

PRODUCT SELECTION GUIDE

The background of the page features several overlapping, semi-transparent blue geometric shapes. These shapes are primarily trapezoidal and rectangular, with rounded corners and varying shades of blue, ranging from light sky blue to a deep, vibrant blue. They are arranged in a layered, overlapping fashion, creating a sense of depth and movement. Some shapes are positioned higher and further back, while others are lower and more prominent in the foreground. The overall effect is a modern, clean, and professional aesthetic.

CONTENTS

01 ABOUT 3ONEDATA

P01 COMPANY PROFILE

03 INDUSTRIAL WIRELESS NETWORKING

P31 WIRELESS AP

P32 WIRELESS AP PCB BOARD

P33 WIRELESS ROAMING CLIENT

P34 CELLULAR NETWORK ROUTER

02 INDUSTRIAL ETHERNET SWITCHES

P04 UNIVERSAL MANAGED L3 SWITCH

P07 UNIVERSAL MANAGED L2 SWITCH

P12 UNIVERSAL UNMANAGED SWITCH

P14 TSN & PTP SWITCH

P15 MANAGED POE SWITCH

P17 UNMANAGED POE SWITCH

P18 EN50155 L3 SWITCH

P20 EN50155 L2 SWITCH

P21 EN50155 L2 & UNMANAGED SWITCH

P22 IEC 61850 SWITCH

P23 PROFINET SWITCH

P24 EMBEDDED SWITCH MODULE

P26 MEDIA CONVERTER CHASSIS & CARD

P28 MEDIA CONVERTER

P29 NETWORK MANAGEMENT SOFTWARE

04 INDUSTRIAL DEVICE NETWORKING

P37 SECURE SERIAL DEVICE SERVER

P38 SERIAL DEVICE SERVER

P39 MODBUS GATEWAY

P40 EDGE COMPUTING GATEWAY

P42 CAN SERVER

P42 FILEDBUS-TO-FIBER MODEM

P43 SERIAL-TO-FIBER MODEM

P44 USB-TO-SERIAL CONVERTER

P44 INTERFACE CONVERTER/HUB/REPEATER

Company Profile

Who is 3onedata?

Headquartered in Shenzhen, founded in 2001, 3onedata has been focused on industrial communication for 23 years and has accumulated rich professional experience in providing industrial communication solutions and services for partners and customers worldwide. In 2020, 3onedata became the first IIoT company to be listed on Shanghai Stock Exchange (SSE) STAR Market, a milestone for our sustainable growth and development.

Corporate Culture

Vision: Committed to be a leading brand in IIoT.

Mission: Focus on IIoT, continuously provide competitive solution and service, and create ever-increasing values and development opportunities for customers, employees and business partners.

Corporate Philosophy: Innovation • Value • Honor



Headquarters in **SHENZHEN**



R&D Center in **SHANGHAI**



Factory in **JIANGXI PROVINCE**

INDUSTRIAL ETHERNET SWITCHES

UNIVERSAL MANAGED L3 SWITCH

UNIVERSAL MANAGED L2 SWITCH

UNIVERSAL UNMANAGED SWITCH

TSN & PTP SWITCH

MANAGED POE SWITCH

UNMANAGED POE SWITCH

EN50155 L3 SWITCH

EN50155 L2 SWITCH

EN50155 L2 & UNMANAGED SWITCH

IEC 61850 SWITCH

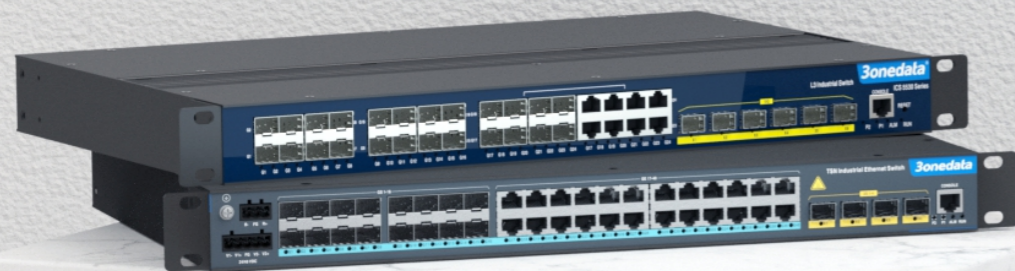
PROFINET SWITCH

EMBEDDED SWITCH MODULE

MEDIA CONVERTER CHASSIS & CARD

MEDIA CONVERTER

NETWORK MANAGEMENT SOFTWARE



Universal Managed L3 Switch



ICS5556-24GT24GS8XS



ICS5530-16GS8GC6XS



ICS5428-16GT8GC4XS

| Interface | | | |
|---|---------------|---------------|---------------|
| Number of Main Ports | 56 | 30 | 28 |
| 10/100/1000Base-T(X) MGMT RJ45 | √ | - | - |
| 1G/10GBase-X SFP Slot | 8 | 6 | 4 |
| 1G Combo (RJ45 or SFP) | - | 8 | 8 |
| 100/1000Base-X SFP Slot | 24 | 16 | - |
| 10/100/1000Base-T(X) RJ45 | 24 | - | 16 |
| Console | √ | √ | √ |
| Relay | √ | √ | √ |
| Switch Properties | | | |
| MAC Address Table | 96K | 16K | 16K |
| Buffer | 32Mbit | 16Mbit | 12Mbit |
| Switching Fabric | 256G | 168G | 128G |
| Jumbo Frame Size | 16K | 16K | 16K |
| Layer 3 Features | | | |
| IPv4, IPv6 | √ | √ | √ |
| Inter-VLAN Routing, Static Routing | √ | √ | √ |
| RIPv1/v2, OSPFv2, BGP4, VRRP, NAT | √ | √ | √ |
| Multicast | | | |
| PIM-DM/SM | √ | √ | √ |
| IGMPv1/v2/v3, IGMP Snooping, SSM Mapping | √ | √ | √ |
| Layer 2 Features | | | |
| VLAN, LACP | √ | √ | √ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | √ | √ | √ |
| Management | | | |
| Telnet/SSH, HTTP/HTTPS, Console | √ | √ | √ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | √ | √ | √ |
| DHCP Server/Client, DHCP Relay, DHCP option82 | √ | √ | √ |
| LLDP | √ | √ | √ |
| QoS | √ | √ | √ |
| DDM | √ | √ | √ |
| Port Mirroring | √ | √ | √ |
| NTP Client | √ | √ | √ |
| Security | | | |
| IEEE 802.1X, RADIUS | √ | √ | √ |
| DHCP Snooping | √ | √ | √ |
| Access Control Lists | √ | √ | √ |
| Power Supply | | | |
| Dual Power Supply | √ | √ | √ |
| 220VAC (100-240VAC) | √ | √ | √ |
| 24/48VDC (18-72VDC) | - | √ | √ |
| 12-48VDC | - | - | - |
| Environmental Limits | | | |
| Operating Temperature | -40~60°C | -40~75°C | -40~75°C |
| IP Rating | IP30 | Ip40 | Ip30 |
| Installation | Rack mounting | Rack mounting | Rack mounting |
| Certification | | | |
| CE, FCC, RoHS | √ | √ | √ |
| UL 61010-1 | √ | √ | √ |



ICS6400-12GT12GS4XS



ICS6420-12GT4GS4XS



ICS6420-8GT8GS4XS

| Interface | | | |
|---|---------------|---------------|---------------|
| Number of Main Ports | 28 | 20 | 20 |
| 10/100/1000Base-T(X) MGMT RJ45 | - | - | - |
| 1G/10GBase-X SFP Slot | 4 | 4 | 4 |
| 1G Combo (RJ45 or SFP) | - | - | - |
| 100/1000Base-X SFP Slot | 12 | 4 | 8 |
| 10/100/1000Base-T(X) RJ45 | 12 | 12 | 8 |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 16K | 16K | 16K |
| Buffer | 12Mbit | 12Mbit | 12Mbit |
| Switching Fabric | 128G | 128G | 128G |
| Jumbo Frame Size | 16K | 16K | 16K |
| Layer 3 Features | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ |
| Inter-VLAN Routing, Static Routing RIPv1/v2, OSPFv2, BGP4, VRRP, NAT | ✓ | ✓ | ✓ |
| Multicast | | | |
| PIM-DM/SM | ✓ | ✓ | ✓ |
| IGMPv1/v2/v3, IGMP Snooping, SSM Mapping | ✓ | ✓ | ✓ |
| Layer 2 Features | | | |
| VLAN, LACP | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ |
| Management | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay, DHCP option82 | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ |
| QoS | ✓ | ✓ | ✓ |
| DDM | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| Security | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 220VAC (100-240VAC) | - | - | - |
| 24/48VDC (18-72VDC) | - | - | - |
| 12-48VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~60°C | -40~75°C | -40~75°C |
| IP Rating | IP30 | Ip40 | Ip30 |
| Installation | Rack mounting | Rack mounting | Rack mounting |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |



| | ICS5400-24GT16GS4XS | ICS5400-24GT8GS4XS | ICS5400-12GT16GS4XS | ICS5400-24GT4XS |
|--|---------------------|--------------------|---------------------|-----------------|
| Interface | | | | |
| Number of Main Ports | 44 | 36 | 32 | 28 |
| 1G/2.5G/10GBase-X SFP Slot | 4 | 4 | 4 | 4 |
| 100/1000Base-X SFP Slot | 16 | 8 | 16 | - |
| 10/100/1000Base-T(X) RJ45 | 24 | 24 | 12 | 24 |
| Console | ✓ | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ | ✓ |
| Switch Properties | | | | |
| MAC Address Table | 32K | 32K | 32K | 32K |
| Buffer | 32Mbit | 32Mbit | 32Mbit | 32Mbit |
| Switching Fabric | 160G | 160G | 160G | 160G |
| Jumbo Frame Size | 10K | 10K | 10K | 10K |
| Layer 3 Features | | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ | ✓ |
| Inter-VLAN Routing, Static Routing | | | | |
| RIPv1/v2, RIPv6, OSPFv2/v3, IS-IS, BGP4, VRRPv3, NAT | ✓ | ✓ | ✓ | ✓ |
| Multicast | | | | |
| IPv4 PIM-DM/SM, IPv6 PIM-DM/SM | ✓ | ✓ | ✓ | ✓ |
| MLDv1/v2, MLD Snooping, SSM Mapping | ✓ | ✓ | ✓ | ✓ |
| IGMPv1/v2/v3, IGMP Snooping, SSM Mapping | ✓ | ✓ | ✓ | ✓ |
| Layer 2 Features | | | | |
| VLAN, LACP | ✓ | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, MRP, Smart-link, SW-Ring | ✓ | ✓ | ✓ | ✓ |
| Management | | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay, DHCP option82 | ✓ | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ | ✓ |
| QoS | ✓ | ✓ | ✓ | ✓ |
| DDM | ✓ | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ |
| Security | | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | |
| Dual Power Supply | ✓ | ✓ | ✓ | ✓ |
| 220VAC (85~264VAC) | ✓ | ✓ | ✓ | ✓ |
| 12-55VDC | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 | IP40 |
| Installation | Rack mounting | Rack mounting | Rack mounting | Rack mounting |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ |

Universal Managed L2 Switch



IES5328-16GT4GS8GC



IES6320-16GT4GS



IES6316-8GT8GS

| Interface | | | |
|-----------------------------------|----------|----------|----------|
| Number of Main Ports | 28 | 20 | 16 |
| 100M/1G/2.5GBase-X SFP Slot | - | - | - |
| 1G Combo (RJ45 or SFP) | 8 | - | - |
| 100/1000Base-X SFP Slot | - | - | - |
| 1000Base-X SFP Slot | 4 | 4 | 8 |
| 10/100/1000Base-T(X) RJ45 | 16 | 16 | 8 |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 16K | 16K | 16K |
| Buffer | 12Mbit | 12Mbit | 12Mbit |
| Switching Fabric | 56G | 56G | 56G |
| Jumbo Frame Size | 16K | 16K | 16K |
| Layer 3 Features | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ |
| Multicast | | | |
| IGMPv1/v2/v3, IGMP Snooping | ✓ | ✓ | ✓ |
| Layer 2 Features | | | |
| 802.1Q VLAN, LACP | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ |
| Management | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ |
| QoS | ✓ | ✓ | ✓ |
| DDM | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| Security | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 220VAC (100~240VAC) | ✓ | - | - |
| 12~48VDC | - | ✓ | ✓ |
| 24VDC (18~36VDC) | ✓ | - | - |
| 48VDC (36~72VDC) | ✓ | - | - |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP30 | IP40 | IP40 |
| Installation (Rack mounting) | ✓ | - | - |
| Installation (DIN-Rail mounting) | - | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |



