	—	—
IGMP Snooping/GMRP	√	√	√	√
SNMP	√	√	√	√
STP/RSTP	√	√	√	√
RMON	√	√	—	—
MSTP	√	√	—	—
Port Trunking	√	√	√	√
Port Mirroring	√	√	√	√
SW-Ring	√	√	√	√
QoS	√	√	√	√
LLDP	√	√	—	√
VLAN	√	√	√	√
IEEE 802.1X	√	√	—	√
SNTP	√	√	—	√
Relay Warning	√	√	√	√
Dimensions				
Size(W×H×D)	440×285×43 (mm)	440×285×43 (mm)	441.6×208.9×45 (mm)	441.6×207.9×45 (mm)
	441.6×207.9×45 (mm)	441.6×207.9×45 (mm)	441.6×290×44.6 (mm)	

Industrial Ethernet Media Converters

	Industrial Ethernet Media Converters					
	IMC101B	IMC102B	IMC101GT	IMC101GT-1GF	IMC102GT	IMC102GT-1GF
IEEE Standards						
IEEE 802.3	√					
IEEE 802.3u	√					
IEEE 802.3ab	—	—	√	√	√	√
IEEE 802.3z	—	—	√	√	√	√
IEEE 802.3x	√					
Interface						
RJ45 Ports	10/100Base-T(X)		10/100/1000Base-T(X)		10/100/1000Base-T(X)	
Fiber Modes	Multi-mode Fiber / Single-mode Fiber		Multi-mode Fiber / Single-mode Fiber		Multi-mode Fiber / Single-mode Fiber	
Fiber Ports	100Base-FX , (SC/ST/FC)		1000Base-FX , SFP	1000Base-FX , (SC/ST/FC)	1000Base-FX , SFP	1000Base-FX , (SC/ST/FC)
LFP	—	—	√	√	—	—
DIP Switches	—	—	√	√	√	√
Transmission Distance						
Twisted pair cable	100m					
Single mode fiber	1310nm /20/40/60km , 1550nm /80/100/120km					
Multimode fiber	850nm /2km , 1310nm /25km					
Power supply						
Input Voltage	24VDC(12~48VDC)					
Input Current	0.07A	0.08A	0.12A	0.12A	0.12A	0.12A
Power redundancy	Single power supply					
Power Connector	Terminal block					
Working environment						
Working temperature	-40~75°C					
Storage temperature	-40~85°C					
Relative Humidity	5%~95%(no condensation)					
Dimensions						
Size(W×H×D)	110×35×95 (mm)	110×35×95 (mm)	110×35×95 (mm)	110×35×95 (mm)	110×35×95 (mm)	110×35×95 (mm)

Embedded Modules

	Embedded industrial Ethernet switch Module	Embedded serial device server Module
		
	IEM608	IEM7010
Ethernet Interface		
10/100Base Port	8	7
1000MBase Port	—	3
Exchange attribute		
100M forward speed	148810pps	148810pps
Transmit mode	store and forward	store and forward
System exchange bandwidth	2G	7.6G
Memory	1Mbits	1Mbits
MAC address table	2K	8K
Serial Interface		
TTL Ports	—	—
Signals	—	TXD,RXD,DTR,DSR,CTS,RTS,GND
Serial Parameters	—	Data Bits: 5,6,7,8; Stop Bits: 1,1.5,2; Parity: None,Even,Odd,Space,Mark
Flow Control	—	RTS/CTS,or No flow control
Baudrate	—	300bps~115200bps
Network Management and Control		
Configuration Options	WEB/Serial	
VLAN	√	√
IGMP Snooping/GMRP	√	√
QOS	√	√
SNMP/RMON	√	√
RSTP	√	√
Port Trunking	√	√
Port Mirroring	√	√
SW-Ring	√	√
Relay Warning	√	√
AT Command Mode	—	√
Operation Modes	—	TCP Server,TCP Client,TCP Auto,UDP,Real COM driver
Power supply		
Input Voltage	3.3 VDC (±5%)	
	3.3 VDC (±5%)	
Environmental Limits		
Working temperature	-40~85°C	
Storage temperature	-45~85°C	
Relative Humidity	5%~95%(no condensation)	
Dimensions		
Size(W×H×D)	72×9.5×54 mm	
	32.5×13.8×25 mm	

EN50155 Ethernet Switches

EN50155 Ethernet Switches				
	TNS5812-4GT		TNS5512-4GT-8PoE-D	TNS5512-4GT-8PoE
Port	TNS5812-4GT-D	TNS5812-4GT	TNS5512-4GT-8PoE-D	TNS5512-4GT-8PoE
Gigabit Ethernet, 10/100/1000 Mbps	4	—	—	—
Fast Ethernet, 10/100 Mbps	8	8	—	—
PoE, Fast Ethernet, 10/100 Mbps	—	—	8	8
Console	√	—	—	—
Alarm	√	—	—	—
Exchange attribute	TNS5812-4GT-D	TNS5812-4GT	TNS5512-4GT-8PoE-D	TNS5512-4GT-8PoE
100M forward speed	148810pps	148810pps	148810pps	148810pps
1000M forward speed	1488100pps	1488100pps	1488100pps	1488100pps
Transmit mode	store and forward	store and forward	store and forward	store and forward
Switching Fabric Capacity	9.6G	9.6G	9.6G	9.6G
Memory	16M	16M	4M	4M
MAC address table	32K	32K	8K	8K
Power supply	TNS5812-4GT-D	TNS5812-4GT	TNS5512-4GT-8PoE-D	TNS5512-4GT-8PoE
Input Voltage	110 VDC(66~160VDC)	110 VDC(66~160VDC)	110 VDC(66~160VDC)	110 VDC(66~160VDC)
Input Current	0.15A	0.15A	1.32A	1.32A
Power redundancy	Dual power supply	Dual power supply	Dual power supply	Dual power supply
Power Connector	M23	M23	M23	M23
Working environment	TNS5812-4GT-D	TNS5812-4GT	TNS5512-4GT-8PoE-D	TNS5512-4GT-8PoE
Working temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C
Storage temperature	-40~85°C	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)
Network Management and Control	TNS5812-4GT-D	TNS5812-4GT	TNS5512-4GT-8PoE-D	TNS5512-4GT-8PoE
Layer 3 Switching (Static routing,VRRP, RIPv1/v2,RIPng,OSPFv2/v3,BGP...)	√	√	—	—
IP v6	√	√	—	—
IGMP Snooping/GMRP	√	—	—	—
SNMP/RMON	√	—	—	—
STP/RSTP/MSTP	√	—	—	—
Port Trunking	√	—	—	—
Port Mirroring	√	—	—	—
SW-Ring	√	—	—	—
QoS	√	—	—	—
LDDP	√	—	—	—
VLAN	√	—	—	—
IEEE 802.1X	√	—	—	—
SNTP	√	—	—	—
Relay Warning	√	—	—	—
Dimensions	TNS5812-4GT-D	TNS5812-4GT	TNS5512-4GT-8PoE-D	TNS5512-4GT-8PoE
Size(W×H×D)	180×50×170 (mm)	441.6×207.9×44.6(mm)	441.6×207.9×44.6(mm)	180×50×170 (mm)

