



PRODUCT SELECTION GUIDE

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Company Profile

OUR PRODUCT

TOP 1

Industrial Ethernet Switch Manufacturing Base in China

70000m²

Innovation hubs thrive in Shenzhen, Shanghai, and Jiangxi.

60Million⁺

Device Connected

23years

Experience in IIOT

180⁺R&D Engineers

Senior Engineer 60%

1000⁺/year

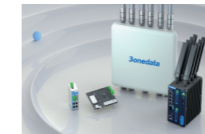
PCB Designing Capability



DEVICE NETWORKING



INDUSTRIAL ETHERNET



INDUSTRIAL WIRELESS



OEM/ODM

MANUFACTURING CAPABILITY

- 7 High-speed SMT placement lines
- 3 DIP production lines
- 5 Product testing lines
- 3 Packaging production lines
- 1 Three-proofing lacquer coating lines

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.



R&D Center in SHENZHEN



R&D Center in SHANGHAI



Factory in JIANGXI PROVINCE

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

Quality Assurance



TS22163 : 2017



ISO9001 : 2015



ISO14001 : 2015



ISO45001 : 2018

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 | 28 |
| 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 | 12 | 8 |
| 10/100/1000Base-T(X) Rj45 | 12 | 12 | 8 |
| 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 | ✓ | ✓ | ✓ |

Universal Managed L2 Switch



| | 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, RIPv3, 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 | ✓ | ✓ | ✓ | ✓ |



| | 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 | IES6300-8GT2GS2HS | IES6000-8GT2HS | IES6000-4GT2HS |
|-----------------------------------|-------------------|----------------|----------------|
| 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 |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 8K | 8K | 8K |
| Buffer | 4Mbit | 4Mbit | 4Mbit |
| Switching Fabric | 30G | 30G | 30G |
| Jumbo Frame Size | 9K | 9K | 9K |
| 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) | ✓ (Single) | - | - |
| 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 | ✓ | ✓ | ✓ |



IES6220-16T4GS



IES6210-8T2GC



IES6210-4T2GC

| Interface | IES6220-16T4GS | IES6210-8T2GC | IES6210-4T2GC |
|-----------------------------|----------------|-------------------------|---------------|
| Number of main ports | 20 | 10 | 6 |
| 1G Combo (RJ45 or SFP) | - | 2 | 2 |
| 1000Base-X SFP Slot | 4 | - | - |
| 100Base-X SC/FC/ST | - | - | - |
| 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 | | | |
| 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 | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap | - | - | - |
| DHCP Server/Client | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ |
| NTP Client | - | - | - |
| SNTP Client | ✓ | ✓ | ✓ |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 220VAC (85-264VAC) | | ✓ (Single Power Supply) | |
| 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 | ✓ | ✓ | ✓ |



IES7110-3GS



IES7110-2GS



IES7110-2GS-4F

| Interface | | | |
|---------------------------|----------|----------|----------|
| Number of main ports | 10 | 10 | 10 |
| 1G Combo (RJ45 or SFP) | - | - | - |
| 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 | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap | - | - | - |
| DHCP Server/Client | ✓ | ✓ | ✓ |
| LLDP | ✓ | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ | ✓ |
| NTP Client | - | - | - |
| SNTP Client | ✓ | ✓ | ✓ |
| 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 | ✓ | ✓ | ✓ |



IES618



IES618-2F



IES618-4F

| Interface | | | |
|------------------------------|----------|-------------------------|----------|
| Number of Ethernet ports | 8 | 8 | 8 |
| 100Base-X SC/FC/ST | - | 2 | 4 |
| 10/100Base-T(X) Rj45 | 8 | 6 | 4 |
| RS-232 | - | - | - |
| RS-422 | - | - | - |
| RS-485 | - | - | - |
| Console | ✓ | ✓ | ✓ |
| Relay | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| MAC Address Table | 16K | 16K | 16K |
| Buffer | 4Mbit | 4Mbit | 4Mbit |
| Switching Fabric | 5.6G | 5.6G | 5.6G |
| Jumbo Frame Size | 16K | 16K | 16K |
| Multicast | | | |
| Static Multicast | ✓ | ✓ | ✓ |
| IGMPv1/v2, IGMP Snooping | ✓ | ✓ | ✓ |
| Layer 2 Features | | | |
| VLAN, Link Aggregation | ✓ | ✓ | ✓ |
| STP/RSTP, SW-Ring, ERPSv1/v2 | ✓ | ✓ | ✓ |
| 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/DC (85-264VAC/DC) | | ✓ (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 | ✓ | ✓ | ✓ |



IES618-4DI(RS-485)



IES618-2F-4DI(RS-485)



IES618-4F-4DI(RS-485)

| Interface | | | |
|---------------------------|--------------------------------------------------------------------------------------|----------|----------|
| Number of Ethernet ports | 8 | 8 | 8 |
| 100Base-X SC/FC/ST | - | 2 | 4 |
| 10/100Base-T(X) RJ45 | 8 | 6 | 4 |
| RS-232 | - | - | - |
| RS-422 | √(4) | √(4) | √(4) |
| RS-485 | √(4) | √(4) | √(4) |
| Console | √ | √ | √ |
| Relay | √ | √ | √ |
| Serial Feature | | | |
| RS-232 Signal | - | - | - |
| RS-422/485 Signal | T+(D+), T-(D-), R+, R-, GND | | |
| Baud Rate | 300bps~115200bps | | |
| Data Bit | 5, 6, 7, 8 | | |
| Parity Bit | None, Even, Odd, Space, Mark | | |
| Stop Bit | 1, 1.5, 2 | | |
| Operating Mode | TCP Server, TCP Client, UDP, TCP auto, Realcom, advanced TCP Server and advanced UDP | | |
| Switch Properties | | | |
| MAC Address Table | 2K | 2K | 2K |
| Buffer | 1Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 2G | 2G | 2G |
| Multicast | | | |
| Static Multicast | √ | √ | √ |
| IGMPv1/v2, IGMP Snooping | √ | √ | √ |
| Layer 2 Features | | | |
| 802.1Q VLAN | √ | √ | √ |
| VLAN ID | 1-4094 | 1-4094 | 1-4094 |
| Active VLAN | 64 | 64 | 64 |
| 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 | | | |
| Dual Power Supply | √ | √ | √ |
| 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 | √ | √ | √ |