IES6300-8GT2GS2HS



IES6000-8GT2HS



IES6000-4GT2HS

| Interface | | | | |
|-----------------------------------|------------|----------|----------|--|
| Number of Main Ports | 12 | 10 | 6 | |
| 100M/1G/2.5GBase-X SFP Slot | 2 | 2 | 2 | |
| 1G Combo (RJ45 or SFP) | - | - | - | |
| 100/1000Base-X SFP Slot | 2 | - | - | |
| 1000Base-X SFP Slot | - | - | - | |
| 10/100/1000Base-T(X) RJ45 | 8 | 8 | 4 | |
| 10/100Base-T(X) RJ45 | - | ✓ | ✓ | |
| Console | ✓ | ✓ | ✓ | |
| Relay | ✓ | | | |
| Switch Properties | | | | |
| MAC Address Table | 8K | 8K | 8K | |
| Buffer | 4Mbit | 4Mbit | 4Mbit | |
| Switching Fabric | 30G | 30G | 30G | |
| Multicast | | | | |
| IGMPv1/v2/v3, IGMP Snooping | ✓ | ✓ | ✓ | |
| IGMPv1/v2, IGMP Snooping | - | - | - | |
| Layer 2 Features | | | | |
| 802.1Q VLAN, Link Aggr | ✓ | ✓ | ✓ | |
| STP/RSTP, SW-Ring | - | - | - | |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ | |
| Management | | | | |
| Telnet/SSH, HTTP, Console | ✓ | ✓ | ✓ | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ | |
| SNMPv1/v2c, SNMP Trap | ✓ | ✓ | ✓ | |
| SNMPv1/v2c/v3, SNMP Trap | ✓ | ✓ | ✓ | |
| DHCP Server/Client | ✓ | ✓ | ✓ | |
| LLDP | ✓ | ✓ | ✓ | |
| QoS | ✓ | ✓ | ✓ | |
| DDM | ✓ | ✓ | ✓ | |
| Port Mirroring | ✓ | ✓ | ✓ | |
| NTP Client | ✓ | ✓ | ✓ | |
| Security | | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ | |
| DHCP Snooping | ✓ | ✓ | ✓ | |
| Access Control Lists | ✓ | ✓ | ✓ | |
| Power Supply | | | | |
| Dual Power Supply | ✓ | ✓ | ✓ | |
| 220VAC (100~240VAC) | ✓ (Single) | - | - | |
| 220VAC (85~264VAC) | - | - | - | |
| 12~48VDC | ✓ | ✓ | - | |
| Environmental Limits | | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C | |
| IP Rating | IP40 | IP40 | IP40 | |
| Installation (DIN-Rail mounting) | ✓ | ✓ | ✓ | |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | |
| UL 61010-1 | ✓ | ✓ | ✓ | |



IES6220-16T4GS



IES6210-8T2GC



IES6210-4T2GC

| Interface | | | |
|-----------------------------------|----------|------------|------------|
| Number of Main Ports | 20 | 10 | 6 |
| 100M/1G/2.5GBase-X SFP Slot | - | - | - |
| 1G Combo (RJ45 or SFP) | - | 2 | 2 |
| 100/1000Base-X SFP Slot | - | - | - |
| 1000Base-X SFP Slot | 4 | - | - |
| 10/100/1000Base-T(X) RJ45 | - | - | - |
| 10/100Base-T(X) RJ45 | 16 | 8 | 4 |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 8K | 8K | 8K |
| Buffer | 3Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 12.8G | 7.6G | 7.6G |
| Multicast | | | |
| IGMPv1/v2/v3, IGMP Snooping | - | - | - |
| IGMPv1/v2, IGMP Snooping | ✓ | ✓ | ✓ |
| Layer 2 Features | | | |
| 802.1Q VLAN, Link Aggr | ✓ | ✓ | ✓ |
| STP/RSTP, SW-Ring | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | - | - | - |
| Management | | | |
| Telnet/SSH, HTTP, Console | ✓ | ✓ | ✓ |
| Telnet/SSH, HTTP/HTTPS, Console | - | - | - |
| SNMPv1/v2c, SNMP Trap | - | - | - |
| SNMPv1/v2c/v3, SNMP Trap | ✓ | ✓ | ✓ |
| DHCP Server/Client | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ |
| QoS | - | - | - |
| DDM | - | - | - |
| Port Mirroring | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| Security | | | |
| IEEE 802.1X, RADIUS | - | - | - |
| DHCP Snooping | - | - | - |
| Access Control Lists | - | - | - |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 220VAC (100~240VAC) | - | - | - |
| 220VAC (85~264VAC) | - | ✓ (Single) | ✓ (Single) |
| 12~48VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 |
| Installation (DIN-Rail mounting) | ✓ | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |



IES6100-6T2F-W2



IES6100-6T3F

| Interface | | |
|------------------------------|----------------------------------|-------------------------|
| Number of Ethernet Ports | 8 | 9 |
| 100Base-X SC/FC/ST | 2 | 3 |
| 10/100Base-T(X) RJ45 | 6 | 6 |
| 2.4G Wi-Fi Antenna Interface | √ (2) | - |
| Console | √ | √ |
| Relay | √ | √ |
| WLAN Feature | | |
| WLAN Standard | IEEE 802.11 a/b/g/n | - |
| Radio Frequency | 802.11 b/g/n: 2.412GHz~2.4835GHz | - |
| RF Power | 23dBm | - |
| Encryption Type | WAP/WAP2/WAP3/RADIUS | - |
| Operating Mode | AP, Bridge Mode | - |
| Switch Properties | | |
| MAC Address Table | 8K | 8K |
| Buffer | 1Mbit | 1Mbit |
| Switching Fabric | 7.6G | 7.6G |
| Multicast | | |
| Static Multicast | √ | √ |
| IGMPv1/v2, IGMP Snooping | √ | √ |
| Layer 2 Features | | |
| VLAN, Link Aggregation | √ | √ |
| STP/RSTP, SW-Ring, MRP | √ | √ |
| Management | | |
| Telnet/SSH, HTTP, Console | √ | √ |
| SNMPv1/v2c/v3, SNMP Trap | √ | √ |
| DHCP Server/Client | √ | √ |
| LLDP | √ | √ |
| Port Mirroring | √ | √ |
| NTP Client | √ | √ |
| Security | | |
| 802.1X, RADIUS | √ | √ |
| Static MAC | √ | √ |
| Power Supply | | |
| Dual Power Supply | √ | √ |
| 220VAC (100-240VAC) | √ (Single Power Supply) | √ (Single Power Supply) |
| 12-48VDC | √ | √ |
| Environmental Limits | | |
| Operating Temperature | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 |
| Installation (Rack mounting) | √ | √ |
| Certification | | |
| CE, FCC, RoHS | √ | √ |
| UL 61010-1 | √ | √ |



IES7110-3GS



IES7110-2GS



IES7110-2GS-4F

| Interface | | | |
|-----------------------------|----------|----------|----------|
| Number of Main Ports | 10 | 10 | 10 |
| 1000Base-X SFP Slot | 3 | 2 | 2 |
| 100Base-X SC/FC/ST | - | - | 4 |
| 10/100Base-T(X) RJ45 | 7 | 8 | 4 |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 8K | 8K | 8K |
| Buffer | 1Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 7.6G | 7.6G | 7.6G |
| Multicast | | | |
| Static Multicast | ✓ | ✓ | ✓ |
| IGMPv1/v2 | ✓ | ✓ | ✓ |
| IGMP Snooping | ✓ | ✓ | ✓ |
| Layer 2 Features | | | |
| VLAN | ✓ | ✓ | ✓ |
| Link Aggregation | ✓ | ✓ | ✓ |
| STP/RSTP, | ✓ | ✓ | ✓ |
| SW-Ring | ✓ | ✓ | ✓ |
| Management | | | |
| Telnet/SSH | ✓ | ✓ | ✓ |
| HTTP | ✓ | ✓ | ✓ |
| Console | ✓ | ✓ | ✓ |
| SNMPv1/v2c | ✓ | ✓ | ✓ |
| SNMP Trap | ✓ | ✓ | ✓ |
| DHCP Server/Client | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ |
| SNTP Client | ✓ | ✓ | ✓ |
| Security | | | |
| 802.1X, RADIUS | - | - | - |
| Static MAC | - | - | - |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 220VAC (85~264VAC) | - | - | - |
| 12~48VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 |
| DIN-Rail or wall mounting | ✓ | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |

Universal Unmanaged Switch



IES2220-16T4GS



IES2210-8T2GC



IES2210-4T2GC

| Interface | | | |
|---------------------------|----------|-------------------------|-------------------------|
| Number of Main Ports | 20 | 10 | 6 |
| 1G Combo (RJ45 or SFP) | - | 2 | 2 |
| 1000Base-X SFP Slot | 4 | - | - |
| 10/100Base-T(X) RJ45 | 16 | 8 | 4 |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 8K | 8K | 8K |
| Buffer | 3Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 12.8G | 7.6G | 7.6G |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 220VAC (85~264VAC) | - | ✓ (Single Power Supply) | ✓ (Single Power Supply) |
| 24/48VDC (18~72VDC) | - | - | - |
| 12~48VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 |
| DIN-Rail or wall mounting | ✓ | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |



IES318-8T



IES318-7T1F



IES318-6T2F



IES318-4T4F

| Interface | | | |
|---------------------------|-------------------------|-------------------------|-------------------------|
| Number of Main Ports | 8 | 8 | 8 |
| 100Base-X SC/FC/ST | - | 1 | 2 |
| 10/100Base-T(X) RJ45 | 8 | 7 | 6 |
| 4 | | | 4 |
| Switch Properties | | | |
| MAC Address Table | 2K | 2K | 2K |
| Buffer | 1Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 1.6G | 1.6G | 1.6G |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 220VAC/DC (85~264VAC/DC) | ✓ (Single Power Supply) | ✓ (Single Power Supply) | ✓ (Single Power Supply) |
| 9~60VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 |
| DIN-Rail or wall mounting | ✓ | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |



IES2305-5GT



IES2305-4GT1GS



IES2305-4GT1GF



IES2105-5T



IES2105-4T1F



IES2105-3T2F

| Interface | | | | | | |
|---------------------------|----------|----------|----------|----------|----------|----------|
| Number of Main Ports | 5 | 5 | 5 | 5 | 5 | 5 |
| 1000Base-X SFP Slot | - | 1 | - | - | - | - |
| 1000Base-X SC/FC/ST | - | - | 1 | - | - | - |
| 10/100/1000Base-T(X) RJ45 | 5 | 4 | 4 | - | - | - |
| 100Base-X SC/FC/ST | - | - | - | - | 1 | 2 |
| 10/100Base-T(X) RJ45 | - | - | - | 5 | 4 | 3 |
| Switch Properties | | | | | | |
| MAC Address Table | 2K | 2K | 2K | 2K | 2K | 2K |
| Buffer | 1Mbit | 1Mbit | 1Mbit | 1Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 9.125G | 9.125G | 9.125G | 1G | 1G | 1G |
| Power Supply | | | | | | |
| Dual Power Supply | - | - | - | - | - | - |
| 220VAC (100~240VAC) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12~48VDC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 | IP40 | IP40 | IP40 |
| DIN-Rail mounting | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |



IES2300SL-16GT



IES2300SL-8GT



IES2300SL-5GT



IES2100SL-16T



IES2100SL-8T



IES2100SL-5T

| Interface | | | | | | |
|---------------------------|----------|----------|----------|----------|----------|----------|
| Number of Main Ports | 16 | 8 | 5 | 16 | 8 | 5 |
| 10/100/1000Base-T(X) RJ45 | 16 | 8 | 5 | - | - | - |
| 10/100Base-T(X) RJ45 | - | - | - | 16 | 8 | 5 |
| Switch Properties | | | | | | |
| MAC Address Table | 4K | 4K | 2K | 8K | 2K | 2K |
| Buffer | 4.1Mbit | 1.5Mbit | 1.5Mbit | 1.5Mbit | 1.5Mbit | 1.5Mbit |
| Switching Fabric | 52G | 16G | 14G | 3.2G | 1.6G | 1G |
| Power Supply | | | | | | |
| Dual Power Supply | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9~60VDC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 | IP40 | IP40 | IP40 |
| DIN-Rail mounting | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