Industrial PoE Switches

Unmanaged DIN-Rail PoE Switches							
	IPS205G-4PoE		IPS205G-GF-4PoE		IPS205G-GS-4PoE		IPS215-4PoE
Port	IPS205G-4PoE	IPS205G-GF-4PoE	IPS205G-GS-4PoE	IPS215-4PoE	IPS215-F-4PoE	IPS318-4PoE	IPS318-8PoE
Gigabit Ethernet, 10/100/1000 Mbps	1	—	—	—	—	—	—
PoE,Gigabit Ethernet,10/100/1000 Mbps	4	4	4	—	—	—	—
Fast Ethernet, 10/100 Mbps	—	—	—	1	1	4	—
PoE, Fast Ethernet, 10/100 Mbps	—	—	—	4	4	4	8
Gigabit Fiber Ethernet, 1000 Mbps	—	1	1	—	—	—	—
Console	—	—	—	—	—	√	√
Alarm	—	—	—	—	—	√	√
Exchange attribute	IPS205G-4PoE	IPS205G-GF-4PoE	IPS205G-GS-4PoE	IPS215-4PoE	IPS215-F-4PoE	IPS318-4PoE	IPS318-8PoE
100M forward speed	148810pps	1488100pps	1488100pps	1488100pps	—	—	—
1000M forward speed	1488100pps	1488100pps	1488100pps	—	—	—	—
Transmit mode	store and forward	store and forward	store and forward	store and forward	store and forward	store and forward	store and forward
Switching Fabric Capacity	10G	10G	10G	1G	1G	1.6G	1.6G
Memory	1M	—	—	—	—	—	—
MAC address table	1K	1K	1K	2K	2K	8K	8K
Power supply	IPS205G-4PoE	IPS205G-GF-4PoE	IPS205G-GS-4PoE	IPS215-4PoE	IPS215-F-4PoE	IPS318-4PoE	IPS318-8PoE
Input Voltage	48VDC(44~55VDC)	—	—	—	—	—	—
Input Current	1.5A	1.5A	1.5A	1.5A	1.5A	1.5A	2.7A
Power redundancy	Single power supply	Single power supply	Single power supply	Single power supply	Single power supply	Dual power supply	Dual power supply
Power Connector	Terminal block	—	—	—	—	—	—
Working environment	IPS205G-4PoE	IPS205G-GF-4PoE	IPS205G-GS-4PoE	IPS215-4PoE	IPS215-F-4PoE	IPS318-4PoE	IPS318-8PoE
Working temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C
Storage temperature	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)	5%~95%(no condensation)
Dimensions	IPS205G-4PoE	IPS205G-GF-4PoE	IPS205G-GS-4PoE	IPS215-4PoE	IPS215-F-4PoE	IPS318-4PoE	IPS318-8PoE
Size(W×H×D)	110×35×95 (mm)	110×35×95 (mm)	110×35×95 (mm)	110×35×95 (mm)	110×35×95 (mm)	160×70×130 (mm)	160×70×130 (mm)

Industrial PoE Switches

Unmanaged DIN-Rail PoE Switches						
	IPS315-1GC-4PoE	IPS316-2GC-4PoE	IPS319-1GC-4PoE	IPS319-1GC-8PoE	IPS3110-2GC-4PoE	IPS3110-2GC-8PoE
Port	1Combo	2Combo	1Combo	1Combo	2Combo	2Combo
Gigabit Ethernet, 10/100/1000 Mbps	1Combo	2Combo	1Combo	1Combo	2Combo	2Combo
PoE, Gigabit Ethernet, 10/100/1000 Mbps	—	—	—	—	—	—
Fast Ethernet, 10/100 Mbps	—	—	4	—	4	—
PoE, Fast Ethernet, 10/100 Mbps	5	4	4	8	4	8
Gigabit Fiber Ethernet, 1000 Mbps	—	—	—	—	—	—
Console	√	—	—	—	—	—
Alarm	√	—	—	—	—	—
Exchange attribute						
100M forward speed	148810pps					
1000M forward speed	1488100pps					
Transmit mode	store and forward					
Switching Fabric Capacity	2.8G	4.8G	3.6G	3.6G	5.6G	5.6G
Memory	1M					
MAC address table	8K					
Power supply						
Input Voltage	48VDC(44~55VDC)					
Input Current	1.5A	1.5A	1.5A	2.7A	1.5A	2.7A
Power redundancy	Dual power supply					
Power Connector	Terminal block					
Working environment						
Working temperature	-40~75°C					
Storage temperature	-40~85°C					
Relative Humidity	5%~95%(no condensation)					
Dimensions						
Size(W×H×D)	70×160×130 (mm)					