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-Wi 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, Brifge 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 | | |
| IEEE 802.1X, RADIUS | √ | √ |
| DHCP Snooping | √ | √ |
| 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 | √ | √ |

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 |
| DIP Button Functions | | | |
| Port Alarm | - | ✓ | ✓ |
| Flow Control | - | ✓ | ✓ |
| Forced 10M | - | ✓ | ✓ |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 220VAC (85-264VAC) | ✓ (Single Power Supply) | ✓ (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 | 8 |
| 100Base-X SC/FC/ST | - | 1 | 2 | 4 |
| 10/100Base-T(X) RJ45 | 8 | 7 | 6 | 4 |
| Relay | ✓ | - | ✓ | ✓ |
| Switch Properties | | | | |
| MAC Address Table | 2K | 2K | 2K | 2K |
| Buffer | 1Mbit | 1Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 1.6G | 1.6G | 1.6G | 1.6G |
| DIP Button Functions | | | | |
| Port Alarm | ✓ | ✓ | ✓ | ✓ |
| Power Supply Alarm | ✓ | ✓ | ✓ | ✓ |
| Flow Control | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | |
| Dual Power Supply | ✓ | ✓ | ✓ | ✓ |
| 220VAC/DC (85-264VAC/DC) | ✓ (Single Power Supply) | ✓ (Single Power Supply) | ✓ (Single Power Supply) | ✓ (Single Power Supply) |
| 9-60VDC | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | 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 |
| DIP Button Functions | | | | | | |
| Flow Control | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Jumbo Frame | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| One-key VLAN | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Forced 100M | ✓ | ✓ | ✓ | - | - | - |
| 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 |
| DIP Button Functions | | | | | | |
| Flow Control | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Loop detection | ✓ | - | - | - | ✓ | ✓ |
| Storm suppression | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| One-key VLAN | ✓ | ✓ | ✓ | - | ✓ | ✓ |
| Forced 100M | - | ✓ | ✓ | - | - | - |
| 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/QBU/QBU/QCH/QCI/QCC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Layer 3 Features | | | | | | |
| IEEE 1588v2 (PTPv2), 802.1 AS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Inter-VLAN Routing, Static Routing RIPv1/v2, RIPv3, 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 8GHP2GS2HS | 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 | 16K | 16K | 16K |
| 48VDC (45-55VDC) | 4Mbit | 4Mbit | 4Mbit |
| 24VDC (18-36VDC) | 5.6G | 5.6GK | 5.6G |
| Environmental Limits | | | |
| Operating Temperature | 16K | 16K | 16K |
| IP Rating | 4Mbit | 4Mbit | 4Mbit |
| DIN-Rail or wall mounting | 5.6G | 5.6GK | 5.6G |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ |



ICS5000-E24GP4GS



ICS5000-E8GP2GS

| Interface | | |
|--------------------------------|---------------|---------------|
| Number of main ports | 28 | 10 |
| 100/1000Base-X SFP Slot | - | 2 |
| 1000Base-X SFP Slot | 4 | - |
| 10/100/1000Base-T(X) PoE RJ45 | 24 | 8 |
| Console | ✓ | ✓ |
| Switch Properties | | |
| MAC Address Table | 8K | 8K |
| Buffer | 4.1Mbit | 4.1Mbit |
| Switching Fabric | 56G | 20G |
| Power over Ethernet | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ |
| Power Pin Assignment | 1/2+, 3/6- | 1/2+, 3/6- |
| Max. Port PoE Budget | 30W | 30W |
| Total PoE Budget | 370W | 140W |
| Multicast | | |
| IGMPv1/v2/v3, IGMP Snooping | ✓ | ✓ |
| MLDv1/v2, MLD Snooping | ✓ | ✓ |
| Layer 2 Features | | |
| VLAN, Link Aggregation | ✓ | ✓ |
| STP/RSTP/MSTP | ✓ | ✓ |
| Management | | |
| Telnet/SSH, HTTP, Console | ✓ | ✓ |
| SNMPv1/v2c/v3, SNMP Trap, RMON | ✓ | ✓ |
| DHCP Server/Client, DHCP Relay | ✓ | ✓ |
| LLDP | ✓ | ✓ |
| Port Mirroring | ✓ | ✓ |
| SNTP Client | ✓ | ✓ |
| Security | | |
| 802.1X, RADIUS, TACACS+ | ✓ | ✓ |
| ACL | ✓ | ✓ |
| DHCP Snooping | ✓ | ✓ |
| Static MAC | ✓ | ✓ |
| Power Supply | | |
| Dual Power Supply | - | - |
| 220VAC (100-240VAC) | ✓ | ✓ |
| Environmental Limits | | |
| Operating Temperature | 0-45°C | 0-45°C |
| IP Rating | IP20 | IP20 |
| Installation | Rack mounting | Rack mounting |
| Certification | | |
| CE, FCC, RoHS | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ |

Unmanaged PoE Switch



IES2220-16P4GS



IES2210-8P2GC



IES2210-4P2GC

| Interface | | | |
|---------------------------|------------|------------|------------|
| Number of main ports | 20 | 10 | 6 |
| 1G Combo (RJ45 or SFP) | - | 2 | 2 |
| 1000Base-X SFP Slot | 4 | - | - |
| 10/100Base-T(X) 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 over Ethernet | | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ | ✓ |
| Power Pin Assignment | 1/2+, 3/6- | 1/2+, 3/6- | 1/2+, 3/6- |
| Max. Port PoE Budget | 30W | 30W | 30W |
| Total PoE Budget | 120W/200W | 120W/200W | 60W/120W |
| DIP Button Functions | | | |
| Port Alarm | - | ✓ | ✓ |
| Flow Control | - | ✓ | ✓ |
| Forced 10M | - | ✓ | ✓ |
| 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 | ✓ | ✓ | ✓ |



IES2305-4GP1GT



IES2305-4GP1GS



IES2305-4GP1GF



IES2105-4P1T



IES2105-4P1F

| Interface | | | | | |
|---------------------------|------------|------------|------------|------------|------------|
| Number of main ports | 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 |
| 10/100Base-T(X) Rj45 | - | - | - | 5 | 4 |
| Switch Properties | | | | | |
| MAC Address Table | 2K | 2K | 2K | 2K | 2K |
| Buffer | 1Mbit | 1Mbit | 1Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 9.125G | 9.125G | 9.125G | 1G | 1G |
| Power over Ethernet | | | | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Power Pin Assignment | 1/2+, 3/6- | 1/2+, 3/6- | 1/2+, 3/6- | 1/2+, 3/6- | 1/2+, 3/6- |
| Max. Port PoE Budget | 30W | 30W | 30W | 30W | 30W |
| Total PoE Budget | 100W | 100W | 100W | 100W | 100W |
| DIP Button Functions | | | | | |
| Flow Control | ✓ | ✓ | ✓ | ✓ | ✓ |
| Jumbo Frame | ✓ | ✓ | ✓ | ✓ | ✓ |
| One-key VLAN | ✓ | ✓ | ✓ | ✓ | ✓ |
| Forced 100M | ✓ | ✓ | ✓ | ✓ | ✓ |
| Power Supply | | | | | |
| Dual Power Supply | - | - | - | - | - |
| 48VDC (45-55VDC) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | | |
| Operating Temperature | -40~75°C | -40~75°C | -40~75°C | -40~75°C | -40~75°C |
| IP Rating | IP40 | IP40 | IP40 | IP40 | IP40 |
| DIN-Rail mounting | ✓ | ✓ | ✓ | ✓ | ✓ |
| Certification | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ |
| UL 61010-1 | ✓ | ✓ | ✓ | ✓ | ✓ |

EN50155 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 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 | 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 | ✓ | ✓ | ✓ | ✓ |



| | 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 | G |
| 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) | ✓ | ✓ | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ | ✓ | ✓ |



| | 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 | -40-75°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 | MES5200-16GT8F-4GS |
|---------------------------------------------|--------------|-----------------|--------------------|
| 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



| | PROFINET CC-B | PROFINET CC-B |
|---------------------------------|---------------|---------------|
| Interface | | |
| Number of main ports | 10 | 202 |
| 1000Base-X SFP Slot | 2 | 4 |
| 10/100/1000Base-T(X) Rj45 | 8 | - |
| 10/100Base-T(X) Rj45 | - | 16 |
| Console | ✓ | ✓ |
| Relay | ✓ | ✓ |
| Switch Properties | | |
| MAC Address Table | 16K | 8K |
| Buffer | 2Mbit | 3Mbit |
| Switching Fabric | 20G | 12.8G |
| Jumbo Frame Size | 10K | - |
| Multicast | | |
| IGMPv1/v2/v3, IGMP Snooping | ✓ | ✓ |
| | 256 | 256 |
| 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 |
| IP Rating | IP40 | IP40 |
| DIN-Rail mounting | ✓ | ✓ |
| Certification | | |
| CE, FCC, RoHS | ✓ | ✓ |

| | PROFINET CC-A | PROFINET CC-A |
|-----------------------------|---------------|---------------|
| Interface | | |
| Number of main ports | 8 | 5 |
| 10/100Base-T(X) Rj45 | 8 | 5 |
| Switch Properties | | |
| MAC Address Table | 2K | 2K |
| Switching Fabric | 1.6G | 1G |
| DIP Button Functions | | |
| Loop Detection | ✓ | ✓ |
| Storm Suppression | ✓ | ✓ |
| VLAN | ✓ | ✓ |
| Flow Control | ✓ | ✓ |
| Power Supply | | |
| Dual Power Supply | - | - |
| 12-48VDC (24VAC) | ✓ | ✓ |
| Environmental Limits | | |
| Operating Temperature | -40-75°C | -40-75°C |
| IP Rating | IP40 | IP40 |
| DIN-Rail or wall mounting | ✓ | ✓ |
| Certification | | |
| CE, FCC, RoHS | ✓ | ✓ |