TSN & PTP Switch



**ICS5400TSN
24GT16GS4XS**

**ICS5400TSN
12GT12GS4XS**

**ICS6400TSN
16GT4XS**

**ICS6400TSN
8GT4XS**

**ICS5400PTP
24GT16GS4XS**

**ICS5400PTP
12GT12GS4XS**

| Interface | | | | | | |
|--|----------|----------|----------|----------|----------|----------|
| Number of Main Ports | 44 | 28 | 20 | 12 | 44 | 28 |
| 1G/2.5G/10GBase-X SFP Slot | 4 | 4 | 4 | 4 | 4 | 4 |
| 100/1000Base-X SFP Slot | 16 | 12 | - | - | 16 | 12 |
| 10/100/1000Base-T(X) RJ45 | 24 | 12 | 16 | 8 | 24 | 12 |
| Console | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Switch Properties | | | | | | |
| MAC Address Table | 32K | 32K | 32K | 32K | 32K | 32K |
| Buffer | 32Mbit | 32Mbit | 32Mbit | 32Mbit | 32Mbit | 32Mbit |
| Switching Fabric | 160G | 160G | 160G | 160G | 160G | 128G |
| Jumbo Frame Size | 10K | 10K | 10K | 10K | 10K | 10K |
| TSN Features | | | | | | |
| IEEE 1588v2 (PTPv2), 802.1 AS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 802.1 CB/QBV/QBU/QCH/QCI/QCC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Layer 3 Features | | | | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Inter-VLAN Routing, Static Routing | | | | | | |
| RIPv1/v2, RIPng, OSPFv2/v3, IS-IS, BGP4, VRRPv3, NAT | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Multicast | | | | | | |
| IPv4 PIM-DM/SM, IPv6 PIM-DM/SM | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MLDv1/v2, MLD Snooping, SSM Mapping | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| IGMPv1/v2/v3, IGMP Snooping, SSM Mapping | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Layer 2 Features | | | | | | |
| VLAN, LACP | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, MRP, Smart-link, SW-Ring | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Management | | | | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay, DHCP option82 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LLDP, QoS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Port Mirroring, DDM | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Security | | | | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | | | |
| Dual Power Supply | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 220VAC (85-264VAC) | ✓ | - | - | - | ✓ | - |
| 220VAC (90-264VAC) | - | ✓ | - | - | - | ✓ |
| 12-55VDC | - | - | - | - | - | - |
| 12-48VDC | - | ✓ | ✓ | ✓ | - | ✓ |
| Environmental Limits | | | | | | |
| Operating Temperature | -40-75°C | -40-60°C | -40-65°C | -40-65°C | -40-75°C | -40-60°C |
| IP Rating | IP40 | IP40 | IP40 | IP40 | IP40 | IP40 |
| Rack mounting | ✓ | ✓ | - | - | ✓ | ✓ |
| DIN-Rail mounting | - | - | ✓ | ✓ | - | - |
| Certification | | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Managed PoE Switch



ICS5428
16GP8GC4XS

IES6300
8GP2GS2HS

IES6300
8GP2GS2HS

IES6000
8GP2HS

IES6000
4GP2HS

| Interface | | | | | |
|---|---------------|---|-------------------|-------------------|-------------------|
| Number of Main Ports | 28 | 12 | 12 | 10 | 6 |
| 1G/10GBase-X SFP Slot | 4 | - | - | - | - |
| 100M/1G/2.5GBase-X SFP Slot | - | 2 | 2 | 2 | 2 |
| 1G Combo (RJ45 or SFP) | 8 | - | - | - | - |
| 100/1000Base-X SFP Slot | - | 2 | 2 | - | - |
| 10/100/1000Base-T(X) PoE RJ45 | 16 | 8 | 8 | 8 | 4 |
| Console | ✓ | ✓ | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ | ✓ | ✓ |
| Switch Properties | | | | | |
| MAC Address Table | 16K | 8K | 8K | 8K | 8K |
| Buffer | 12Mbit | 4Mbit | 4Mbit | 4Mbit | 4Mbit |
| Switching Fabric | 128G | 30G | 30G | 30G | 30G |
| Jumbo Frame Size | 16K | 9K | 9K | 9K | 9K |
| Interface | | | | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ | ✓ | ✓ | ✓ |
| 802.3 BT (PoE++) | - | ✓ | - | - | - |
| Power Pin Assignment | 1/2+, 3/6- | AF/AT: 1/2-, 3/6+ BT: 1/2-, 3/6+, 4/5-, 7/8+ | 1/2+, 3/6- | 1/2+, 3/6- | 1/2+, 3/6- |
| Max. Port PoE Budget | 30W | 90W | 30W | 30W | 30W |
| Total PoE Budget | 240W | 360W | 120W/240W | 120W/240W | 120W |
| Layer 3 Features | | | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ | ✓ | ✓ |
| Inter-VLAN Routing, Static Routing | ✓ | - | - | - | - |
| RIPv1/v2, OSPFv2, BGP4, VRRP, NAT | ✓ | - | - | - | - |
| Multicast | | | | | |
| IPv4 PIM-DM/SM | ✓ | - | - | - | - |
| IGMPv1/v2/v3, IGMP Snooping | ✓ | ✓ | ✓ | ✓ | ✓ |
| Layer 2 Features | | | | | |
| VLAN, LACP | ✓ | ✓ | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ | ✓ | ✓ |
| Management | | | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay, DHCP option82 | ✓ | ✓ | ✓ | ✓ | ✓ |
| LLDP, QoS | ✓ | ✓ | ✓ | ✓ | ✓ |
| Port Mirroring, DDM | ✓ | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ | ✓ |
| Security | | | | | |
| DHCP Snooping | ✓ | ✓ | ✓ | ✓ | ✓ |
| Switching Fabric | ✓ | ✓ | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | | |
| Dual Power Supply | ✓ | ✓ | ✓ | ✓ | ✓ |
| 50-55VDC | - | ✓ | - | - | - |
| 48VDC (45-55VDC) | ✓ | - | ✓ | ✓ | ✓ |
| 24VDC (18-36VDC) | - | - | ✓ | ✓ | - |
| Environmental Limits | | | | | |
| Operating Temperature | -40-75°C | -40-75°C | -40-75°C | -40-75°C | -40-75°C |
| IP Rating | IP30 | IP40 | IP40 | IP40 | IP40 |
| Installation | Rack mounting | DIN-Rail mounting | DIN-Rail mounting | DIN-Rail mounting | DIN-Rail mounting |
| Certification | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ | ✓ |



IES6220-16P4GS



IES6210-8P2GC



IES6210-4P2GC

| Interface | | | |
|------------------------------|------------|------------|------------|
| Number of Main Ports | 20 | 10 | 6 |
| 1G Combo (RJ45 or SFP) | - | 2 | 2 |
| 1000Base-X SFP Slot | 4 | - | - |
| 10/100Base-T(X) PoE RJ45 | 16 | 8 | 4 |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 8K | 8K | 8K |
| Buffer | 3Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 12.8G | 7.6G | 7.6G |
| Power over Ethernet | | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ | ✓ |
| Power Pin Assignment | 1/3+, 2/6- | 1/3+, 2/6- | 1/3+, 2/6- |
| Max. Port PoE Budget | 30W | 30W | 30W |
| Total PoE Budget | 120W/200W | 120W/240W | 60W/120W |
| Multicast | | | |
| Static Multicast | ✓ | ✓ | ✓ |
| IGMPv1/v2, IGMP Snooping | ✓ | ✓ | ✓ |
| Layer 2 Features | | | |
| VLAN, Link Aggregation | ✓ | ✓ | ✓ |
| STP/RSTP, SW-Ring | ✓ | ✓ | ✓ |
| Management | | | |
| Telnet/SSH, HTTP, Console | ✓ | ✓ | ✓ |
| SNMPv1/v2c, SNMP Trap | ✓ | ✓ | ✓ |
| DHCP Server/Client | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ |
| SNTP Client | ✓ | ✓ | ✓ |
| Security | | | |
| 802.1X, RADIUS | - | ✓ | ✓ |
| IP/MAC filtering, Static MAC | ✓ | - | - |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 48VDC (45-55VDC) | ✓ | ✓ | ✓ |
| 24VDC (18-36VDC) | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40-75°C | -40-75°C | -40-75°C |
| IP Rating | IP40 | IP40 | IP40 |
| DIN-Rail or wall mounting | ✓ | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |

EN50155 L3 Switch



TNS5800-16GP4GT



TNS5800-16P4GT



TNS5800-8GP4GT



TNS5800-8P4GT

| Interface | | | | |
|--|------------|------------|------------|------------|
| Number of Main Ports | 20 | 20 | 12 | 12 |
| 10/100/1000Base-T(X) Bypass M12 | 4 | 4 | 4 | 4 |
| 10/100/1000Base-T(X) PoE M12 | 16 | - | 8 | - |
| 10/100Base-T(X) PoE M12 | - | 16 | - | 8 |
| Console | ✓ | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ | ✓ |
| Switch Properties | | | | |
| MAC Address Table | 16K | 16K | 16K | 16K |
| Buffer | 12Mbit | 12Mbit | 12Mbit | 12Mbit |
| Switching Fabric | 128G | 128G | 128G | 128G |
| Jumbo Frame Size | 16K | 16K | 16K | 16K |
| Power over Ethernet | | | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ | ✓ | ✓ |
| Power Pin Assignment | 1/2+, 3/4- | 1/3+, 2/4- | 1/2+, 3/4- | 1/3+, 2/4- |
| Max. Port PoE Budget | 30W | 30W | 30W | 30W |
| Total PoE Budget | 100W | 100W | 100W | 100W |
| Layer 3 Features | | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ | ✓ |
| Inter-VLAN Routing, Static Routing | ✓ | ✓ | ✓ | ✓ |
| RIPv1/v2, OSPFv2, BGP4, VRRPv2, NAT | ✓ | ✓ | ✓ | ✓ |
| Multicast | | | | |
| IPv4 PIM-DM/SM | ✓ | ✓ | ✓ | ✓ |
| IGMPv1/v2/v3, IGMP Snooping, SSM Mapping | ✓ | ✓ | ✓ | ✓ |
| Layer 2 Features | | | | |
| VLAN, LACP | ✓ | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ | ✓ |
| Management | | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay, DHCP option822 | ✓ | ✓ | ✓ | ✓ |
| LLDP, QoS | ✓ | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ |
| Security | | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | |
| 110VDC (66-156VDC) | - | ✓ | - | - |
| 24VDC (18-36VDC) | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40-75°C | -40-75°C | -40-75°C | -40-75°C |
| IP Rating | IP40 | IP40 | IP40 | IP40 |
| Rack mounting | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ |
| EN 50155, EN 50121, IEC 61373, EN 45545 | ✓ | ✓ | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ | ✓ | ✓ |
| IEC 62443 | ✓ | ✓ | ✓ | ✓ |



TNS5800D-16GP4GT



TNS5800D-16P4GT



TNS5800D-8GP4GT



TNS5800D-8P4GT

| Interface | | | | |
|---|------------|------------|------------|------------|
| Number of Main Ports | 20 | 20 | 12 | 12 |
| 10/100/1000Base-T(X) Bypass M12 | 4 | 4 | 4 | 4 |
| 10/100/1000Base-T(X) PoE M12 | 16 | - | 8 | - |
| 10/100Base-T(X) PoE M12 | - | 16 | - | 8 |
| Console | ✓ | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ | ✓ |
| Switch Properties | | | | |
| MAC Address Table | 16K | 16K | 16K | 16K |
| Buffer | 12Mbit | 12Mbit | 12Mbit | 12Mbit |
| Switching Fabric | 56G | 56G | 56G | 56G |
| Jumbo Frame Size | 16K | 16K | 16K | 16K |
| Power over Ethernet | | | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ | ✓ | ✓ |
| Power Pin Assignment | 1/2+, 3/4- | 1/3+, 2/4- | 1/3+, 2/4- | 1/3+, 2/4- |
| Max. Port PoE Budget | 30W | 30W | 30W | 30W |
| Total PoE Budget | 100W | 100W | 100W | 100W |
| Layer 3 Features | | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ | ✓ |
| Inter-VLAN Routing, Static Routing | ✓ | ✓ | ✓ | ✓ |
| RIPv1/v2, OSPFv2, BGP4, VRRPv2, NAT | ✓ | ✓ | ✓ | ✓ |
| Multicast | | | | |
| IPv4 PIM-DM/SM | ✓ | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ | ✓ |
| Layer 2 Features | | | | |
| VLAN, LACP | ✓ | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ | ✓ |
| Management | | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay, DHCP option82 | ✓ | ✓ | ✓ | ✓ |
| LLDP, QoS | ✓ | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ |
| Security | | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | |
| 110VDC (66-156VDC) | ✓ | ✓ | ✓ | ✓ |
| 24VDC (18-36VDC) | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40-75°C | -40-75°C | -40-75°C | -40-75°C |
| IP Rating | IP67 | IP67 | IP67 | IP67 |
| Wall mounting | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ |
| EN 50155, EN 50121, IEC 61373, EN 45545 | ✓ | ✓ | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ | ✓ | ✓ |
| IEC 62443 | ✓ | ✓ | ✓ | ✓ |