Industrial PoE Switches

Managed DIN-Rail POE Switches						
	IPS618-4PoE	IPS618-8PoE	IPS618-2F-4PoE	IPS715-1GC-4PoE	IPS716-2GC-4PoE	IPS719-1GC-4PoE
Port	1Combo	2Combo	1Combo	2Combo	1Combo	1Combo
Gigabit Ethernet, 10/100/1000 Mbps	—	—	—	1Combo	2Combo	1Combo
PoE, Gigabit Ethernet, 10/100/1000 Mbps	—	—	—	—	—	—
Fast Ethernet, 10/100 Mbps	4	—	4	—	—	4
PoE, Fast Ethernet, 10/100 Mbps	4	8	4	4	4	4
Gigabit Fiber Ethernet, 1000 Mbps	—	—	—	—	—	—
Console	√	—	—	—	—	—
Alarm	√	—	—	—	—	—
Exchange attribute						
100M forward speed	148810pps					
1000M forward speed	—	—	—	1488100pps	1488100pps	1488100pps
Transmit mode	store and forward					
Switching Fabric Capacity	1.6G	1.6G	1.6G	2.8G	4.8G	3.6G
Memory	1M					
MAC address table	8K					
Power supply						
Input Voltage	48VDC(44~55VDC)					
Input Current	1.5A	2.7A	1.5A	1.5A	1.5A	1.5A
Power redundancy	Dual power supply					
Power Connector	Terminal block					
Working environment						
Working temperature	-40~75°C					
Storage temperature	-40~85°C					
Relative Humidity	5%~95%(no condensation)					
Network Management and Control						
IGMP Snooping/GMRP	√					
SNMP/RMON	√					
STP/RSTP	√					
SW-Ring	√					
VLAN	√					
QoS	√					
Relay Warning	√					
Dimensions						
Size(W×H×D)	160×30×70 (mm)					

Industrial PoE Switches

Managed DIN-Rail PoE Switches					
Port	IPS719-1GC-8PoE	IPS7110-2GC-4PoE	IPS7110-2GC-8PoE	IPS7110-2GC-2F-4PoE	IPS7110-2GC-4F-4POE
Gigabit Ethernet, 10/100/1000 Mbps	1Combo	2Combo	2Combo	2Combo	2Combo
PoE, Gigabit Ethernet, 10/100/1000 Mbps	—				
Fast Ethernet, 10/100 Mbps	—	4	—	4	4
PoE, Fast Ethernet, 10/100 Mbps	8	4	8	4	4
Gigabit Fiber Ethernet, 1000 Mbps	—				
Console	√				
Alarm	√				
Exchange attribute					
100M forward speed	148810pps				
1000M forward speed	1488100pps				
Transmit mode	store and forward				
Switching Fabric Capacity	3.6G	5.6G	5.6G	5.6G	5.6G
Memory	1M				
MAC address table	8K				
Power supply					
Input Voltage	48VDC(44~55VDC)				
Input Current	2.7A	1.5A	2.7A	1.5A	2.7A
Power redundancy	Dual power supply				
Power Connector	Terminal block				
Working environment					
Working temperature	-40~75°C				
Storage temperature	-40~85°C				
Relative Humidity	5%~95%(no condensation)				
Network Management and Control					
IGMP Snooping/GMRP	√				
SNMP/RMON	√				
STP/RSTP	√				
SW-Ring	√				
VLAN	√				
QoS	√				
Relay Warning	√				
Dimensions					
Size(W×H×D)	160×70×130 (mm)				

Industrial PoE Switches

PoE Media Converters				
	IPMC101-F-PoE	IPMC101-SF-PoE	IPMC101GT-GF-PoE	IPMC101GT-GS-PoE
IEEE Standards	IEEE 802.3	√		
IEEE 802.3u	√			
IEEE 802.3ab	—	—	√	√
IEEE 802.3z	—	—	√	√
IEEE 802.3x	√			
IEEE 802.3af/at	√			
Interface	RJ45 Ports	10/100Base-T(X)	10/100/1000Base-T(X)	
Fiber Modes	Multi-mode Fiber / Single-mode Fiber			
Fiber Ports	100Base-FX , (SC/ST/FC)	100Base-FX , SFP	1000Base-FX , (SC/ST/FC)	1000Base-FX , SFP
LFP	√			
DIP Switches	√			
Transmission Distance	Twisted pair cable	100 m		
	Single mode fiber	1310nm /20/40/60km,1550nm /80/100/120km		
	Multimode fiber	850nm /2km,1310nm /2/5km		
Power supply	Input Voltage	48VDC(44~55VDC)		
Input Current	0.7A			
Power redundancy	Single power supply			
Power Connector	Terminal block			
Working environment	Working temperature	-40~75°C		
Storage temperature	-40~85°C			
Relative Humidity	5%~95%(no condensation)			
Dimensions	Size(W×H×D)	110×35×95 (mm)		

Serial Device Servers

Serial Device Servers							
							
Ethernet Interface							
Number of Ports	1						
Connectors	RJ45						
Speed	10/100 Mbps, Auto MDI/MDIX						
Magnetic Isolation Protection	—		—	1.5KV	—	1.5KV	
Serial Interface							
Number of Ports	1	2	4	8			
Serial Standards	RS-232/422/485	RS-232	RS-422/485	RS-232	RS-422/485	RS-232	RS-422/485
Connectors	DB9-M/Terminal block	RJ45	Terminal block	RJ45	Terminal block	RJ45	Terminal block
ESD Protection	15KV	8KV	8KV	15KV	8KV	15KV	15KV
Serial Communication Parameters	Parity: None, Even, Odd, Space, Mark ; Data Bits: 5 , 6 , 7 , 8 ; Stop Bits: 1, 2						
Flow Control	NO,RTS/CTS						
Baudrate	300bps-115200bps						
Power supply							
Input Voltage	9 ~ 48VDC						
Power Connector	Terminal block						
Network Management and Control							
Network Protocols	TCP、UDP、ARP、ICMP、HTTP、DNS、DHCP						
Web Console	√						
Serial Console	√						
Windows Utility	√						
Windows Real COM Drivers	Windows NT/2000,WindowsXP/2003/Vista/2008/7 x86/x64						
Installation Options							
DIN-Rail Mounting	√						
Panel Mounting	√						
Rack Mounting	—						
Working environment							
Working temperature	-40~75°C						
Storage temperature	-40~85°C						
Relative Humidity	5%-95%(no condensation)						
Dimensions							
Size(W×H×D)	100×69×22 (mm)	160×95.5×28 (mm)	160×95.5×28 (mm)				