Embedded Switch Module



ICM7428G



IEM6300-20G



IEM6300-12G

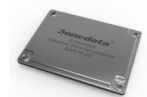
| Interface | | | |
|-------------------------------------|-------------------|-------------------|-------------------|
| Number of main ports | 28 | 20 | 12 |
| QSGMII | 8 | - | - |
| 1000Base-X | 4 | 4 | 4 |
| 10/100/1000Base-T(X) | 16 | 16 | 8 |
| UART (Console) | ✓ | ✓ | ✓ |
| Switch Properties | | | |
| 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 10/100/1000Base-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



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 | ✓ | ✓ |

Media Converter Card



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 | ✓ | ✓ | ✓ | ✓ | ✓ |



ECU100-1GT2GS



ECU100-2GT1GF



ECU100-1GT1GF



ECU100-2T1F



ECU100-1T1F

| 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 | | | | |
| Installation | Embedded Mounting | | | | |
| Certification | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ |



MODEL3012-C



MODEL1200-C

| Interface | | |
|---------------------------|-----------------------------|-------|
| 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 | ✓ | ✓ |

PoE Media Converter



IPMC100-1GS-1GPoE



IPMC100-1GS-2GPoE



IPMC101-F-PoE

| Interface | | | |
|-------------------------------|-----------------------------|------------|------------|
| Number of main ports | 2 | 3 | 2 |
| 1000Base-X SFP | 1 | 1 | - |
| 10/100/1000Base-T(X) PoE RJ45 | 1 | 2 | - |
| 100Base-X SC/FC/ST | - | - | 1 |
| 10/100Base-T(X) PoE 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 | 8K | 8K | 2K |
| Buffer | 1Mbit | 1Mbit | 1Mbit |
| Switching Fabric | 14G | 14G | 1.6G |
| Power Over Ethernet | | | |
| 802.3 AF/AT (PoE+) | ✓ | ✓ | ✓ |
| Power Pin Assignment | 1/2+, 3/6- | 1/2+, 3/6- | 1/2+, 3/6- |
| Total PoE Budget | 50W | 50W | 15W |
| Power Supply | | | |
| 45-55VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~80°C | -40~80°C | -40~75°C |
| DIN-Rail or wall mounting | ✓ | ✓ | ✓ |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |

Media Converter



IMC100-2GT1GS



IMC100-2GT1GF



IMC100-1GT1GS



IMC100-1GT1GF



IMC100-2T1F



IMC100-1T1F

| Interface | | | | | | |
|---------------------------|-----------------------------|-------|-------|-------|----|----|
| Number of main ports | 3 | 3 | 2 | 2 | 3 | 2 |
| 1000Base-X SFP | 1 | - | 1 | - | - | - |
| 1000Base-X SC/FC/ST | - | 1 | - | 1 | - | - |
| 10/100/1000Base-T(X) RJ45 | - | 2 | 1 | 1 | - | - |
| 100Base-X SC/FC/ST | 2 | - | - | - | 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 | | | | | | |
| Switching Fabric | 18.2G | 18.2G | 18.2G | 18.2G | 1G | 1G |
| MAC Address Table | 2K | 2K | 2K | 2K | 2K | 2K |
| DIP Buttons | | | | | | |
| Flow Control | ✓ | ✓ | - | - | ✓ | - |
| Jumbo Frame | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| One-key VLAN | ✓ | ✓ | - | - | ✓ | - |
| LFPT | - | - | ✓ | ✓ | - | ✓ |
| Power Supply | | | | | | |
| 12-48VDC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 100-240VAC/DC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | | | |
| Operating Temperature | -40~75°C | | | | | |
| DIN-Rail mounting | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Dimension (W x H x D) | 35mm×110mm×95mm | | | | | |
| Certification | | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |



MODEL3012



MODEL1200



MODEL1100

| Interface | | | |
|---------------------------|----------------------------------------------------------------------------------------|------------|------------|
| Number of main ports | 2 | 3 | 2 |
| 1000Base-X SFP | - | - | - |
| 1000Base-X SC/FC/ST | 1 | - | - |
| 10/100/1000Base-T(X) Rj45 | 1 | - | - |
| 100Base-X SC/FC/ST | - | 1 | 1 |
| 10/100Base-T(X) Rj45 | - | 2 | 1 |
| Transmission Distance | | | |
| Ethernet | 100M | | |
| Single-mode Fiber | 10/20/40/80KM@1310NM or 1550NM | | |
| Multi-mode Fiber | 500M/2KM@850NM or 1310NM | | |
| Power Supply | | | |
| External 5VDC | ✓ | ✓ | ✓ |
| Built-in 220VAC | ✓ | ✓ | ✓ |
| Built-in 48VDC | ✓ | ✓ (-48VDC) | ✓ (-48VDC) |
| Environmental Limits | | | |
| Operating Temperature | -10~60°C | -10~60°C | -10~60°C |
| Wall or DIN-Rail mounting | ✓ | ✓ | ✓ |
| Dimension (W x H x D) | 70.6mm×26mm×94mm (external power supply) 115mm×30mm×173.2mm (built-in power supply) | | |
| 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 |
| Alarm Management | |
| System Security | User maintenance, user role maintenance, user role authority, user authority, data authority |
| System Maintenance | Support system configuration, data dictionary, northbound interface and other functional configurations; support database backup; support historical data cleanup |
| System Log | User login log, user operation log and equipment operation log |