EN50155 L2 Switch



TNS5500D-16GP4GT



TNS5500D-16P4GT



TNS5500D-8GP4GT



TNS5500D-8P4GT

| Interface | | | | |
|---|------------|------------|------------|------------|
| Number of Main Ports | 20 | 20 | 12 | 12 |
| 10/100/1000Base-T(X) Bypass M12 | 4 | 4 | 4 | 4 |
| 10/100/1000Base-T(X) PoE M12 | 16 | - | 8 | - |
| 10/100Base-T(X) PoE M12 | - | 16 | - | 8 |
| Console | ✓ | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ | ✓ |
| Switch Properties | | | | |
| MAC Address Table | 16K | 16K | 16K | 16K |
| Buffer | 12Mbit | 12Mbit | 12Mbit | 12Mbit |
| Switching Fabric | 56G | 56G | 56G | 56G |
| Jumbo Frame Size | 16K | 16K | 16K | 16K |
| Power over Ethernet | | | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ | ✓ | ✓ |
| Power Pin Assignment | 1/2+, 3/4- | 1/3+, 2/4- | 1/3+, 2/4- | 1/3+, 2/4- |
| Max. Port PoE Budget | 30W | 30W | 30W | 30W |
| Total PoE Budget | 100W | 100W | 100W | 100W |
| Layer 3 Features | | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ | ✓ |
| Multicast | | | | |
| IGMPv1/v2/v3, IGMP Snooping, SSM Mapping | ✓ | ✓ | ✓ | ✓ |
| Layer 2 Features | | | | |
| VLAN, LACP | ✓ | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ | ✓ |
| Management | | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay, DHCP option82 | ✓ | ✓ | ✓ | ✓ |
| LLDP, QoS | ✓ | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ |
| Security | | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | |
| 110VDC (66-156VDC) | ✓ | ✓ | ✓ | ✓ |
| 24VDC (18-36VDC) | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40-75°C | -40-75°C | -40-75°C | -40-75°C |
| IP Rating | IP67 | IP67 | IP67 | IP67 |
| Wall mounting | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ |
| EN 50155, EN 50121, IEC 61373, EN 45545 | ✓ | ✓ | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ | ✓ | ✓ |

EN50155 L2 & Unmanaged Switch



TNS5500D-8T



TNS5000D-8T



TNS5500D-2GX8GPoE

| Interface | | | |
|--|----------|----------|------------|
| Number of Main Ports | 8 | 8 | 10 |
| 1G/10GBase-T(X) M12 | - | - | 2 |
| 10/100/1000Base-T(X) PoE M12 | - | - | 8 |
| 10/100Base-T(X) M12 | 8 | 8 | - |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 8K | 8K | 16K |
| Buffer | 1Mbit | 1Mbit | 2Mbit |
| Switching Fabric | 7.6G | 7.6G | 56G |
| Power over Ethernet | | | |
| 802.3 AF/AT (PoE+) | - | - | ✓ |
| Power Pin Assignment | - | - | 1/2-, 3/4+ |
| Max. Port PoE Budget | - | - | 30W |
| Total PoE Budget | - | - | 160W |
| Multicast | | | |
| Static Multicast | ✓ | - | - |
| IGMPv1/v2, IGMP Snooping | ✓ | - | - |
| Layer 2 Features | | | |
| 802.1Q VLAN, Link Aggregation | ✓ | - | - |
| STP/RSTP, SW-Ring | ✓ | - | - |
| Management | | | |
| Telnet/SSH, HTTP, Console | ✓ | - | - |
| SNMPv1/v2c, SNMP Trap | ✓ | - | - |
| DHCP Server/Client | ✓ | - | - |
| LLDP | ✓ | - | - |
| Port Mirroring | ✓ | - | - |
| SNTP Client | ✓ | - | - |
| Power Supply | | | |
| 110VDC (66-154VDC) | ✓ | ✓ | - |
| 24VDC (9-36VDC) | ✓ | ✓ | - |
| 24VDC (18-36VDC) | - | - | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40-75°C | -40-75°C | -10-50°C |
| IP Rating | IP67 | IP65 | IP67 |
| Wall mounting | ✓ | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |
| EN 50155, EN 50121, IEC 61373, EN 45545 | ✓ | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ | ✓ |
| Q/CR 699-2019, Q/CRRC J26-2018 | ✓ | ✓ | - |

IEC 61850 Switch



MES5300-28GS



MES5300-24GT4GS



MES5200-16GT8F4GS

| Interface | | | |
|---|------------|------------|------------|
| Number of Main Ports | 28 | 28 | 28 |
| 100/1000Base-X SFP Slot | 28 | 4 | 4 |
| 10/100/1000Base-T(X) RJ45 | - | 24 | 16 |
| 100Base-X SC/FC/ST | - | - | 8 |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 32K | 8K | 8K |
| Buffer | 32Mbit | 4.1Mbit | 4.1Mbit |
| Switching Fabric | 90G | 56G | 56G |
| Jumbo Frame Size | 10K | 10K | 10K |
| Layer 3 Features | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ |
| Multicast | | | |
| IGMPv1/v2/v3, IGMP Snooping | ✓ | ✓ | ✓ |
| Layer 2 Features | | | |
| VLAN, LACP | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, MRP, SW-Ring | ✓ | ✓ | ✓ |
| Management | | | |
| Telnet/SSH, HTTP/HTTPS, Console, Modbus TCP | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay | ✓ | ✓ | ✓ |
| LLDP, QoS | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| MMS Server | √(Pending) | √(Pending) | √(Pending) |
| Security | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 85-264VAC (77-300VDC) | ✓ | ✓ | ✓ |
| 18-72VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~85°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 |
| Rack mounting | ✓ | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| IEC 61850-3, IEEE 1613 | ✓ | ✓ | ✓ |

PROFINET Switch



**IES6300PN
8GT2HS**

PROFINET CC-B



**IES6200PN
16T4GS**

PROFINET CC-B



IES2008-PN

PROFINET CC-A

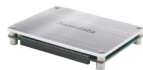


IES2005-PN

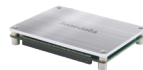
PROFINET CC-A

| | PROFINET CC-B | PROFINET CC-B | PROFINET CC-A | PROFINET CC-A |
|---------------------------------|---------------|---------------|---------------|---------------|
| Interface | | | | |
| Number of Main Ports | 10 | 20 | 8 | 5 |
| 1000Base-X SFP Slot | 2(1G/2.5G) | 4 | - | - |
| 10/100/1000Base-T(X) RJ45 | 8 | - | - | - |
| 10/100Base-T(X) RJ45 | - | 16 | 8 | 5 |
| Console | ✓ | ✓ | - | - |
| Relay | ✓ | ✓ | - | - |
| Switch Properties | | | | |
| MAC Address Table | 16K | 8K | 2K | 2K |
| Buffer | 2Mbit | 3Mbit | 0.75Mbit | 0.75Mbit |
| Switching Fabric | 20G | 12.8G | 1.6G | 1G |
| Jumbo Frame Size | 10K | - | - | - |
| Multicast | | | | |
| IGMPv1/v2/v3 | ✓ | ✓ | - | - |
| IGMP Snooping | ✓ | ✓ | - | - |
| Layer 2 Features | | | | |
| 802.1Q VLAN | ✓ | ✓ | - | - |
| LACP | ✓ | ✓ | - | - |
| STP/RSTP/MSTP, ERPS | ✓ | ✓ | - | - |
| SW-Ring | ✓ | ✓ | - | - |
| MRP (MRM/MRC) | ✓ | ✓ | - | - |
| Management | | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | - | - |
| SNMPv1/v2c/v3, SNMP Trap | ✓ | ✓ | - | - |
| DHCP Server/Client | ✓ | ✓ | - | - |
| LLDP | ✓ | ✓ | - | - |
| QoS | ✓ | ✓ | - | - |
| Port Mirroring | ✓ | ✓ | - | - |
| NTP Client | ✓ | ✓ | - | - |
| Security | | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | - | - |
| Access Control Lists | ✓ | ✓ | - | - |
| Power Supply | | | | |
| Dual Power Supply | ✓ | ✓ | - | - |
| 12~48VDC | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 | IP40 |
| DIN-Rail mounting | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |

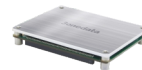
Embedded Switch Module



ICM7428G



IEM6300-20G



IEM6300-12G

| Interface | | | |
|-------------------------------------|-------------------|-------------------|-------------------|
| Number of Main Ports | 28 | 20 | 12 |
| QSGMII | 8 | - | - |
| 1000Base-X | 4 | 4 | 4 |
| 10/100/1000Base-T(X) | 16 | 16 | 8 |
| UART (Console) | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 16K | 8K | 8K |
| Buffer | 12Mbit | 4Mbit | 4Mbit |
| Switching Fabric | 128G | 40G | 24G |
| Jumbo Frame Size | 16K | 9K | 9K |
| Layer 3 Features | | | |
| IPv4, IPv6 | ✓ | ✓ | ✓ |
| Inter-VLAN Routing, Static Routing | ✓ | - | - |
| RIPv1/v2, OSPFv2, BGP4, VRRPv2, NAT | ✓ | - | - |
| Multicast | | | |
| IPv4 PIM-DM/SM | ✓ | - | - |
| IGMPv1/v2/v3, IGMP Snooping | ✓ | ✓ | ✓ |
| Layer 2 Features | | | |
| 802.1Q VLAN | ✓ | ✓ | ✓ |
| LACP | ✓ | ✓ | ✓ |
| STP/RSTP/MSTP, ERPSv1/v2, SW-Ring | ✓ | ✓ | ✓ |
| Management | | | |
| Telnet/SSH, HTTP/HTTPS, Console | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ |
| QoS | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| Security | | | |
| IEEE 802.1X, RADIUS | ✓ | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ | ✓ |
| Port Security | ✓ | ✓ | ✓ |
| Access Control Lists | ✓ | ✓ | ✓ |
| Power Supply | | | |
| 3.3VDC±5% | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| Installation | Embedded mounting | Embedded mounting | Embedded mounting |
| Dimension(W*H*D) | 90mm×72mm×14.6mm | 90mm×72mm×14.6mm | 90mm×10.4mm×72mm |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |


IEM7110-3G

IEM618-4D-2C

IEM615-2D

| Interface | | | |
|------------------------------------|-------------------|--|-------------------|
| Number of Main Ports | 10 | 8 | 5 |
| 1000Base-X or 10/100/1000Base-T(X) | 3 | - | - |
| 1000Base-X or 10/100Base-T(X) | 7 | 8 | 5 |
| UART (Console) | √ | √ | √ |
| UART | - | √ (4) | √ (2) |
| CAN | - | √ (2) | - |
| Switch Properties | | | |
| MAC Address Table | 8K | 2K | 2K |
| Buffer | 1Mbit | 1Mbit | 0.5Mbit |
| Switching Fabric | 7.6G | 2G | 1.2G |
| UART Features | | | |
| RS-232/422/485 Optional | - | √ | √ |
| Baud Rate | - | 300bps~115200bps | 300bps~115200bps |
| Data Bit | - | 5, 6, 7, 8 | 8 |
| Parity Bit | - | None, Even, Odd, Space, Mark | None, Even, Odd |
| Stop Bit | - | 1, 1.5, 2 | 1, 2 |
| Operating Mode | - | Realcom, TCP Server, TCP Client, UDP, TCP Auto | |
| CAN Features | | | |
| CAN 2.0A/B | - | √ | - |
| CAN-H, CAN-L | - | √ | - |
| Baud Rate | - | 5-1000kbps | - |
| Operating Mode | - | TCP Server/Client, UDP, TCP Auto | - |
| Multicast | | | |
| Static Multicast | √ | √ | √ |
| IGMPv1/v2, IGMP Snooping | √ | √ | √ |
| Layer 2 Features | | | |
| VLAN, Link Aggregation | √ | √ | √ |
| STP/RSTP, SW-Ring | √ | √ | √ |
| Management | | | |
| Telnet/SSH, HTTP, Console | √ | √ | √ |
| SNMPv1/v2c, SNMP Trap | √ | √ | √ |
| DHCP Server/Client | √ | √ | √ |
| LLDP | √ | √ | √ |
| Port Mirroring | √ | √ | √ |
| SNTP Client | √ | √ | √ |
| Power Supply | | | |
| 3.3VDC±5% | √ | √ | √ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~85°C | -40~75°C |
| Installation | Embedded mounting | Embedded mounting | Embedded mounting |
| Dimension(W*H*D) | 72mm×8.9mm×54mm | 72mm×9.5mm×54mm | 55mm×9.7mm×40mm |
| Certification | | | |
| CE, FCC, RoHS | √ | √ | √ |