Serial Device Servers

Serial Device Servers				
				
Ethernet Interface	NP3016T-16D(RS-232)	NP3016T-16DI(RS-485)	NP3116T-16D(RS232/485/422)-2P	NP3016T-16D(RS232/485/422)-P
Ethernet Interface	Number of Ports	1	2	1
Connectors	RJ45			
Speed	10/100 Mbps, Auto MDI/MDIX			
Magnetic Isolation Protection	—	1.2 KV	—	—
Serial Interface	Number of Ports	16	16	8
Serial Standards	RS-232	RS-422/485	RS-232/422/485	RS-232/422/485
Connectors	RJ45	Terminal block	RJ45	RJ45
ESD Protection	8KV			
Serial Communication Parameters	Parity: None, Even, Odd, Space, Mark ; Data Bits: 5 , 6 , 7 , 8 ; Stop Bits: 1, 2, 1.5			
Flow Control	NO,RTS/CTS, XON/XOFF,DTR/DTS			
Baudrate	300bps~92100bps			
Power supply	Input Voltage	85~265VDC		
Power Connector	Three-phase socket			
Network Management and Control	Network Protocols	TCP、UDP、ARP、ICMP、HTTP、DNS、DHCP		
Web Console	√			
Serial Console	√			
Windows Utility	√			
Windows Real COM Drivers	Windows NT/2000,WindowsXP/2003/Vista/2008/7 x86/x64			
Installation Options	DIN-Rail Mounting	—		
Panel Mounting	—			
Rack Mounting	√			
Working environment	Working temperature	-25~60°C	-25~55°C	-25~60°C
Storage temperature	-30~85°C			
Relative Humidity	5%~95%(no condensation)			
Dimensions	Size(W×H×D)	441.6×44.6×207.9 (mm)		

Modbus Gateways

Modbus Gateways			
	GW1101-1D(RS-232)		GW1101-1D(RS-485)
	GW1102-2D(RS-232)		GW1102-2D(RS-485)
Ethernet Interface			
Number of Ports	1		1
Connectors	RJ45		RJ45
Speed	10/100 Mbps, Auto MDI/MDIX		10/100 Mbps, Auto MDI/MDIX
Magnetic Isolation Protection	—		—
Serial Interface			
Number of Ports	1		2
Serial Standards	RS-232	RS-422/485	RS-232
Connectors	RJ45	Terminal block	RJ45
ESD Protection	8		8
Serial Communication Parameters	Parity: None, Even, Odd, Space, Mark ; Data Bits: 5 , 6 , 7 , 8 ; Stop Bits: 1, 2		
Flow Control	NO,RTS/CTS,XON/XOFF,DTR/DTS		
Working mode	RTU Slave,RTU Master,ASCII Slave,ASCII Master		
Baudrate	300bps-115200bps		
Power supply			
Input Voltage	9-48VDC		9-48VDC
Power Connector	Terminal block		Terminal block
Network Management and Control			
Telnet Configuration	√	√	√
WEB configuration	√	√	√
Installation Options			
DIN-Rail Mounting	√	√	√
Panel Mounting	√	√	√
Working environment			
Working temperature	-40~75°C		-40~75°C
Storage temperature	-40~85°C		-40~85°C
Relative Humidity	5%-95%(no condensation)		5%-95%(no condensation)
Dimensions			
Size(W×H×D)	100×69×22 (mm)		100×69×22 (mm)

Modbus Gateways

Modbus Gateways			
	GW1104-4D(RS-232)		GW1104-4DI(RS-485)
	GW1108-8D(RS-232)		GW1108-8DI(RS-485)
Ethernet Interface			
Number of Ports	1		1
Connectors	RJ45		RJ45
Speed	10/100 Mbps, Auto MDI/MDIX		10/100 Mbps, Auto MDI/MDIX
Magnetic Isolation Protection	—	1.5 KV	—
Serial Interface			
Number of Ports	4		8
Serial Standards	RS-232	RS-422/485	RS-232
Connectors	RJ45	Terminal block	RJ45
ESD Protection	8		8
Serial Communication Parameters	Parity: None, Even, Odd, Space, Mark ; Data Bits: 5 , 6 , 7 , 8 ; Stop Bits: 1, 2		
Flow Control	NO,RTS/CTS,XON/XOFF,DTR/DTS		
Working mode	RTU Slave,RTU Master,ASCII Slave,ASCII Master		
Baudrate	300bps-115200bps		
Power supply			
Input Voltage	9-48VDC		9~ 48VDC
Power Connector	Terminal block		Terminal block
Network Management and Control			
Telnet Configuration	√	√	√
WEB configuration	√	√	√
Installation Options			
DIN-Rail Mounting	√	√	√
Panel Mounting	√	√	√
Working environment			
Working temperature	-40~75°C		-40~75°C
Storage temperature	-40~85°C		-40~85°C
Relative Humidity	5%-95%(no condensation)		5%-95%(no condensation)
Dimensions			
Size(W×H×D)	160×95.5×28 (mm)		160×95.5×28 (mm)