Wireless AP



IAP3600S-2225-2GT



IAP3300L-2E-4GT1GP

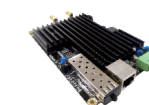


IAP2300-2N2-5T

| Interface | IAP3600S-2225-2GT | IAP3300L-2E-4GT1GP | IAP2300-2N2-5T |
|-----------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------|
| 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 |
| 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 | 27dBm | 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, Dual-link | Router, AP, Bridge, Client |
| Web (HTTP/HTTPS), SSH | ✓ | ✓ | ✓ |
| SNMPv1/v2c, SNMP Trap | ✓ | ✓ | ✓ |
| AC Management | ✓ | ✓ | ✓ |
| Wireless User Black/white list | ✓ | ✓ | ✓ |
| IP/MAC/URL filtering | ✓ | ✓ | ✓ |
| Port Forwarding/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 | ✓ | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ | ✓ |
| SRRC | ✓ | ✓ | ✓ |



IAP3600EXI-2225-2GS4GT-SMA



IAP3500-2E-1GT1GS

| Interface | IAP3600EXI-2225-2GS4GT-SMA | IAP3500-2E-1GT1GS |
|-----------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 1000Base-X LAN/WAN SFP | 2 | 1 |
| 10/100/1000Base-T(X) LAN/WAN Rj45 | - | - |
| 10/100/1000Base-T(X) LAN Rj45 | 4 | 1 |
| 5G Wi-Fi Antenna Interface | 2 | - |
| 2.4G Wi-Fi Antenna Interface | 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 |
| 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 |
| RF Power | 20dBm | 20dBm |
| Encryption Type | WPA/WPA2/WPA3/RADIUS | WPA/WPA2/WPA3/RADIUS |
| Management | | |
| Operating Mode | Router, AP, Bridge, Client | Router, AP, Bridge, Client |
| Web (HTTP/HTTPS), SSH | ✓ | ✓ |
| SNMPv1/v2c, SNMP Trap | ✓ | ✓ |
| AC Management | ✓ | ✓ |
| Wireless User Black/white list | ✓ | ✓ |
| IP/MAC/URL filtering | ✓ | ✓ |
| Port Forwarding/Redirection | ✓ | ✓ |
| QoS (Traffic Shaping) | ✓ | ✓ |
| Syslog | ✓ | ✓ |
| NTP Client | ✓ | ✓ |
| Power Supply | | |
| 9-24VDC | - | ✓ |
| 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 | / | / |
| Installation | Embedded mounting | Embedded mounting |
| Dimension(W*H*D) | 180mm×15.1mm×145mm | 85mm×14.7mm×138mm |
| Certification | | |
| CE, FCC, RoHS | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ |
| SRRC | ✓ | ✓ |

Wireless Bridge



IAP2700-25-2GT

| Interface | |
|-----------------------------------|--------------------------------------|
| 10/100/1000Base-T(X) PoE LAN RJ45 | 1 |
| 10/100/1000Base-T(X) LAN RJ45 | 1 |
| 5G Wi-Fi Panel | ✓ |
| Interface | |
| WLAN Standard | IEEE 802.11 a/b/g/n/ac |
| Radio Frequency | 802.11 a/b/g/n/ac: 4.920GHz-6.060GHz |
| RF Power | 27dBm |
| Encryption Type | WPA2-PSK |
| Beamwidth | Horizontal: 35 °, Vertical: 17 ° |
| Transmission Distance | 0-5km |
| Management | |
| Operating Mode | Router, AP, Bridge, Client |
| Web (HTTP/HTTPS), SSH | ✓ |
| SNMPv1/v2c/v3 | ✓ |
| Syslog | ✓ |
| NTP Client | ✓ |
| Power Supply | |
| 48VDC PoE Input | ✓ |
| Environmental Limit | |
| Operating Temperature | -40~75°C |
| Storage Temperature | -40~85°C |
| Relative Humidity | 5% ~ 95% (no condensation) |
| IP Rating | Ip66 |
| Installation | Pole mounting |
| Dimension(W*H*D) | 200mm×50mm×200mm |
| Certification | |
| CE, FCC, RoHS | ✓ |
| SFT (Salt Fog Test) | ✓ |
| SRRC | ✓ |

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 | 1 | - |
| 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 | ✓ | ✓ | ✓ | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ | ✓ | ✓ | ✓ |
| SRRC | ✓ | ✓ | ✓ | ✓ | ✓ |

Cellular Network Router



ICPE2600A-BW-8A25-2GT



ICPE2300-2A-1GC3GT-2C4D4I0-2225



IRT5300-AW-5T2D



IRT5300L-5T2D

| Interface | | |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 10/100/1000Base-T(X) or 1000M SFP 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-232/485 |
| 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 | WPA/WPA2 | 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 | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ |

| 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 | 1 |
| 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 | 1*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 | WPA/WPA2 | WPA/WPA2 |
| 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 | ✓ | ✓ |
| SFT (Salt Fog Test) | ✓ | ✓ |

Access Controller



IAC8500-1GC4GT

| Interface | | |
|--------------------------------|--|----------------------------|
| 10/100/1000Base-T(X) WAN Combo | | 1 |
| 10/100/1000Base-T(X) LAN RJ45 | | 4 |
| Console | | 1 |
| AP Management | | |
| Max. manageable AP | | 500 |
| Group Management | | ✓ |
| Location Management | | ✓ |
| Function Configuring | | ✓ |
| Device Audit | | ✓ |
| Device Upgrade | | ✓ |
| Device List | | ✓ |
| Management | | |
| Web (HTTP/HTTPS), SSH, Console | | ✓ |
| IP/MAC/URL filtering | | ✓ |
| Port Forwarding/Redirection | | ✓ |
| Syslog | | ✓ |
| SNTP Client | | ✓ |
| DHCP Server | | ✓ |
| Power Supply | | |
| Dual Power Supply | | ✓ |
| 110~240VAC | | ✓ |
| Environmental Limit | | |
| Operating Temperature | | -40~75°C |
| Storage Temperature | | -40~85°C |
| Relative Humidity | | 5% ~ 95% (no condensation) |
| IP Rating | | IP30 |
| Installation | | Rack mounting |
| Dimension(W*H*D) | | 440mm×43.5mm×229.6mm |
| Certification | | |
| CE, FCC, RoHS | | ✓ |