Media Converter Chassis & Card



RACK2100-R



RACK2000D

| Media Converter Slot | | |
|------------------------------|-------------------------------|----------------------------|
| MC Slot | 18 | 16 |
| NMU Slot | 1 | - |
| Adapted Media Converter Card | ECU100 series, ECU100M series | MODEL1100-C, MODEL3012-C |
| Management | | |
| SNMPv1/v2c | ✓ | ✓ |
| Web(HTTP) | ✓ | ✓ |
| DHCP Client | ✓ | ✓ |
| NTP Client | ✓ | ✓ |
| SMTP Alarm | ✓ | ✓ |
| Power Supply | | |
| Dual Power Supply | ✓ | ✓ |
| 85-264VAC/DC | ✓ | - |
| 100-260VAC | - | ✓ |
| Environmental Limits | | |
| Operating Temperature | -40~75°C | -20~60°C |
| Storage Temperature | -40~85°C | -20~60°C |
| Relative Humidity | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) |
| Installation | Rack mounting | Rack mounting |
| Dimension(W*H*D) | 432.04mm×88.1mm×278mm | 483.4mm×90.5mm×291.2mm |
| Certification | | |
| CE, FCC, RoHS | ✓ | ✓ |



ECU100M-1GT2GS



ECU100M-2GT1GF



ECU100M-1GT1GF



ECU100M-2T1F



ECU100M-1T1F

| Interface | | | | | |
|---------------------------|-----------------------------|-------|-------|----------|----------|
| Number of Main Ports | 3 | 3 | 2 | 3 | 2 |
| 1000Base-X SFP | 2 | - | - | - | - |
| 1000Base-X SC/FC/ST | - | 1 | 1 | - | - |
| 10/100/1000Base-T(X) RJ45 | 1 | 2 | 1 | - | - |
| 100Base-X SC/FC/ST | - | - | - | 1 | 1 |
| 10/100Base-T(X) RJ45 | - | - | - | 2 | 1 |
| Transmission Distance | | | | | |
| Ethernet | 100M | | | | |
| Single-mode Fiber | 20/40/80KM@1310NM or 1550NM | | | | |
| Multi-mode Fiber | 2KM@1310NM | | | | |
| Switch Properties | | | | | |
| MAC Address Table | 8K | 8K | 8K | 2K | 2K |
| Buffer | 1Mbit | 1Mbit | 1Mbit | 0.75Mbit | 0.75Mbit |
| Switching Fabric | 14G | 14G | 14G | 0.8G | 0.8G |
| Environmental Limits | | | | | |
| Operating Temperature | -40~75°C | | | | |
| Embedded Mounting | ✓ | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ |



MODEL3012-C



MODEL1100-C

| Interface | | MODEL3012-C | MODEL1100-C |
|---------------------------|--|-----------------------------|-------------|
| Number of Main Ports | | 2 | 2 |
| 1000Base-X SFP | | - | - |
| 1000Base-X SC/FC/ST | | 1 | - |
| 10/100/1000Base-T(X) RJ45 | | 1 | - |
| 100Base-X SC/FC/ST | | - | 1 |
| 10/100Base-T(X) RJ45 | | - | 1 |
| Transmission Distance | | | |
| Ethernet | | 100M | |
| Single-mode Fiber | | 20/40/80KM@1310NM or 1550NM | |
| Multi-mode Fiber | | 2KM@1310NM | |
| Switch Properties | | | |
| MAC Address Table | | 1K | 1K |
| Buffer | | 12KB | 1Mbit |
| Switching Fabric | | 4G | 0.4G |
| Environmental Limits | | | |
| Operating Temperature | | -10~60°C | |
| Installation | | Embedded Mounting | |
| Certification | | | |
| CE, FCC, RoHS | | ✓ | ✓ |



ECU100-1GT2GS



ECU100-2GT1GF



ECU100-1GT1GF



ECU100-2T1F



ECU100-1T1F

| Interface | | ECU100-1GT2GS | ECU100-2GT1GF | ECU100-1GT1GF | ECU100-2T1F | ECU100-1T1F |
|---------------------------|--|-----------------------------|---------------|---------------|-------------|-------------|
| Number of Main Ports | | 3 | 3 | 2 | 3 | 2 |
| 1000Base-X SFP | | 2 | - | - | - | - |
| 1000Base-X SC/FC/ST | | - | 1 | 1 | - | - |
| 10/100/1000Base-T(X) RJ45 | | 1 | 2 | 1 | - | - |
| 100Base-X SC/FC/ST | | - | - | - | 1 | 1 |
| 10/100Base-T(X) RJ45 | | - | - | - | 2 | 1 |
| Transmission Distance | | | | | | |
| Ethernet | | 100M | | | | |
| Single-mode Fiber | | 20/40/80KM@1310NM or 1550NM | | | | |
| Multi-mode Fiber | | 2KM@1310NM | | | | |
| Switch Properties | | | | | | |
| MAC Address Table | | 8K | 8K | 8K | 2K | 2K |
| Buffer | | 1Mbit | 1Mbit | 1Mbit | 0.75Mbit | 0.75Mbit |
| Switching Fabric | | 14G | 14G | 14G | 0.8G | 0.8G |
| Environmental Limits | | | | | | |
| Operating Temperature | | -40~75°C | | | | |
| Installation | | Embedded Mounting | | | | |
| Certification | | | | | | |
| CE, FCC, RoHS | | ✓ | ✓ | ✓ | ✓ | ✓ |

Media Converter



IPMC100-1GS-1GPOE IPMC100-1GS-2GPOE IPMC101-F-POE IMC100-2GT1GS IMC100-2GT1GF IMC100-1GT1GS IMC100-1GT1GF IMC100-2T1F IMC100-1T1F

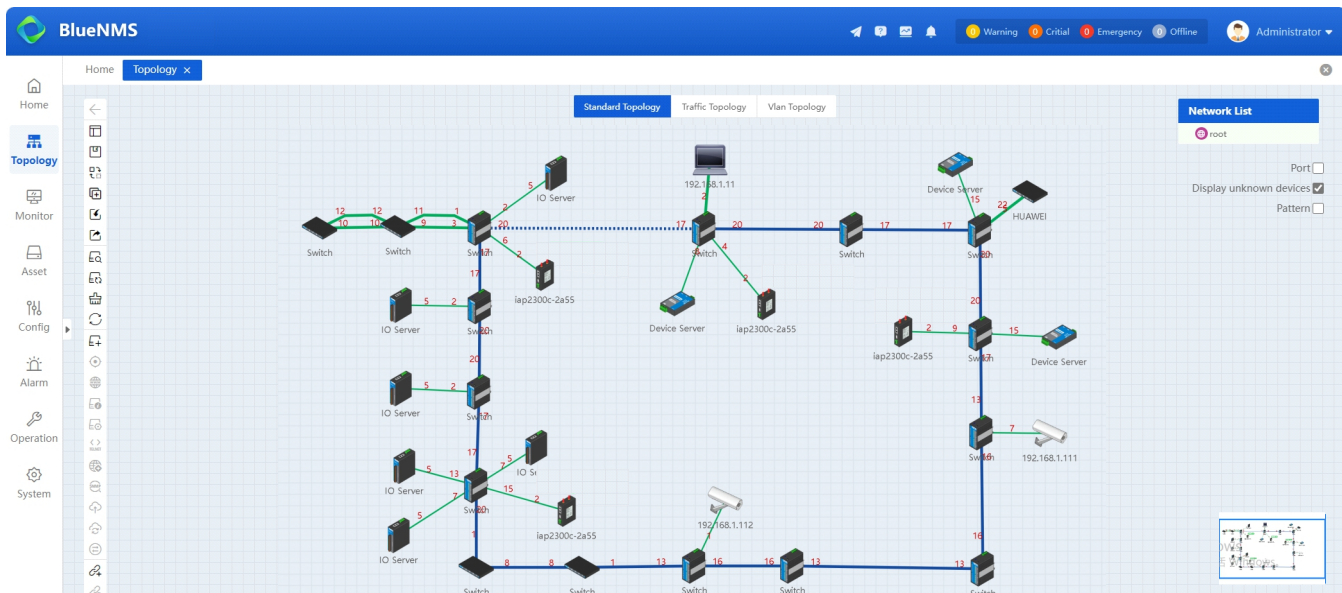
| Interface | | | | | | | | | |
|-------------------------------|-----------------------------|----------|----------|----------|-----------------------------|----------|----------|----------|----------|
| Number of Main Ports | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 2 |
| 1000Base-X SFP | 1 | 1 | - | 1 | - | 1 | - | - | - |
| 1000Base-X SC/FC/ST | - | - | - | - | 1 | - | 1 | - | - |
| 10/100/1000Base-T(X) RJ45 | - | - | - | 2 | 2 | 1 | 1 | - | - |
| 10/100/1000Base-T(X) PoE RJ45 | 1 | 2 | - | - | - | - | - | - | - |
| 100Base-X SC/FC/ST | - | - | 1 | - | - | - | - | 1 | 1 |
| 10/100Base-T(X) RJ45 | - | - | - | - | - | - | - | 2 | 1 |
| 10/100Base-T(X) PoE RJ45 | - | - | 1 | - | - | - | - | - | - |
| Transmission Distance | | | | | | | | | |
| Ethernet | 100M | | | | 100M | | | | |
| Single-mode Fiber | 20/40/80KM@1310NM or 1550NM | | | | 20/40/80KM@1310NM or 1550NM | | | | |
| Multi-mode Fiber | 2KM@1310NM | | | | 2KM@1310NM | | | | |
| Switch Properties | | | | | | | | | |
| Switching Fabric | 14G | 14G | 1.6G | 18.2G | 18.2G | 18.2G | 18.2G | 1G | 1G |
| MAC Address Table | 8K | 8K | 2K | 2K | 2K | 2K | 2K | 2K | 2K |
| Power Supply | | | | | | | | | |
| 12-48VDC | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 100-240VAC/DC | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 45-55VDC | ✓ | ✓ | ✓ | - | - | - | - | - | - |
| Environmental Limits | | | | | | | | | |
| Operating Temperature | -40~80°C | -40~80°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C |
| DIN-Rail mounting | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Network Management Software



BlueNMS

| Operating System | |
|----------------------|--|
| Windows | Windows Server 2016, Windows 7/10/11 64-bit OS |
| Linux | Linux 64-bit OS |
| Performance | |
| Device Quantity | Max. of nodes: 2000 |
| Connected Users | Max. of web concurrent user number: 100 |
| Response Speed | Second-level |
| Topology Management | |
| Device Discovery | 3onedata NMS protocol discovery, IP address range discovery, 3rd-party device smart discovery |
| Topology View | Standard network topology, traffic topology, VLAN topology, GIS map topology, server room rack topology, wireless connection topology |
| Network Management | Topology link, subnet and device cluster management |
| Panel Management | Visual management of physical panel and logical panel |
| Monitor Management | |
| Device Details | Provide real-time device details dashboard to show all static and dynamic indicators of devices and ports |
| Monitoring Analysis | device availability analysis, network bandwidth utilization analysis, device packet loss analysis, device Syslog |
| Asset Management | |
| Asset List | Asset overview, asset type list, wireless device list, camera list, unknown device list |
| Asset Management | Device manufacturer management, device type management, device model management, device icon management |
| Device Configuring | |
| Device Configuring | Support basic configuration, remote access (Telnet, SSH), SNMP query, network diagnostics, configuration backup, configuration recovery, remote upgrade |
| Wireless Configuring | Support wireless group configuration and maintenance, wireless user list, wireless user log |
| Alarm Management | |
| Alarm Configuring | Alarm Configuration (Level, Alarm Reason, Solution, Business Impact); Notification Configuration (SMS, Email, Sound); Frequent Alarm Configuration, Trap Receiving Configuration |
| Alarm List | Real-time alarm list, historical alarm list, and events reported by equipment |
| Alarm Playback | Network-wide alarm playback, AP history user playback, wireless topology playback |
| Alarm Statistics | Device alarm statistics, current alarm statistics, historical alarm statistics |