Interface Converters

RS-232/485/422 Converters								
	TLC485	TLC422	SW485C	MODEL485P	SW485GI	SW485WA	SW4485I	OCTOPUS3000
Serial Interface								
RS-232	√	√	√	√	√	√	√	
RS-422/485			√	√	√	—	—	√
RS-422		√						
RS-485	√	—	—	—	—	√	√	—
Connector	Db9/Terminal block				Terminal block			
Interface protection	15 kV ESD	15 kV ESD,600W Surge	15 kV ESD,600W Surge 3kV Electrical Isolation	15 kV ESD,600W Surge 2.5kV Electrical Isolation	2kV Electrical Isolation	15 kV ESD,600W Surge 3kV Electrical Isolation		
Compliance	EIA RS-232,EIA RS-422,EIA RS-485							
Baudrate	300bps-115200bps							
Flow Control	Auto detect direction control							
Environmental Limits								
Working temperature	-20~60°C	-40~75°C	-20~60°C		-40~75°C		-20~60°C	
Storage temperature	-25~85°C	-40~85°C	-25~85°C		-40~85°C		-25~85°C	
Relative Humidity	5%~95%(no condensation)							
Power Requirements								
Input Voltage	—	—	—	9VDC	9~36VDC	—	12~48VDC	220VAC/48VDC
Dimensions								
Size(mm)	90×33×16.5 mm (Db9) 65×55×16.5 mm (DB25)	72×33×16.5 mm	93×62.4×22 mm	100×69×22 mm	82×33×16.5 mm	100×95×35 mm	227×146×43 mm	

Interface Converters

USB to RS-232/485/422 Converters											
	USB232	USB4232	USB8232I	USB485	USB485I	USB4485	USB8485I				
USB Interface											
Compliance	USB1.1/USB2.0 compliant,EIA RS-232			USB1.1/USB2.0 compliant,EIA RS-422,EIA RS-485							
Connector	USB type A										
Signal	VCC,DATA+,DATA-,GND,FG										
Serial Interface											
Number of Ports	1 x RS-232	4 x RS-232	8 x RS-232	1 x RS-485	1 x RS-232/485/422	4 x RS-485/422	8 x RS-485/422				
Connector	DB9 male / Terminal block										
Interface protection	15 kV ESD,600W Surge										
Serial Communication Parameters	Data Bits: 5,6,7,8 ; Stop Bits: 1,2 ; Parity: None,Even,Odd,Space,Mark										
Baudrate	300bps-115200bps										
Flow Control	RTS/CTS										
Driver Support											
windows 2000	√										
Windows XP/2003 x86/x64	√										
Windows Vista x86/x64	√										
Windows CE 4.2/5.0/5.2/6.0	√										
Mac OS-X	√										
Linux (above 2.4 versions), x86_64 Linux	√										
Environmental Limits											
Working temperature	-20~60°C			-40~75°C	-20~60°C	-40~75°C	-20~60°C				
Storage temperature	-25~85°C			-40~85°C	-25~85°C	-40~85°C	-25~85°C				
Relative Humidity	5%~95%(no condensation)										
Power Requirements											
Input Voltage	—	5VDC	5VDC	—	12VDC (9~48VDC)	5VDC	9VDC				
Dimensions											
Size(mm)	72×33×18 mm	160×94×28 mm	230×148.3×40 mm	72×33×18 mm	100×69×22 mm	160×94×28 mm	230×148.3×40 mm				

Interface Converters

CAN to RS-232/485 Converters



CAN232



CAN485

CAN Interface	
CAN Specification	CAN2.0A,CAN2.0B
Signal Support	GND,CANL,CANH,RES+,RES-
Baudrate	2.5K-1Mbps
Interface protection	8 kV ESD,2 kV Electrical Isolation
Connector	Terminal block
Serial Interface	
Number of Ports	1 x RS-232
Connector	Db9
Signal Support	TXD,RXD,GND
Serial Communication Parameters	Data Bits: 8 ; Stop Bits: 1, 2 ; Parity: None, Even, Odd, Space, Mark
Baudrate	300bps-115200bps
Compliance	EIA RS-232,EIA RS-485
Environmental Limits	
Working temperature	-40~75°C
Storage temperature	-40~85°C
Relative Humidity	5%~95%(no condensation)
Power Requirements	
Input Voltage	9VDC (9~48VDC)
Dimensions	
Size(mm)	100×69×22 mm

Interface Converters

RS-232 Isolator&Repeater



MODEL232I



MODEL232D

Serial Interface	
Number of Ports	1 x RS-232
Connector	DB9/DB25
Signal Support	TXD,RXD,GND
Serial Communication Parameters	Data Bits:5,6,7,8; Stop Bits: 1,2 ; Parity: None, Even, Odd, Space, Mark
Baudrate	300bps-921600bps
Compliance	EIA RS-232
Transfer distance	5m
Interface protection	600W surge,15KV ESD protection,2500V Electrical Isolation
Environmental Limits	
Working temperature	-0~70 °C
Storage temperature	-40~85 °C
Relative Humidity	5%~95%(no condensation)
Dimensions	
Size(mm)	63 ×33 ×17.5 mm (DB9)
	72 ×33 ×16.5 mm (DB9)

Interface Converters

TTL to RS-232/485 Converters



	TTL-232-33P	TTL-232-5P	TTL-485-5P
Serial Interface			
Standards	EIA RS-232C		EIA RS-485
RS-232 signal	TX, RX, GND		—
RS-485 signal	—		D+, D-, GND
TTL signal	IN, OUT, GND		
Baudrate	300~115200bps		
Transfer distance	3.3V TTL (3m)RS-232 (5m)	5V TTL (3m)RS-232 (5m)	5V TTL (3m)RS-485 (1200m)
Connectors	3.3V TTL (DB9 Male/Terminal Block) RS-232 (DB9 Female)	5V TTL (DB9 Male/Terminal Block) RS-232 (DB9 Female)	5V TTL (DB9 Male/Terminal Block) RS-485 (DB9 Male/Terminal Block)
Interface protection	600W surge protection, 15KV ESD protectionPower		
Power supply			
Input Voltage	—	—	5 VDC
Environmental Limits			
Working temperature	-10~60°C		
Storage temperature	-40~85°C		
Relative Humidity	5%~95%(no condensation)		
Dimensions			
Size(mm)	62.8×33.8×17.8 mm	80.3×33.4×18.6 mm	99.8×34.1×17.8 mm