Serial Device Server



NP301



NP302T-2D(RS-232)



NP302T-2DI(RS-485)

| Serial Interface | | | |
|-----------------------|--------------------------------------------------------------------------------------------------------------|------------|------------|
| Quantity | 1 | 2 | 2 |
| RS-232 | ✓ | ✓ | - |
| RS-422 | ✓ | - | ✓ |
| RS-485 | ✓ | - | ✓ |
| Baud Rate | 300bps~115200bps | | |
| Data Bit | 5, 6, 7, 8 | | |
| Parity Bit | None, Even, Odd, Space, Mark | | |
| Stop Bit | 1, 1.5, 2 | | |
| Interface Form | Terminal Block, DB9 Male | 8-pin RJ45 | 8-pin RJ45 |
| Ethernet Interface | | | |
| 10/100Base-T(X) RJ45 | 1 | 1 | 1 |
| Single IP | ✓ | ✓ | ✓ |
| Management | | | |
| Web (HTTP), Telnet | ✓ | ✓ | ✓ |
| Operating Mode | RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang and UDP Multicast | | |
| Power Supply | | | |
| Dual Power Supply | - | - | - |
| 9~48VDC | ✓ | ✓ | ✓ |
| 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) | | |
| Installation | Wall/DIN-Rail mounting | | |
| Dimension(W*H*D) | 69mm×22mm×100mm | | |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ |



NP314T-4DI (RS-485)



NP314T-4D (3IN1)



NP318T-8DI (RS-485)



NP318T-8D (3IN1)



NP3116T-16DI (RS-485)



NP3116T-16D (3IN1)

| Serial Interface | | | | | | |
|----------------------------------------|----------------------------------------------------------------------------------|------------|----------------|------------|----------------------------|------------|
| Quantity | 4 | 4 | 8 | 8 | 16 | 16 |
| RS-232 | - | ✓ | - | ✓ | - | ✓ |
| RS-422 | - | ✓ | - | ✓ | - | ✓ |
| RS-485 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Baud Rate | 110bps~115200bps (customizable 110bps~921600bps) | | | | | |
| Data Bit | 5, 6, 7, 8 | | | | | |
| Parity Bit | None, Even, Odd, Space, Mark | | | | | |
| Stop Bit | 1, 1.5, 2 | | | | | |
| Interface Form | Terminal Block | 8-pin RJ45 | Terminal Block | 8-pin RJ45 | Terminal Block | 8-pin RJ45 |
| Ethernet Interface | | | | | | |
| 10/100Base-T(X) RJ45 | 2 | 2 | 2 | 2 | 2 | 2 |
| Dual IPs & MACs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Single IP | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Management | | | | | | |
| Web (HTTP/HTTPS), Telnet, SSH, Console | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SMTP Alarm | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 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 | |
| Storage Temperature | -40~85°C | | | | -40~85°C | |
| Relative Humidity | 5% ~ 95% (no condensation) | | | | 5% ~ 95% (no condensation) | |
| Installation | Desktop/wall mounting | | | | Rack mounting | |
| Dimension(W*H*D) | 170mm×30mm×110mm | | | | 441.6mm×44.6mm×207.9mm | |
| Certification | | | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |



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 |
| 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 | | | |
| 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 |
| Operating Mode | 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 | - | - | ✓ | - |

Modbus Gateway



GW1101-1D (RS-485)



GW1101-1DI (3IN1)



GW1102-2D (RS-485)



GW1102-2DI (3IN1)

| Serial Interface | | | | |
|-------------------------------|-----------------------------------------------------|-----|----------------|-----|
| Quantity | 1 | 1 | 2 | 2 |
| RS-232 | - | ✓ | - | ✓ |
| RS-422 | ✓ | ✓ | ✓ | ✓ |
| RS-485 | ✓ | ✓ | ✓ | ✓ |
| Baud Rate | 110bps-115200bps | | | |
| Data Bit | 7, 8 | | | |
| Parity Bit | None, Even, Odd, Space, Mark | | | |
| Stop Bit | 1, 2 | | | |
| Interface Form | Terminal Block | DB9 | Terminal Block | DB9 |
| Ethernet Interface | | | | |
| 10/100Base-T(X) RJ45 | 1 | 1 | 1 | 1 |
| Dual IPs & MACs | - | - | - | - |
| Single IP | ✓ | ✓ | ✓ | ✓ |
| Management | | | | |
| Web (HTTP/HTTPS), Telnet, SSH | ✓ | ✓ | ✓ | ✓ |
| Console | - | - | - | - |
| SNMPv1/v2c/v3 | ✓ | ✓ | ✓ | ✓ |
| SMTP Alarm | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ |
| Operating Mode | RTU Master, RTU Slave, ASCII Master and ASCII Slave | | | |
| Power Supply | | | | |
| Dual Power Supply | - | - | - | - |
| 12-48VDC | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40~75°C | | | |
| Storage Temperature | -40~85°C | | | |
| Relative Humidity | 5% ~ 95% (no condensation) | | | |
| Installation | Wall Mounting | | | |
| Dimension(W*H*D) | 97mm×110mm×25mm | | | |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ | ✓ |



GW1114-4DI (RS-485)