INDUSTRIAL WIRELESS NETWORKING

WIRELESS AP

WIRELESS AP PCB BOARD

WIRELESS ROAMING CLIENT

CELLULAR NETWORK ROUTER



Wireless AP



IAP3600S-2225-2GT



IAP3300L-2E-4GT1GP



IAP2300-2N2-5T

| Interface | | | |
|-----------------------------------|---|---|----------------------------------|
| 10/100/1000Base-T(X) LAN/WAN RJ45 | 1 | 1 | - |
| 10/100/1000Base-T(X) LAN RJ45 | 1 | 4 | - |
| 10/100Base-T(X) WAN RJ45 | - | - | 1(LAN/WAN) |
| 10/100Base-T(X) LAN RJ45 | - | - | 4 |
| 5G Wi-Fi Antenna Interface | 2 | - | - |
| 2.4G Wi-Fi Antenna Interface | 2 | - | 2 |
| 2.4G/5G Wi-Fi Antenna Interface | - | 2 | - |
| WLAN Feature | | | |
| WLAN Standard | IEEE 802.11 a/b/g/n/ac/ax | IEEE 802.11 a/b/g/n/ac/ax | IEEE 802.11 a/b/g/n |
| Radio Frequency | 802.11b/g/n/ax: 2.412GHz-2.4835GHz 802.11a/n/ac/ax: 5.18GHz-5.825GHz | 802.11b/g/n/ax: 2.412GHz-2.4835GHz 802.11a/n/ac/ax: 5.18GHz-5.825GHz | 802.11 b/g/n: 2.412GHz-2.4835GHz |
| RF Power | 20dBm | 20dBm | 23dBm |
| Encryption Type | WPA/WPA2/WPA3/RADIUS | WPA/WPA2/WPA3/RADIUS | WPA/WPA2/WPA3/RADIUS |
| Management | | | |
| Operating Mode | Router, AP, Bridge, Client | Router, AP, Bridge, Client | Router, AP, Bridge, Client |
| Web (HTTP/HTTPS) | ✓ | ✓ | ✓ |
| SSH | ✓ | ✓ | ✓ |
| SNMPv1/v2c, SNMP Trap | ✓ | ✓ | ✓ |
| AC Management | ✓ | ✓ | ✓ |
| Wireless User white list | ✓ | ✓ | ✓ |
| Wireless User Black list | ✓ | ✓ | ✓ |
| IP filtering | ✓ | ✓ | ✓ |
| MAC filtering | ✓ | ✓ | ✓ |
| URL filtering | ✓ | ✓ | ✓ |
| Port Forwarding | ✓ | ✓ | ✓ |
| Port Redirection | ✓ | ✓ | ✓ |
| QoS (Traffic Shaping) | ✓ | ✓ | ✓ |
| Syslog | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| Power Supply | | | |
| 48VDC PoE Input | ✓ | ✓ | ✓ |
| 12-36VDC | - | - | ✓ |
| 12-48VDC | ✓ | ✓ | - |
| Environmental Limit | | | |
| Operating Temperature | -40~75°C | -40~55°C | -40~75°C |
| Storage Temperature | -40~85°C | -40~85°C | -40~85°C |
| Relative Humidity | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) |
| IP Rating | IP68 | IP40 | IP30 |
| Installation | Wall/Pole mounting | DIN-Rail or wall mounting | DIN-Rail mounting |
| Dimension(W*H*D) | 275mm×245mm×76mm | 53mm×138mm×110mm | 53mm×138mm×110mm |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |

Wireless AP PCB Board



IAP3600EXI-2225-2GS4GT-SMA



IAP3500-2E-1GT1GS



IAP2300F-2N2-5T

| Interface | | | |
|----------------------------------|---|---|----------------------------------|
| 10/100/1000Base-T(X) LAN/WAN SFP | 2 | 1 | - |
| 10/100/1000Base-T(X) LAN RJ45 | 4 | 1 | - |
| 10/100Base-T(X) WAN RJ45 | - | - | 1(LAN/WAN) |
| 10/100Base-T(X) LAN RJ45 | - | - | 4 |
| 5G Wi-Fi Antenna Interface | 2 | - | - |
| 2.4G Wi-Fi Antenna Interface | 2 | - | 2 |
| 2.4G/5G Wi-Fi Antenna Interface | - | 2 | - |
| WLAN Feature | | | |
| WLAN Standard | IEEE 802.11 a/b/g/n/ac/ax | IEEE 802.11 a/b/g/n/ac/ax | IEEE 802.11 a/b/g/n |
| Radio Frequency | 802.11b/g/n/ax: 2.412GHz-2.4835GHz 802.11a/n/ac/ax: 5.18GHz-5.825GHz | 802.11b/g/n/ax: 2.412GHz-2.4835GHz 802.11a/n/ac/ax: 5.18GHz-5.825GHz | 802.11 b/g/n: 2.412GHz-2.4835GHz |
| RF Power | 20dBm | 20dBm | 23dBm |
| Encryption Type | WPA/WPA2/WPA3/RADIUS | WPA/WPA2/WPA3/RADIUS | WPA/WPA2/WPA3/RADIUS |
| Management | | | |
| Operating Mode | Router, AP, Bridge, Client | Router, AP, Bridge, Client | Router, AP, Bridge, Client |
| Web (HTTP/HTTPS) | ✓ | ✓ | ✓ |
| SSH | ✓ | ✓ | ✓ |
| SNMPv1/v2c, SNMP Trap | ✓ | ✓ | ✓ |
| AC Management | ✓ | ✓ | ✓ |
| Wireless User white list | ✓ | ✓ | ✓ |
| Wireless User Black list | ✓ | ✓ | ✓ |
| IP filtering | ✓ | ✓ | ✓ |
| MAC filtering | ✓ | ✓ | ✓ |
| URL filtering | ✓ | ✓ | ✓ |
| Port Forwarding | ✓ | ✓ | ✓ |
| Port Redirection | ✓ | ✓ | ✓ |
| QoS (Traffic Shaping) | ✓ | ✓ | ✓ |
| Syslog | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| Power Supply | | | |
| 9~24VDC | - | ✓ | - |
| 12~36VDC | - | - | ✓ |
| 12~48VDC | ✓ | - | - |
| Environmental Limit | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| Storage Temperature | -40~85°C | -40~85°C | -40~85°C |
| Relative Humidity | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) |
| IP Rating | / | / | / |
| Installation | Embedded mounting | Embedded mounting | Embedded mounting |
| Dimension(W*H*D) | 180mm×15.1mm×145mm | 85mm×14.7mm×138mm | 130mm×14.6mm×90mm |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |

Wireless Roaming Client



IAP2300C
2E-2T-1D



IAP2300C
2E2E-2T-1D



IAP2300C
2E-5T-1D



IAP2300C
2E2E-5T-1D



IAP2200PRO
2525-5GT-1D

| Interface | | | | | |
|---------------------------------|---|--|-------------------------------|---|-----------------|
| 10/100/1000Base-T(X) LAN RJ45 | - | - | - | - | 5 |
| 10/100Base-T(X) WAN RJ45 | 1 (WAN/LAN) | 1 (WAN/LAN) | 1(LAN/WAN) | 1(LAN/WAN) | - |
| 10/100Base-T(X) LAN RJ45 | 1 | 1 | 4 | 4 | - |
| 5G Wi-Fi Antenna Interface | - | - | - | - | 4 |
| 2.4G/5G Wi-Fi Antenna Interface | 2 | 4 | 2 | 4 | - |
| RS-232/422/485 | 1 | 1 | - | - | - |
| RS-232/485 | - | - | 1 | 1 | - |
| RS-485 | - | - | - | - | 1 |
| Serial Interface Feature | | | | | |
| Baud Rate | 300bps~115200bps | 300bps~115200bps | 300bps~115200bps | 300bps~115200bps | 9600/115200 bps |
| Data Bit | 8 | 8 | 8 | 8 | 8 |
| Parity Bit | None, Even, Odd | None, Even, Odd | None, Even, Odd | None, Even, Odd | - |
| Stop Bit | 1 | 1 | 1 | 1 | - |
| Interface Form | Terminal Block | Terminal Block | Terminal Block | Terminal Block | Terminal Block |
| WLAN Feature | | | | | |
| WLAN Standard | IEEE 802.11a/b/g/n | | | IEEE 802.11 a/b/g/n/ac | |
| Radio Frequency | 802.11B/g/n: 2.412GHz~2.4835GHz 802.11a/n: 5.18GHz~5.825GHz | | | 802.11 a/b/g/n/ac: 4.920GHz~6.060GHz | |
| RF Power | 20dBm | | | 27dBm | |
| Encryption Type | WPA/WPA2/WPA3/RADIUS | | | WPA/WPA2 | |
| Fast Roaming | ✓ | - | ✓ | - | - |
| Seamless Roaming | - | ✓ | - | ✓ | ✓ |
| Management | | | | | |
| Operating Mode | Router, AP, Bridge, Client | Router, AP, Bridge, Client, Dual-link | Router, AP, Bridge, Client | Router, AP, Bridge, Client, Dual-link | Bridge, Client |
| Web (HTTP/HTTPS), SSH | ✓ | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c, SNMP Trap | ✓ | ✓ | ✓ | ✓ | - |
| AC Management | ✓ | ✓ | ✓ | ✓ | - |
| Serial Device Server | RealCom Mode, TCP Server Mode, TCP Client Mode, UDP Server Mode, UDP Client operating mode | | | TCP Server Mode, TCP Client Mode, UDP operating mode | |
| Modbus Conversion | RTU Master, RTU Slave, ASCII Master, ASCII Slave operating mode | | | RTU Slave mode | |
| Wireless User Black/white list | ✓ | ✓ | ✓ | ✓ | - |
| IP/MAC/URL filtering | ✓ | ✓ | ✓ | ✓ | - |
| Syslog | ✓ | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ | - |
| Power Supply | | | | | |
| Dual Power Supply | - | - | ✓ | ✓ | - |
| 12~36VDC | ✓ | ✓ | ✓ | ✓ | - |
| 12~48VDC | - | - | - | - | ✓ |
| Environmental Limit | | | | | |
| Operating Temperature | -40~75°C | | | -20~55 °C | |
| Storage Temperature | -40~85°C | | | -40~85 °C | |
| Relative Humidity | 5% ~ 95% (no condensation) | | | 5% ~ 95% (no condensation) | |
| IP Rating | IP30 | | | IP41 | |
| Installation | DIN-Rail or wall mounting | | | DIN-Rail or wall mounting | |
| Dimension(W*H*D) | 26mm×114mm×77mm | | 30mm×124mm×96mm | | 90mm×32mm×140mm |
| Certification | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ |

Cellular Network Router



ICPE2600A-BW-8A25-2GT



ICPE2300-2A-1GC3GT-2C4D4IO-2225

| Interface | | |
|--------------------------------|---|---|
| 1G Combo (LAN/WAN) | - | 1 |
| 10/100/1000Base-T(X) WAN RJ45 | 1 | - |
| 10/100/1000Base-T(X) LAN RJ45 | 1 | 3 |
| 5G NR Cellular Interface | 4 | 4 |
| 5G Wi-Fi Antenna Interface | 2 | 2 |
| 2.4G Wi-Fi Antenna Interface | 2 | 2 |
| SIM Card Slot | 1 (Micro-SIM & Nano-SIM) | 1 (Micro-SIM & Nano-SIM) |
| Serial Interface | - | 2*RS-232, 2*RS-422/485 |
| CAN | - | 2 |
| DI | - | 4 |
| DO | - | 4 |
| Cellular Network | | |
| Service Type | 5G NR/LTE FDD/ LTE TDD/ WCDMA/ TD-SCDMA/ CDMA/ EVDO | |
| 5G Band | 5G NR: n1/n2/n3/n5/n7/n8/n12/n20/n28/n38/n40/n41/n48/n66/n71/n77/n78/n79 | |
| Service Type | 4G LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B9/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 4G LTE-TDD: B34/B38/39/B40/B41/B42/B48 | |
| 3G Band | 3G WCDMA: B1/B2/B3/B4/B5/B6/B8/B19 | |
| WLAN Feature | | |
| WLAN Standard | IEEE 802.11b/g/n/a/ac | IEEE 802.11b/g/n/a/ac |
| Radio Frequency | 802.11B/g/n: 2.412GHz-2.4835GHz 802.11Ac/n/a: 5.18GHz-5.825GHz | 802.11B/g/n: 2.412GHz-2.4835GHz 802.11Ac/n/a: 5.18GHz-5.825GHz |
| RF Power | 20dBm | 20dBm |
| Encryption Type | WPA1/WPA2/WPA3 | WPA/WPA2/WPA3 |
| Operating Mode | Router mode | Router mode |
| VPN Tunnel | | |
| GRE | ✓ | ✓ |
| PPTP Server/Client | ✓ | ✓ |
| L2TP Server/Client | ✓ | ✓ |
| IPSec | ✓ | ✓ |
| Management | | |
| Web (HTTP/HTTPS), SSH | ✓ | ✓ |
| Wireless User Black/white list | ✓ | ✓ |
| IP/MAC/URL filtering | ✓ | ✓ |
| Port Forwarding/Redirection | ✓ | ✓ |
| Syslog | ✓ | ✓ |
| NTP Client | ✓ | ✓ |
| Power Supply | | |
| Dual Power Supply | - | ✓ |
| 48VDC PoE Input | ✓ | ✓ |
| 12-48VDC | ✓ | ✓ |
| Environmental Limit | | |
| Operating 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) |
| IP Rating | IP68 | IP40 |
| Installation | Wall/Pole mounting | DIN-Rail mounting |
| Dimension(W*H*D) | 275mm×76mm×245mm | 88mm×150mm×135mm |
| Certification | | |
| CE, FCC, RoHS | ✓ | ✓ |