Interface Converters

Surge Protectors



	FL45	FL485	FL422	FL-BNC
Data Line Surge Protection				
Interface	RJ45	Terminal block	Terminal block,	BNC
Standard	IEC6100-4-5 and ITU-TK20&21	IEC6100-4-5 and ITU-TK20&21	IEC61643-21, VDE0675, GB18802.1	IEC6100-4-5 and ITU-TK20&21
Nominal discharge current(In)	5 KA(8/20 μS)			
Working voltage	0~5V	0~5V	5V	0~2V
Limit voltage	≤40V	<15V		≤30V
Apply Band rate	100Mbps	1Mbps		10Mbps
Insert consumption	≤0.5dB	<0.5dB	≤0.2dB	≤0.5dB
Delay time	<1ns	<1ns	<1ns	≤10ns
Environmental Limits				
Working temperature	-20~60 °C		-40~85 °C	-20~60 °C
Storage temperature	-25~85 °C		-40~85 °C	-25~85 °C
Relative Humidity	5%~95%(no condensation)			
Dimensions				
Size(mm)	84×25×25 mm	80×25×25 mm	50×25×25 mm	86×25×25 mm

Media Converters

Ethernet Media Converters						
	MODEL1100	MODEL1200	MODEL3010	MODEL3011	MODEL3012	MODEL1100M
IEEE Standards						
IEEE 802.3	√	√	√	√	√	√
IEEE 802.3u	√	√	√	√	√	√
IEEE 802.3ab	—	—	—	—	√	—
IEEE 802.3z	—	—	—	—	√	—
Interface						
RJ45 Ports	10/100Base-T(X)		10/100/1000Base-T(X)		10/100/1000Base-T(X)	
Fiber Modes	Multi-mode Fiber / Single-mode Fiber					
Fiber Ports	100Base-FX , (SC/ST/FC)	100Base-FX , SFP	1000Base-FX,SFP	1000Base-FX,(SC/ST/FC)	100Base-FX,(SC/ST/FC)	
Transmission Distance						
Twisted pair cable	100 m					
Single mode fiber	1310nm /20/40/60km , 1550nm /80/100/120km					
Multimode fiber	850nm /2km , 1310nm /2/5km					
Network Management and Control						
Web management	—	—	—	—	—	√
SNMP management	—	—	—	—	—	√
Telnet management	—	—	—	—	—	√
Console management	—	—	—	—	—	√
Up graded online via TFTP	—	—	—	—	—	√
Power supply						
Input Voltage	External 5VDC, built-in 220VAC, 48VDC optional					
Environmental Limits						
Working temperature	-10~65 °C					
Storage temperature	-20~70°C					
Relative Humidity	5%~95%(no condensation)					
Dimensions						
Size(mm)	94×71×26 mm					

Media Converters

Ethernet Media Converter Rackmount				
	RACK2000A	RACK2000B	RACK2000C	RACK4000
Physical Characteristics				
Number of Slots	14	16	16	16
Dimensions(mm)	482.6×350×88 mm		425×315×92 mm	
Installation Options	19 inch 2U	19 inch 2U	19 inch 2U	19 inch 4U
Shell	aluminium alloy			
Power supply				
Input Voltage	AC 100~260V , 50~60HZ, or DC -48V			
Network Management and Control				
Web management				√
SNMP management				√
Telnet management				√
Environmental Limits				
Working temperature	0~50 °C			
Storage temperature	-40~85°C			
Relative Humidity	5%~95%(no condensation)			

Media Converters

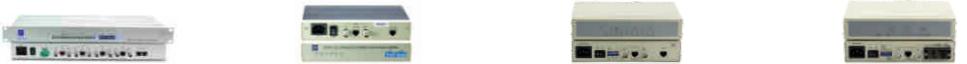
RS-232/485/422/CAN to Fiber Converters



	MODEL271 Series	MODEL277 Series	MODEL277A	MODEL277B	IMF204-2F-4DI(RS-485)	IMF208-2F-8DI(RS-485)	MC201
Optical Fiber Side							
Number of Ports	1			2		1	
Fiber Connector	SC/ST/FC						
Cables Requirements	Single-mode: 8.3/125, 8.7/125, 9/125, or 10/125 μm	Multi-mode: 50/125, 62.5/125, or 100/140 μm					
Transmission Distance	Single mode fiber :1310nm /20/40/60km , 1550nm /80/100/120km	Multimode fiber:850nm /2km , 1310nm /2/5km					
Serial Interface							
RS-232	1	1	—	—	—	—	
RS-422/485	1	—	1	4	—		
Connector	Terminal block	DB9	Terminal block	Terminal block	—		
Signals	RS-232 Signals: Tx, Rx, GND RS-422 Signals: T+, T-, R+, R-, GND RS-485 Signals: D+, D-, GND	RS-232 Signals: Tx, Rx, GNG	RS-422 Signals: T+, T-, R+, R-, GND RS-485 Signals: D+, D-, GND	—	—		
Interface protection	600W surge,15KV ESD protection		1500W surge,15KV ESD protection	—			
Compliance	EIA RS-232,EIA RS-422,EIA RS-485	EIA RS-232	EIA RS-422,EIA RS-485	EIA RS-422,EIA RS-485	—		
Baudrate	0bps-115200bps						
CAN Interface							
CAN Specification	—			CAN2.0A,CAN2.0B			
Signal Support	—			GND,CANL,CANH, RES+,RES-			
Baudrate	—			2.5K-1Mbps			
Interface protection	—			8 KV ESD,2 KV Electrical Isolation			
Connector	—			Terminal block			
Power supply							
Input Voltage	9~36VDC	5VDC	9~48VDC or 110~240VDC	5VDC			
Environmental Limits							
Working temperature	-25~70°C	-25~70°C	-10~70°C	-40~75°C			
Storage temperature	-40~80°C	-40~85°C	-40~85°C	—			
Relative Humidity	5%~95%(no condensation)						
Dimensions							
Size(mm)	100×69×22 mm	94×71×26 mm	500×120×35 mm	22×69×100 mm			