GW1114-4DI (3IN1)



GW1118-8DI (RS-485)



GW1118-8DI (3IN1)

| Serial Interface | | | | |
|--------------------------------|-----------------------------------------------------|------------|----------------|------------|
| Quantity | 4 | 4 | 8 | 8 |
| RS-232 | - | ✓ | - | ✓ |
| RS-422 | - | ✓ | - | ✓ |
| RS-485 | ✓ | ✓ | ✓ | ✓ |
| Baud Rate | 110bps~115200bps | | | |
| Data Bit | 7, 8 | | | |
| Parity Bit | None, Even, Odd, Space, Mark | | | |
| Stop Bit | 1, 2 | | | |
| Interface Form | Terminal Block | 8-pin RJ45 | Terminal Block | 8-pin RJ45 |
| Ethernet Interface | | | | |
| 10/100Base-T(X) RJ45 | 2 | 2 | 2 | 2 |
| Dual IPs & MACs | ✓ | ✓ | ✓ | ✓ |
| Single IP | ✓ | ✓ | ✓ | ✓ |
| Management | | | | |
| Web (HTTP/HTTPS), Telnet, SSH | ✓ | ✓ | ✓ | ✓ |
| Console | ✓ | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3 | ✓ | ✓ | ✓ | ✓ |
| SMTP Alarm | ✓ | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ | ✓ |
| Operating Mode | RTU Master, RTU Slave, ASCII Master and ASCII Slave | | | |
| Power Supply | | | | |
| Dual Power Supply | - | - | - | - |
| 12~48VDC | ✓ | ✓ | ✓ | ✓ |
| Environmental Limits | | | | |
| Operating Temperature | -40~75°C | | | |
| Storage Temperature | -40~85°C | | | |
| Relative Humidity/Installation | 5% - 95% (no condensation) | | | |
| Installation | Desktop/wall Mounting | | | |
| Dimension(W*H*D) | 170mm×30mm×110mm | | | |
| Certification | | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ | ✓ |



IGW1111-1DI(3IN1)



IGW1112-2DI(3IN1)



IGW1114-4DI(3IN1)

| Serial Interface | | | |
|-------------------------------|-----------------------------------------------------|------------------|------------------|
| Quantity | 1 | 2 | 4 |
| RS-232 | ✓ | ✓ | ✓ |
| RS-422 | ✓ | ✓ | ✓ |
| RS-485 | ✓ | ✓ | ✓ |
| Baud Rate | 110bps~15200bps (customizable 110bps~921600bps) | | |
| Data Bit | 7, 8 | | |
| Parity Bit | None, Even, Odd, Space, Mark | | |
| Stop Bit | 1, 2 | | |
| Interface Form | DB9 Male | DB9 Male | DB9 Male |
| Ethernet Interface | | | |
| 10/100Base-T(X) RJ45 | 2 | 2 | 2 |
| Dual IPs & MACs | ✓ | ✓ | ✓ |
| Single IP | ✓ | ✓ | ✓ |
| Management | | | |
| Web (HTTP/HTTPS), Telnet, SSH | ✓ | ✓ | ✓ |
| Console | ✓ | ✓ | ✓ |
| SNMPv1/v2c/v3 | ✓ | ✓ | ✓ |
| SMTP Alarm | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| Operating Mode | RTU Master, RTU Slave, ASCII Master and ASCII Slave | | |
| Power Supply | | | |
| Dual Power Supply | ✓ | ✓ | ✓ |
| 12~48VDC | ✓ | ✓ | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -40~75°C | | |
| Storage Temperature | -40~85°C | | |
| Relative Humidity | 5% - 95% (no condensation) | | |
| Installation | DIN-Rail mounting | | |
| Dimension(W*H*D) | 33mm×138mm×110mm | 33mm×138mm×110mm | 53mm×138mm×110mm |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ |

CAN Server



| | CP202-2CI | ICP222-1T2F-2CI | CP300-W0-1T-2CI |
|------------------------------|----------------------------------------------------------------------------|----------------------------|----------------------------|
| CAN Interface | | | |
| Quantity | 2 | 2 | 2 |
| CAN 2.0A, CAN 2.0B | ✓ | ✓ | ✓ |
| Standard Baud Rate | 5kbps~1000kbps | | |
| Interface Form | Terminal Block | | |
| Ethernet Interface | | | |
| 10/100Base-T(X) RJ45 | 1 | 1 | 1 |
| 100Base-X SC/FC/ST | - | 2 | - |
| Single IP | ✓ | ✓ | ✓ |
| Ring (SW-Ring) | - | ✓ | - |
| WLAN Feature | | | |
| Wi-Fi4 (802.11b/g/n) | - | - | ✓ |
| Encryption Type | - | - | WPA/WPA2 |
| Operating Mode | - | - | AP, STA |
| Management | | | |
| Web (HTTP/HTTPS), Telnet/SSH | ✓ | ✓ | ✓ |
| NTP Client | ✓ | ✓ | ✓ |
| Operating Mode | TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang and UDP Multicast | | |
| Power Supply | | | |
| Single 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 | Wall Mounting | DIN-Rail mounting | Wall Mounting |
| Dimension(W*H*D) | 97mm×110mm×25mm | 35mm×110mm×95mm | 97mm×110mm×25mm |
| 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 | 1 | 1 |
| RS-485 | 4 | 4 | 4 |
| CAN | - | 1 | 1 |
| DI | 4 | - | - |
| Do | 4 | - | - |
| HDMI | 1 | - | - |
| USB | 1 | 1 | 1 |
| Serial Feature | | | |
| RS-232 Signal (TxD, RxD, GND) | ✓ | ✓ | ✓ |
| RS-485 Signal (D+, D-, GND) | ✓ | ✓ | ✓ |
| Baud Rate | 110bps~921600bps | 110bps~921600bps | 110bps~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 |
| 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 | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ |



| | 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 (Tx, Rx, GND) | ✓ | ✓ | DCD, Rx, Tx, DTR, GND, DSR, RTS, CTS |
| RS-485 Signal (D+, D-, GND) | ✓ | ✓ | TxD-(A), TxD+(B), RxD+(B), RxD-(A), GND |
| Baud Rate | 110bps-921600bps | 110bps-921600bps | 110bps-921600bps |
| 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 | ✓ | ✓ | ✓ |
| UL 62368-1 | ✓ | ✓ | ✓ |