IRT5300-AW-5T2D

IRT5300L-5T2D

| Interface | | |
|---------------------------------------|---|--|
| 10/100/1000Base-T(X) or 1000M SFP WAN | - | - |
| 10/100/1000Base-T(X) WAN RJ45 | - | - |
| 10/100/1000Base-T(X) LAN RJ45 | - | - |
| 10/100Base-T(X) WAN RJ45 | 1(LAN/WAN) | 1(LAN/WAN) |
| 10/100Base-T(X) LAN RJ45 | 4 | 4 |
| 5G NR Cellular Interface | - | - |
| 4G LTE Cellular Interface | 2 | 2 |
| 5G Wi-Fi Antenna Interface | - | - |
| 2.4G Wi-Fi Antenna Interface | 2 | 2 |
| SIM Card Slot | 2 (Micro-SIM) | 1 (Micro-SIM & Nano-SIM) |
| Serial Interface | 2*RS-232/485 | 1*RS-232/422/485 |
| Cellular Network | | |
| Service Type | LTE FDD/ LTE TDD/ WCDMA/ TD-SCDMA/ CDMA/ EVDO | |
| LTE Band | TDD-LTE: B38/39/40/41 FDD-LTE: B1/3/5/7/8/20 | TDD-LTE: B34/38/39/40/41 FDD-LTE: B1/2/1/3/4/5/7/8/12/13/18/19/20/25/26/28/66 |
| 3G Band | WCDMA: Band1/5/8, TD-SCDMA: B34/39 | B1/2/4/5/6/8/19 |
| GSM | B3/8 | B2/3/5/8 |
| WLAN Feature | | |
| WLAN Standard | IEEE 802.11b/g/n | IEEE 802.11b/g/n |
| Radio Frequency | 802.11b/g/n: 2.412GHz~2.4835GHz | 802.11b/g/n: 2.412GHz~2.4835GHz |
| RF Power | 23dBm | 20dBm |
| Encryption Type | WPA1/WPA2/WPA3 | WPA1/WPA2/WPA3 |
| Operating Mode | Router mode | Router mode |
| VPN Tunnel | | |
| GRE | √ | √ |
| PPTP Server/Client | √ | √ |
| L2TP Server/Client | √ | √ |
| IPSec | √ | √ |
| OpenVPN Client | - | √ |
| Management | | |
| Web (HTTP/HTTPS), SSH | √ | √ |
| Wireless User Black/white list | √ | √ |
| IP/MAC/URL filtering | √ | √ |
| Port Forwarding/Redirection | √ | √ |
| Syslog | √ | √ |
| NTP Client | √ | √ |
| Power Supply | | |
| Dual Power Supply | √ | √ |
| 12~36VDC | √ | √ |
| Environmental Limit | | |
| Operating Temperature | -40~75°C | -40~75°C |
| Storage Temperature | -40~75°C | -40~85°C |
| Relative Humidity | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) |
| IP Rating | IP30 | IP40 |
| Installation | DIN-Rail mounting | DIN-Rail mounting |
| Dimension(W*H*D) | 53mmx138mmx110 mm | 40.6mmx103mmx78 mm |
| Certification | | |
| CE, FCC, RoHS | √ | √ |

INDUSTRIAL DEVICE NETWORKING

SECURE SERIAL DEVICE SERVER

FILEDBUS-TO-FIBER MODEM

SERIAL DEVICE SERVER

SERIAL-TO-FIBER MODEM

MODBUS GATEWAY

USB-TO-SERIAL CONVERTER

EDGE COMPUTING GATEWAY

INTERFACE CONVERTER/HUB/REPEATER

CAN SERVER



Secure Serial Device Server



**NP5000 SERIES
(RS-485)**



**NP5000 SERIES
(3IN1)**



**NP5100 SERIES
(3IN1)**



**NP5200 SERIES
(3IN1)**

| Serial Interface | | | | |
|---|--|----------------------|------------------------------|--|
| Quantity | 4/8 | 1/2/4/8 | 8/16/32 | 1/2/4 |
| RS-232 | - | ✓ | ✓ | ✓ |
| RS-422 | - | ✓ | ✓ | ✓ |
| RS-485 | ✓ | ✓ | ✓ | ✓ |
| Baud Rate | 110bps-115200bps (customizable 110bps-921600bps) | | 110bps-921600bps | 110bps-115200bps |
| Data Bit | 5, 6, 7, 8 | | 5, 6, 7, 8 | 5, 6, 7, 8 |
| Parity Bit | None, Even, Odd, Space, Mark | | None, Even, Odd, Space, Mark | None, Even, Odd, Space, Mark |
| Stop Bit | 1, 1.5, 2 | | 1, 1.5, 2 | 1, 1.5, 2 |
| Serial Interface Form | Terminal Block | DB9 Male, 8-pin RJ45 | 8-pin RJ45 | DB9 Male |
| Ethernet Interface | | | | |
| 10/100Base-T(X) RJ45 | 2 | 1/2 | 2 | 2 |
| Dual IPs & MACs | ✓ | ✓ | ✓ | ✓ |
| Single IP | ✓ | ✓ | ✓ | ✓ |
| Management | | | | |
| OLED Display | - | - | ✓ | - |
| Web (HTTP/HTTPS), Telnet, SSH, Console | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3 | ✓ | ✓ | ✓ | ✓ |
| SMTP Alarm | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ |
| Operating Mode | RealCom, Reverse RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast, Telnet, Reverse Telnet, RFC2217, Redundant COM, DRDAS RealCom and DRDAS TCP Server | | | |
| Encrypted Socket Transmission | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | |
| Dual Power Supply | - | - | ✓ | ✓ |
| 9-48VDC | - | - | - | - |
| 12-48VDC | ✓ | ✓ | - | ✓ |
| 85-265VAC | - | - | ✓ | - |
| Environmental Limit | | | | |
| Operating Temperature | -40~75°C | | -40~75°C | -40~75°C |
| Storage Temperature | -40~85°C | | -40~85°C | -40~85°C |
| Relative Humidity | 5% ~ 95% (no condensation) | | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) |
| Installation | Desktop/wall mounting | | Rack mounting | DIN-Rail mounting |
| Dimension(W*H*D) | 1/2-port model: 97mm×25mm×110mm 4/8-port model: 170mm×30mm×110mm | | 440mm×44mm×265.6mm | 1/2-port model: 33mm×138mm×110mm 4-port model: 53mm×138mm×110mm |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | - | - | ✓ | - |
| IEC 62443 | - | - | ✓ | - |

Serial Device Server



NP301



NP302T-2D(RS-232)



NP302T-2DI(RS-485)



NP314T-4DI(RS-485)



NP314T-4D(3IN1)



NP318T-8DI(RS-485)



NP318T-8D(3IN1)



NP3116T-16DI(RS-485)



NP3116T-16D(3IN1)

Serial Interface

| | | | | | | | | | |
|-----------------------|------------------------------|------------|------------|----------------|------------------------------|----------------|------------|----------------|------------|
| Quantity | 1 | 2 | 2 | 4 | 4 | 8 | 8 | 16 | 16 |
| RS-232 | √ | √ | - | - | √ | - | √ | - | √ |
| RS-422 | √ | - | √ | - | √ | - | √ | - | √ |
| RS-485 | √ | - | √ | √ | √ | √ | √ | √ | √ |
| Baud Rate | 300bps~115200bps | | | | 110bps~115200bps | | | | |
| Data Bit | 5, 6, 7, 8 | | | | 5, 6, 7, 8 | | | | |
| Parity Bit | None, Even, Odd, Space, Mark | | | | None, Even, Odd, Space, Mark | | | | |
| Stop Bit | 1, 2 | | | | 1, 1.5, 2 | | | | |
| Serial Interface Form | Terminal Block, DB9 Male | 8-pin RJ45 | 8-pin RJ45 | Terminal Block | 8-pin RJ45 | Terminal Block | 8-pin RJ45 | Terminal Block | 8-pin RJ45 |

Ethernet Interface

| | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|
| 10/100Base-T(X) RJ45 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| Dual IPs & MACs | - | - | - | √ | √ | √ | √ | √ | √ |
| Single IP | √ | √ | √ | √ | √ | √ | √ | √ | √ |

Management

| | | | | | | | | | |
|-------------------------|--|--|---|---|---|---|---|---|---|
| Web (HTTP), Telnet, SSH | √ (No SSH) | | √ | √ | √ | √ | √ | √ | √ |
| Operating Mode | RealCom, TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang, UDP Multicast | | | | | | | | |

Power Supply

| | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|
| Dual Power Supply | - | - | - | - | - | - | - | √ | √ |
| 9~48VDC | √ | √ | √ | - | - | - | - | - | - |
| 12~48VDC | - | - | - | √ | √ | √ | √ | - | - |
| 85~265VAC | - | - | - | - | - | - | - | √ | √ |

Environmental Limit

| | | | | | | | | | |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C |
| Wall/DIN-Rail Mounting | √ | √ | √ | - | - | - | - | - | - |
| Desktop/wall mounting | - | - | - | √ | √ | √ | √ | - | - |
| Rack Mounting | - | - | - | - | - | - | - | √ | √ |

Certification

| | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|
| CE, FCC, RoHS | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| UL 62368-1 | √ | √ | √ | √ | √ | √ | √ | √ | √ |

Edge Computing Gateway



TCU2000-U00



TCU1200-U02



TCU1200-U01

| System | | | |
|---------------------------------|---|--------------------------------------|--------------------------------------|
| Processor | ARM quad-core CPU 1.2GHz | ARM quad-core CPU 1.2GHz | ARM quad-core CPU 1.2GHz |
| OS | Ubuntu 20.04.4 LTS (GNU/Linux 5.4.128 armv7l) | | |
| Memory | 2GB DDR3 | 2GB DDR3 | 2GB DDR3 |
| Storage | 16Gb (8GB, 32GB optional) | 8Gb (16GB, 32GB optional) | 8Gb (16GB, 32GB optional) |
| AI Module | - | Computing power IPU 2TOPS (optional) | Computing power IPU 2TOPS (optional) |
| Management | | | |
| Secondary Development | √ | √ | √ |
| Interface | | | |
| 1000Base-X SFP Slot | 4 | - | 2 |
| 10/100/1000Base-T(X) RJ45 | 8 | 4 | - |
| 10/100Base-T(X) RJ45 | - | - | 8 |
| RS-232 | 2 | 2 | 1 |
| RS-485 | 4 | 4 | 4 |
| CAN | - | 1 | 1 |
| DI | 4 | 3 | - |
| DO | 4 | 3 | - |
| HDMI | 1 | - | - |
| USB | 1 | 1 | 1 |
| Serial Feature | | | |
| RS-232 Signal (Tx/D, Rx/D, GND) | √ | √ | √ |
| RS-485 Signal (D+, D-, GND) | √ | √ | √ |
| Baud Rate | 300bps~921600bps | 300bps~921600bps | 300bps~921600bps |
| Data Bit | 5, 6, 7, 8 | 5, 6, 7, 8 | 5, 6, 7, 8 |
| Parity Bit | None, Even, Odd, Space, Mark | None, Even, Odd, Space, Mark | None, Even, Odd, Space, Mark |
| Stop Bit | 1, 2 | 1, 2 | 1, 2 |
| LTE Feature | | | |
| Network Type | - | - | - |
| TDD-LTE Frequency Band | - | - | - |
| FDD-LTE Frequency Band | - | - | - |
| TD-SCDMA Frequency Band | - | - | - |
| WCDMA Frequency Band | - | - | - |
| CDMA Frequency Band | - | - | - |
| GSM/EDGE Frequency Band | - | - | - |
| Power Supply | | | |
| Dual Power Supply | √ | √ | √ |
| 12~48VDC | √ | √ | √ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| Storage Temperature | -40~85°C | -40~85°C | -40~85°C |
| Relative Humidity | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) |
| Installation | DIN-Rail or wall mounting | DIN-Rail or wall mounting | DIN-Rail or wall mounting |
| Dimension(W*H*D) | 70mm×160mm×130mm | 53mm×138mm×110mm | 53mm×138mm×110mm |
| Certification | | | |
| CE, FCC, RoHS | √ | √ | √ |