Protocol Converters

E1/FE1/Ethernet/V35 Converters



	MODEL7210	MODEL7211	MODEL7212	MODEL7221
E1 Interface				
Standard	ITU-T G.703,ITU-TG.735 ,ITU-TG.823			
Frame format	unframed			framed
Interface rate	2.048Mbps×4=8.192Mbps	2.048Mbps		N×64Kbps(N=1~32)
CRC checkout	No			
Port coding	HDB3			
Port transmission	2KM			
Interface protection	1500V electromagnetism isolate			
Connectors	120 Ohm(RJ-45) and 75 ohm(BNC double coaxial)			
Ethernet port				
Interface Types	10/100BaseT, full/half duplex			
Standards Compliance	IEEE 802.3(support VLAN)	IEEE 802.3		
Bit Rate	10/100BaseT limited to Max 2.048 Mbps			
Connectors	RJ45 (10/100 Base-T Electrical)			
Line code	Manchester Encoding			
Clock selection	—	Internal and recover clock		
V.35 interface				
Standard	—	—	—	Comply with V.35 (DTE)
Clock	—	—	—	Line clock, Local clock
Connector	—	—	—	DB-25 female (DB25 to M/34 cable)
Line code	—	—	—	NRZ
Clock selection	—	—	—	Internal clock, V.35 line clock, EI recovery Clock
Test facility	—	—	—	Bite Local& remote loop test
Power supply				
Input Voltage	220VAC or -48VDC			
Environmental Limits				
Working temperature	-25~70°C			0~50°C
Storage temperature	-40~85°C			-20~80°C
Relative Humidity	5%~95%(no condensation)			5%~95%(no condensation)
Dimensions				
Size(mm)	483×160×44 mm	227.4×146.3×42.7 mm		140×210×42 mm

Protocol Converters

E1/FE1/Ethernet/V35 to Fiber Converters					
					
Optic Interface	MODEL 7213S	MODEL 7301	MODEL 7302	MODEL 7304	MODEL 7305
Line mode type	CMI				
Line mode rate	100Mbps	8.192Mbps		2.048Mbps	
Operating wavelength	850nm,1310nm or 1550nm				
Applicable optic fiber	Multi-mode, Single-mode				
Optic fiber connector	SC/PC				
Transmission distance	Single-mode: up to 120km; Multi-mode: up to 2km				
E1 Interface					
Standard	ITU-T G.703, G.704, G.736, G.823, I431 ITU-T G.703, G.704	ITU-T G.703, G.704		—	—
Frame structure			framing CCS(PCM31)CAS(PCM30)	—	—
Data rate	framing: N×64Kbps(N=0~32); unframing: 2.048Mbps	2.048Mbps	N×64Kbps (N=1~31)or 2.048Mbps	—	—
Port coding		HDB3		—	—
Working		Asynchronism Transparent transfer		—	—
Interface protection	—	1500V electromagnetism isolate		—	—
Connectors	75Ω, physical interface BNC; 120Ω, physical interface RJ45			—	—
Transmission Distance	Circuit interface: BNC: 600m; RJ45: 300m; Data interface: 100m			—	—
V.35 Interface					
Data rate	—	—	—	N×64Kbps (N=1~32)	—
Flow Control	—	—	—	CTS/RTS (Hardware)	—
Type of connector	—	—	—	M34 connector	—
Operating mode	—	—	—	DCE	—
ETH Interface					
Interface Types	10/100Base-T(X), full/half duplex	—	—	—	10/100Base-T(X), full/half duplex
Standards Compliance	IEEE 802.3	—	—	—	IEEE 802.3
Bit Rate	100 Mbps	—	—	—	100 Mbps
Connectors	RJ45	—	—	—	RJ45
Line code	Manchester Encoding	—	—	—	Manchester Encoding
Transmission Distance	100m	—	—	—	100m
Power supply					
Input Voltage	Independent: 85V~264V AC input, 5V/2A output;-36V~72V DC input, 5V/2A output ;Frame-mounted: 150V~260V AC input, 5V/16A,12V/1A output ;-38V~58V DC input, 5V/16A ,12V/1A output;				
Environmental Limits					
Working temperature	0~50°C				
Storage temperature	-20~80°C				
Relative Humidity	5%~90%(no condensation)				
Dimensions					
Size(mm)	Independent: 140 × 210 × 42 mm Frame-mounted: 19in standard 4.5U cabinet			227.4×146.3×42.7 mm	66×42×20 mm

Protocol Converters

Protocol Converters		
Serial to E1 Converters		BNC to RJ45 Converters
	E232	
E1 Interface	E1 Interface	TLC703
Standard	ITU-T G.703,ITU-TG.735 ,ITU-TG.823	—
Frame format	unframed	—
Interface rate	2.048Mbps±50ppm	—
CRC checkout	No	—
Port coding	HDB3	—
Port transmission	2KM	—
Interface protection	1500W surge protection, 15KV ESD protection	—
Connectors	120 Ohm(RJ-45) and 75 ohm(BNC double coaxial)	—
Balance to Unbalance Converter		
Standard	—	ITU/CCITT G.703
Twisted-pair signal	—	T+, T-, R+, R-, GND
Copper signal	—	TX, RX
Working	—	Transparent convert
Baud rate	—	2Mbps
Isolation	—	1000V
Interface style	—	BNC(75 ohm, unbalance) RJ45(100 ohm, balance)
Serial Interface		
Standard	EIA RS-232C	EIA RS-485, RS-422
Connector	DB25 female	—
Signal	TXD, RXD, CTS, DSR, GND, DCD	D+, D-, GND; TXD+, TXD-, RXD+, RXD-, GND
Baud Rate	0~115200bps	—
Work mode	DCE	—
Interface protection	600W surge protection, 15KV ESD protection	—
Working	Synchronous serial, lucency transmission	—
Power supply		
Input Voltage	220VAC or -48VDC	—
Environmental Limits		
Working temperature	-25~70°C	-40~75°C
Storage temperature	-40~85°C	-40~85°C
Relative Humidity	5%~95%(no condensation)	5%~95%(no condensation)
Dimensions		
Size(mm)	227.4×146.3×42.7 mm	66×42×20 mm