Fieldbus Modem



| | MODEL277 | MODEL277A | MODEL277B |
|---------------------------|----------------------------------------|-------------------------------------------------------------------------|----------------------------|
| Fieldbus Interface | | | |
| Quantity | 1 | 1 | 1 |
| RS-232 | ✓ | ✓ | - |
| RS-422 | ✓ | - | ✓ |
| RS-485 | ✓ | - | ✓ |
| 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 |
| Single-mode | 20/40/60/80/100/120KM@1310NM or 1550NM | | |
| Multi-mode | 2KM@1310NM | | |
| 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 |
| Storage Temperature | -40-75°C | -40-85°C | -40-85°C |
| Relative Humidity | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) | 5% ~ 95% (no condensation) |
| Installation | Wall or DIN-Rail Mounting | Wall or DIN-Rail Mounting | Wall or DIN-Rail Mounting |
| Dimension(W*H*D) | 100mm×69mm×22mm | 5VDC model: 94mm×70.6mm×26mm -48VDC/220VAC model: 173.2mm×115mm×30mm | |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |



| | IMF204 | IMF208 | IMF210 |
|-----------------------------|----------------------------|----------------------------|-----------------------------|
| 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 |
| Single-mode | 20KM@1310NM or 1550NM | 20KM@1310NM or 1550NM | 20/40/60KM@1310NM or 1550NM |
| Multi-mode | 2KM@1310NM | 2KM@1310NM | 2KM@1310NM |
| Link Type | Ring | Ring | P2P or Ring |
| Power Supply | | | |
| 5VDC | - | - | - |
| 12-48VDC | ✓ | ✓ | ✓ |
| 220VAC | ✓ | - | ✓ |
| Environmental Limits | | | |
| Operating Temperature | -10-70°C | -10-70°C | -40-75°C |
| Storage Temperature | -10-70°C | -10-70°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) | 200mm×35mm×120mm | 200mm×35mm×120mm | 35mm×110mm×95mm |
| Certification | | | |
| CE, FCC, RoHS | ✓ | ✓ | ✓ |



| | 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 |
| Single-mode | 15KM@1310NM or 1550NM | 20/40/60KM@1310NM or 1550NM | 20/40/60KM@1310NM or 1550NM |
| Multi-mode | 2KM@1310NM | 2KM@1300NM | 2KM@1300NM |
| 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 |
| 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 | Wall Mounting | DIN-Rail mounting | DIN-Rail mounting |
| Dimension(W*H*D) | 69mm×22mm×100mm | 30mm×120mm×80mm | 30mm×120mm×80mm |
| Certification | | | |
| CE, FCC, RoHS | ✓ | / | / |

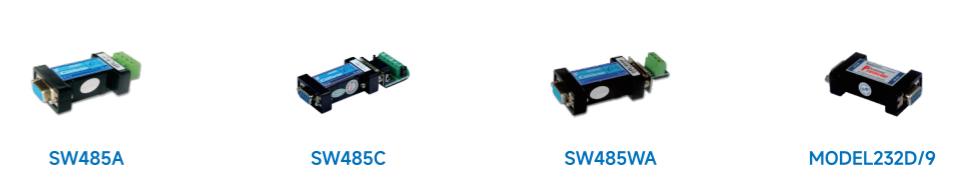
Interface Converter



| | 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 | ✓ | ✓ | ✓ |



| | 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 | ✓ | ✓ |



| | 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 | ✓ | ✓ | ✓ | ✓ |

USB-to-Serial Converter



USB232



USB485C

| Serial Interface | | |
|--------------------------|--------------------------------------|----------------------------------|
| Conversion | USB to 4-port RS-232 | USB to 1-port RS-422/485 |
| RS-232 | ✓ | - |
| RS-422 | - | ✓ |
| RS-485 | - | ✓ |
| USB | ✓ | ✓ |
| Baud Rate | 300bps-115200bps | 300bps-115200bps |
| Interface Form | DB9 Male, USB | DB9 Male, USB |
| Surge Protection | 1500W | 600W |
| Electrostatic Protection | 15kV | 15kV |
| Power Supply | | |
| External Power Supply | - | - |
| Power over USB | ✓ | ✓ |
| Environmental Limits | | |
| Operating Temperature | -20-60°C | -20-60°C |
| Storage Temperature | -25-85°C | -25-85°C |
| Relative Humidity | 5% - 95% (no condensation) | 5% - 95% (no condensation) |
| Installation | / | / |
| Dimension(W*H*D) | 36mm×16.5mm×68.5mm (cable length 1m) | 33mm×18mm×72mm (cable length 1m) |
| Certification | | |
| CE, FCC, RoHS | ✓ | ✓ |



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 | ✓ | ✓ | ✓ | ✓ |