TCU1200-U00



RCU1200



RCU100

| System | | | |
|-------------------------------|---|----------------------------|---|
| Processor | ARM quad-core CPU 1.2GHz | ARM quad-core CPU 1.2GHz | ARM quad-core CPU 300MHz |
| OS | Ubuntu 20.04.4 LTS (GNU/Linux 5.4.128 armv7l) | | |
| Memory | 2GB DDR3 | 1GB DDR3 (2GB optional) | 128MB |
| Storage | 8Gb (16Gb, 32GB optional) | 8Gb (16GB optional) | 250MB |
| AI Module | Computing power IPU 2TOPS (optional) | - | - |
| Management | | | |
| Secondary Development | √ | - | - |
| Interface | | | |
| 1000Base-X SFP Slot | - | - | - |
| 10/100/1000Base-T(X) RJ45 | 2 | - | - |
| 10/100Base-T(X) RJ45 | - | 2 | 2 |
| RS-232 | 1 | 1 | 2 |
| RS-485 | 1 | 4 | 2 |
| DI | 1 | - | - |
| DO | 1 | - | - |
| USB | 1 | 1 | 1 |
| SIM Card Slot | 1 | 1 | 1 |
| LTE Cellular Interface | 1 | 1 | 2 |
| Serial Feature | | | |
| RS-232 Signal (TxD, RxD, GND) | √ | √ | DCD, RxD, TxD, DTR, GND, DSR, RTS, CTS |
| RS-485 Signal (D+, D-, GND) | √ | √ | TxD-(A), TxD+(B), RxD+(B), RxD-(A), GND |
| Baud Rate | 300bps-921600bps | 300bps-115200bps | 300bps-115200bps |
| Data Bit | 5, 6, 7, 8 | 5, 6, 7, 8 | 7, 8 |
| Parity Bit | None, Even, Odd, Space, Mark | None, Even, Odd | None, Even, Odd, Space, Mark |
| Stop Bit | 1, 2 | 1, 1.5, 2 | 1, 2 |
| LTE Feature | | | |
| Network Type | LTE FDD/ LTE TDD/WCDMA/TD-SCDMA/CDMA/ GSM | | |
| TDD-LTE Frequency Band | B34/38/39/40/41 | | |
| FDD-LTE Frequency Band | B1/3/5/8 | | |
| TD-SCDMA Frequency Band | B34/39 | | |
| WCDMA Frequency Band | B1/8 | | |
| CDMA Frequency Band | Bc0 | | |
| GSM/EDGE Frequency Band | 900/1800MHz | | |
| Power Supply | | | |
| Dual Power Supply | - | - | - |
| 12~48VDC | √ | √ | √ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| Storage Temperature | -40~85°C | -40~85°C | -40~85°C |
| Relative Humidity | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) |
| Installation | DIN-Rail mounting | DIN-Rail or wall mounting | DIN-Rail or wall mounting |
| Dimension(W*H*D) | 35mm×85mm×110mm | 33mm×138mm×110mm | 138mm×33mm×110mm |
| Certification | | | |
| CE, FCC, RoHS | √ | √ | √ |

CAN Server



CP202-2CI



ICP222-1T2F-2CI



CP300-W0-1T-2CI

| CAN Interface | | | |
|------------------------------|--|-------------------|----------------|
| Quantity | 2 | 2 | 2 |
| CAN 2.0A, CAN 2.0B Protocol | ✓ | ✓ | ✓ |
| Standard Baud Rate | 5kbps-1000kbps | 5kbps-1000kbps | 5kbps-1000kbps |
| Interface Form | Terminal Block | Terminal Block | Terminal Block |
| Ethernet Interface | | | |
| 10/100Base-T(X) RJ45 | 1 | 1 | 1 |
| 100Base-X SC/FC/ST | - | 2 | - |
| Ring (SW-Ring) | - | ✓ | - |
| WLAN Feature | | | |
| Wi-Fi4 (802.11b/g/n) | - | - | ✓ |
| Operating Mode | - | - | AP, STA |
| Management | | | |
| Web (HTTP/HTTPS), Telnet/SSH | ✓ | ✓ | ✓ |
| Operating Mode | TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang and UDP Multicast | | |
| Power Supply | | | |
| 12~48VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C |
| Installation | Wall Mounting | DIN-Rail mounting | Wall Mounting |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ |

Fieldbus-to-fiber Modem



MC201



IPB200



IPB201

| Fieldbus Interface | | | |
|-----------------------|------------------|-------------------|-------------------|
| Quantity | 1 | 1 | 1 |
| CAN | ✓ | - | - |
| Profibus | - | ✓ | ✓ |
| Interface Form | Terminal Block | DB9 Female | DB9 Female |
| Baud Rate | 2.5kbps-1000kbps | 9600bps-12Mbps | 9600bps-12Mbps |
| Fiber Optic | | | |
| Quantity | 1 | 1 | 2 |
| Interface Form | SC/FC/ST | SC/ST | SC/ST |
| Link Type | P2P | P2P | P2P, Ring |
| Power Supply | | | |
| 5VDC | ✓ | - | - |
| 12~48VDC | - | - | - |
| 18~32VDC | - | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | -20 °C~70 °C | -20 °C~70 °C |
| Installation | Wall Mounting | DIN-Rail mounting | DIN-Rail mounting |
| Certification | | | |
| CE, FCC, RoHS | ✓ | / | / |

Serial-to-fiber Modem



MODEL277



MODEL277A



MODEL277B

| Fieldbus Interface | | | |
|-----------------------|---------------------------|---------------------------|---------------------------|
| Quantity | 1 | 1 | 1 |
| RS-232 | ✓ | ✓ | - |
| RS-422 | ✓ | - | ✓ |
| RS-485 | ✓ | - | ✓ |
| Serial Interface Form | Terminal Block | DB9 Female | Terminal Block |
| Baud Rate | 300bps-115200bps | 300bps-115200bps | 300bps-115200bps |
| Fiber Optic | | | |
| Quantity | 1 | 1 | 1 |
| Interface Form | SC/FC/ST | SC/FC/ST | SC/FC/ST |
| Link Type | P2P | P2P | P2P |
| Power Supply | | | |
| 5VDC | - | ✓ | ✓ |
| 12-48VDC | ✓ | - | - |
| -48VDC | - | ✓ | ✓ |
| 220VAC | - | ✓ | ✓ |
| Fiber Optic | | | |
| Operating Temperature | -40~75°C | -10~60°C | -10~60°C |
| Installation | Wall or DIN-Rail Mounting | Wall or DIN-Rail Mounting | Wall or DIN-Rail Mounting |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |



IMF204



IMF208



IMF2100

| Fieldbus Interface | | | |
|-----------------------|----------------|----------------|-------------------|
| Quantity | 4 | 8 | 1 |
| RS-232 | - | - | ✓ |
| RS-422 | - | - | ✓ |
| RS-485 | ✓ | ✓ | ✓ |
| Interface Form | Terminal Block | Terminal Block | Terminal Block |
| Baud Rate | 0-115200bps | 0-115200bps | 300bps-115200bps |
| Fiber Optic | | | |
| Quantity | 2 | 2 | 1/2 |
| Interface Form | SC/FC/ST | SC/FC/ST | SC/FC/ST |
| Link Type | Ring | Ring | P2P or Ring |
| Power Supply | | | |
| 12-48VDC | ✓ | ✓ | ✓ |
| 220VAC | ✓ | - | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -10~70°C | -10~70°C | -40~75°C |
| Installation | Wall Mounting | Wall Mounting | DIN-Rail mounting |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |

USB-to-Serial Converter



USB4232



USB4485



USB8232I



USB8485I

| Serial Interface | | | | |
|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Conversion | USB to 4-port RS-232 | USB to 4-port RS-422/485 | USB to 8-port RS-232 | USB to 8-port RS-422/485 |
| RS-232 | ✓ | - | ✓ | - |
| RS-422 | - | ✓ | - | ✓ |
| RS-485 | - | ✓ | - | ✓ |
| USB | ✓ | ✓ | ✓ | ✓ |
| Baud Rate | 300bps~115200bps | 300bps~230400bps | 300bps~115200bps | 300bps~115200bps |
| Interface Form | DB9 Male, USB | DB9 Male, USB | DB9 Male, USB | DB9 Male, USB |
| Surge Protection | 1500W | 1500W | - | - |
| Electrostatic Protection | 15kV | 15kV | 15kV | 15kV |
| Power Supply | | | | |
| External Power Supply | 5VDC | 5VDC | 9VDC | 9VDC |
| Power over USB | ✓ | ✓ | - | - |
| Environmental Limits | | | | |
| Operating Temperature | -20~60°C | -20~60°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) |
| Installation | Desktop mounting | Desktop mounting | Desktop mounting | Desktop mounting |
| Dimension(W*H*D) | 160mm×28mm×94mm | 160mm×28mm×94mm | 230mm×40mm×148mm | 230mm×40mm×148mm |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |

Interface Converter/Hub/Repeater



MODEL485P



SW485GI



SW4485I

| Serial Interface | | | |
|--------------------------|----------------------------|---------------------------------------|---------------------------|
| Conversion | RS-232 to RS-422/485 | RS-232 to RS-422/485, RS-485 Repeater | 4-port RS-485 Hub |
| RS-232 | ✓ | ✓ | ✓ |
| RS-422 | ✓ | ✓ | ✓ |
| RS-485 | ✓ | ✓ | ✓ |
| Baud Rate | 110bps~115200bps | 300bps~115200bps | 300bps~115200bps |
| Interface Form | DB9 Female, Terminal Block | DB9 Female, Terminal Block | Terminal Block |
| Surge Protection | 1500W | 1500W | - |
| Electrostatic Protection | 15kV | 15kV | 15kV |
| Photoelectric Isolation | 2500V | 3000V | - |
| Power Supply | | | |
| 9VDC | ✓ | - | - |
| 12~36VDC | - | ✓ | - |
| 12~48VDC | - | - | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -20~75°C | -10~75°C | -40~75°C |
| Storage Temperature | -25~85°C | -40~75°C | -40~85°C |
| Relative Humidity | 5% - 95%(no condensation) | 5% - 95%(no condensation) | 5% - 95%(no condensation) |
| Installation | Wall Mounting | Wall Mounting | DIN-Rail mounting |
| Dimension(W*H*D) | 62.4mm×22mm×93mm | 69mm×22mm×100mm | 35mm×110mm×95mm |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |



SW485A



SW485C



SW485WA



MODEL232D/9

| Serial Interface | | | | |
|-----------------------------------|----------------------------|----------------------|------------------|----------------------|
| Conversion | RS-232 to RS-485 | RS-232 to RS-422/485 | RS-232 to RS-485 | RS-232 Repeater |
| RS-232 | ✓ | ✓ | ✓ | ✓ |
| RS-422 | - | ✓ | - | - |
| RS-485 | ✓ | ✓ | ✓ | - |
| Baud Rate | 0-38400bps | 0-115200bps | 0-38400bps | 300bps-115200bps |
| Interface Form | DB9 Female, Terminal Block | | | DB9 Female, DB9 Male |
| Surge Protection | 600W | 600W | 600W | 600W |
| Electrostatic Protection | 15kV | 15kV | 15kV | 15kV |
| Photoelectric Isolation | - | - | 1500V | 2500V |
| Power Supply | | | | |
| Power over RS-232 (TXD, RTS, DTR) | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40-80°C | | | -40-80°C |
| Storage Temperature | -40-85°C | | | -40-85°C |
| Relative Humidity | 5% - 95%(no condensation) | | | |
| Dimension(W*H*D) | 71mm×33mm×16.5mm | 90mm×33mm×16.5mm | 82mm×33mm×16.5mm | 72mm×33mm×16.5mm |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |

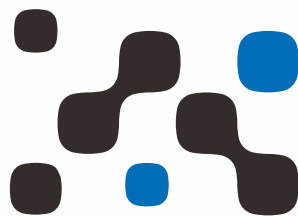


TLC422



TLC485

| Serial Interface | | | | |
|-----------------------------------|----------------------------|--|------------------|--|
| Conversion | RS-232 to RS-422 | | RS-232 to RS-485 | |
| RS-232 | ✓ | | ✓ | |
| RS-422 | ✓ | | - | |
| RS-485 | - | | ✓ | |
| Baud Rate | 0-115200bps | | | |
| Interface Form | DB9 Female, Terminal Block | | | |
| Surge Protection | - | | | |
| Electrostatic Protection | 15kV | | - | |
| Photoelectric Isolation | - | | 15kV | |
| Power Supply | | | | |
| Power over RS-232 (TXD, RTS, DTR) | ✓ | | ✓ | |
| Environmental Limits | | | | |
| Operating Temperature | -20-60°C | | | |
| Storage Temperature | -25-85°C | | | |
| Relative Humidity | 5% - 95%(no condensation) | | | |
| Dimension(W*H*D) | 90mm×33mm×16.5mm | | | |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | | ✓ | |



3onedata Co., Ltd.

Add: 3/B, Zone 1, Baiwangxin High Technology Industrial Park,
Xili Street, Nanshan District, Shenzhen, 518105, China

Web: www.3onedata.com

Tel: +86-755-26702688 ext.826

Email: marketing@3onedata.com

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