PoE Switches

10/100M PoE Switches



	ES1005D-4PoE-65W	ES1009D-8PoE-150W	ES5018-16PoE-300W	ES5026-24PoE-450W	
Port					
Gigabit Ethernet, 10/100/1000 Mbps	—	—	—	—	
PoE, Gigabit Ethernet, 10/100/1000 Mbps	—	—	2	4	
Fast Ethernet, 10/100 Mbps	1	1	—	—	
PoE, Fast Ethernet, 10/100 Mbps	4	8	14	20	
Gigabit Fiber Ethernet, 1000 Mbps	—	—	2	2	
Console	—	—	—	—	
PoE Pin-out	1/2(+),3/6(-)		1/2(+),3/6(-);Customized 4/5(+),7/8(-)		
Exchange attribute					
Forwarding Rate (10M)	14880pps/port				
Forwarding Rate (100M)	148809pps/port				
Forwarding Rate (1000M)	—		1488095pps/port		
Forwarding Mode	Full wire-speed storage and forwarding				
Switching Capacity	≥1Gbps	≥1.8Gbps	≥10.8Gbps	≥16Gbps	
MAC address table	16K				
Power supply					
Input Voltage	48VDC/1.25A	48VDC/2A	90~264VAC(50~60Hz)	90~264VAC(50~60Hz)	
Max Output Power(single port)	30W	30W	30W	30W	
Total Power Consumption	60W	96W	300W	450W	
Power Connector					
Working environment					
Working temperature	-20~50°C				
Storage temperature	-40~70°C				
Relative Humidity	10%~95%(no condensation)				
Network Management and Control					
IP v6	—	—	√	√	
SNMP/RMON	—	—	√	√	
STP/RSTP/MSTP	—	—	√	√	
IGMP Snooping/GMRP	—	—	√	√	
VLAN	—	—	√	√	
QoS	—	—	√	√	
PoE standards	IEEE802.3af/at				
Dimensions					
Size(W×H×D)	118×85×28 (mm)	155×75×28 (mm)	440×285×44.5 (mm)		

PoE Switches

10/100/1000M PoE Switches



	ES1008G-8PoE-150W	ES5008G-8PoE-150W	ES5010G-2GS-8PoE-150W	ES5018G-2GS-16PoE-300W	ES5026G-2GS-24PoE-450W
Port					
Gigabit Ethernet, 10/100/1000 Mbps	—	—	—	—	—
PoE, Gigabit Ethernet, 10/100/1000 Mbps	8	8	8	16	24
Fast Ethernet, 10/100 Mbps	—	—	—	—	—
PoE, Fast Ethernet, 10/100 Mbps	—	—	—	—	—
Gigabit Fiber Ethernet, 1000 Mbps	—	—	2	2	2
Console	—	—	—	√	√
PoE Pin-out	1/2(+),3/6(-);Customized 4/5(+),7/8(-)				
Exchange attribute					
Forwarding Rate (10M)	14880pps				
Forwarding Rate (100M)	148809pps				
Forwarding Rate (1000M)	1488095pps				
Forwarding Mode	Full wire-speed storage and forwarding				
Switching Capacity	≥16Gbps	≥16Gbps	≥20Gbps	≥36Gbps	≥52Gbps
MAC address table	8K				16K
Power supply					
Input Voltage	90~264VAC(50~60Hz)				
Max Output Power(single port)	30W				
Total Power Consumption	150W				300W
Power Connector	Three-phase socket				450W
Working environment					
Working temperature	-20~50°C				
Storage temperature	-40~70°C				
Relative Humidity	10%~95%(no condensation)				
Network Management and Control					
IP v6	—	—	√	√	√
SNMP/RMON	—	—	√	√	√
STP/RSTP/MSTP	—	—	√	√	√
IGMP Snooping/GMRP	—	—	√	√	√
VLAN	—	—	√	√	√
QoS	—	—	√	√	√
PoE standards	IEEE802.3af/at				
Dimensions					
Size(W×H×D)	280×180×44 (mm)		280×180×44 (mm)	440×285×44.5 (mm)	

PoE Switches

PoE Injectors



	PSE101-15W	PSE101-30W	PSE101G-15W	PSE101G-30W
Port				
PoE Standard	IEEE802.3af	IEEE802.3af/at	IEEE802.3af	IEEE802.3af/at
Fixed ports	2*10/100M Base-T(x) Ports (including one POE ports)		2*10/100/1000M Base-T(x) Ports (including one POE ports)	
PoE Pin-out	1/2(+), 3/6(-); Customized 4/5(+), 7/8(-)			
Physic Medium	UTP category 3/4/5 cables(Maximum 100m)			
Network Cable Deployment	Support Auto-MDIX function, can automatically identify straight forward cable and cross-over cable			
Negotiation Pattern	Support port auto-negotiation function (automatically negotiate transmission rate and Duplex modes)			
Power supply				
Input Voltage	90~264VAC/50~60Hz			
Max Output Power (single port)	15W	30W	15W	30W
Environmental Limits				
Working temperature	-20~50°C			
Storage temperature	-40~70°C			
Relative Humidity	5%~95%(no condensation)			
Dimensions				
Size(mm)	145×56×39mm	113×62×33 mm	145×56×39mm	113×62×33 mm

PoE Switches

PoE Splitters



	PD101-12V-15W	PD101G-12V-15W	PD101G-12V-30W
Port			
PoE Standard		IEEE802.3af	IEEE802.3af/at
Fixed ports	2*10/100M Base-T(x) Ports(including one POE ports)		2*10/100/1000M Base-T(x) Ports (including one POE ports)
PoE Pin-out	1/2(+), 3/6(-); Customized 4/5(+), 7/8(-)		
Physic Medium	UTP category 3/4/5 cables(Maximum 100m)		
Network Cable Deployment	Support Auto-MDIX function, can automatically identify straight forward cable and cross-over cable		
Negotiation Pattern	Support port auto-negotiation function (automatically negotiate transmission rate and Duplex modes)		
Power supply			
Input Voltage	48VDC/0.3A	48VDC/0.3A	48VDC/0.6A
Max Output Power (single port)	15.4W	15W	30W
Environmental Limits			
Working temperature	-20~50°C		
Storage temperature	-40~70°C		
Relative Humidity	5%~95%(no condensation)		
Dimensions			
Size(mm)	80×60×23mm		