PRODUCT
SELECTION GUIDE

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INDUSTRIAL ETHERNET SWITCHES

UNIVERSAL MANAGED L3 SWITCH
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TSN & PTP SWITCH
MANAGED POE SWITCH
UNMANAGED POE SWITCH
EN50155 L3 SWITCH
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EN50155 L2 & UNMANAGED SWITCH
IEC 61850 SWITCH
PROFINET SWITCH
EMBEDDED SWITCH MODULE
MEDIA CONVERTER CHASSIS & CARD
MEDIA CONVERTER
NETWORK MANAGEMENT SOFTWARE



Universal Managed L3 Switch



ICS5556-24GT24GS8XS



ICS5530-16GS8GC6XS



ICS5428-16GT8GC4XS

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



ICS6400-12GT12GS4XS



ICS6420-12GT4GS4XS



ICS6420-8GT8GS4XS

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






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

Universal Managed L2 Switch





	IES5328-16GT4GS8GC	IES6320-16GT4GS	IES6316-8GT8GS
Interface			
Number of Main Ports	28	20	16
100M/1G/2.5GBase-X SFP Slot	-	-	-
1G Combo (RJ45 or SFP)	8	-	-
100/1000Base-X SFP Slot	-	-	-
1000Base-X SFP Slot	4	4	8
10/100/1000Base-T(X) RJ45	16	16	8
Console	√	√	√
Relay	√	√	√
Switch Properties			
MAC Address Table	16K	16K	16K
Buffer	12Mbit	12Mbit	12Mbit
Switching Fabric	56G	56G	56G
Jumbo Frame Size	16K	16K	16K
Layer 3 Features			
IPv4, IPv6	√	√	√
Multicast			
IGMPv1/v2/v3, IGMP Snooping	√	√	√
Layer 2 Features			
802.1Q VLAN, LACP	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, SW-Ring	√	√	√
Management			
Telnet/SSH, HTTP/HTTPS, Console	√	√	√
SNMPv1/v2c/v3, SNMP Trap, RMON	√	√	√
DHCP Server/Client, DHCP Relay	√	√	√
LLDP	√	√	√
QoS	√	√	√
DDM	√	√	√
Port Mirroring	√	√	√
NTP Client	√	√	√
Security			
IEEE 802.1X, RADIUS	√	√	√
DHCP Snooping	√	√	√
Access Control Lists	√	√	√
Power Supply			
Dual Power Supply	√	√	√
220VAC (100~240VAC)	√	-	-
12~48VDC	-	√	√
24VDC (18~36VDC)	√	-	-
48VDC (36~72VDC)	√	-	-
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP30	IP40	IP40
Installation (Rack mounting)	√	-	-
Installation (DIN-Rail mounting)	-	√	√
Certification			
CE, FCC, RoHS	√	√	√
UL 61010-1	√	√	√





	IES6300-8GT2GS2HS	IES6000-8GT2HS	IES6000-4GT2HS
Interface			
Number of Main Ports	12	10	6
100M/1G/2.5GBase-X SFP Slot	2	2	2
1G Combo (RJ45 or SFP)	-	-	-
100/1000Base-X SFP Slot	2	-	-
1000Base-X SFP Slot	-	-	-
10/100/1000Base-T(X) RJ45	8	8	4
10/100Base-T(X) RJ45	-	√	√
Console	√	√	√
Relay	√		
Switch Properties			
MAC Address Table	8K	8K	8K
Buffer	4Mbit	4Mbit	4Mbit
Switching Fabric	30G	30G	30G
Multicast			
IGMPv1/v2/v3, IGMP Snooping	√	√	√
IGMPv1/v2, IGMP Snooping	-	-	-
Layer 2 Features			
802.1Q VLAN, Link Aggr	√	√	√
STP/RSTP, SW-Ring	-	-	-
STP/RSTP/MSTP, ERPSv1/v2, SW-Ring	√	√	√
Management			
Telnet/SSH, HTTP, Console	√	√	√
Telnet/SSH, HTTP/HTTPS, Console	√	√	√
SNMPv1/v2c, SNMP Trap	√	√	√
SNMPv1/v2c/v3, SNMP Trap	√	√	√
DHCP Server/Client	√	√	√
LLDP	√	√	√
QoS	√	√	√
DDM	√	√	√
Port Mirroring	√	√	√
NTP Client	√	√	√
Security			
IEEE 802.1X, RADIUS	√	√	√
DHCP Snooping	√	√	√
Access Control Lists	√	√	√
Power Supply			
Dual Power Supply	√	√	√
220VAC (100~240VAC)	√ (Single)	-	-
220VAC (85~264VAC)	-	-	-
12~48VDC	√	√	-
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40
Installation (DIN-Rail mounting)	√	√	√
Certification			
CE, FCC, RoHS	√	√	√
UL 61010-1	√	√	√





	IES6220-16T4GS	IES6210-8T2GC	IES6210-4T2GC
Interface			
Number of Main Ports	20	10	6
100M/1G/2.5GBase-X SFP Slot	-	-	-
1G Combo (RJ45 or SFP)	-	2	2
100/1000Base-X SFP Slot	-	-	-
1000Base-X SFP Slot	4	-	-
10/100/1000Base-T(X) RJ45	-	-	-
10/100Base-T(X) RJ45	16	8	4
Console	√	√	√
Relay	√	√	√
Switch Properties			
MAC Address Table	8K	8K	8K
Buffer	3Mbit	1Mbit	1Mbit
Switching Fabric	12.8G	7.6G	7.6G
Multicast			
IGMPv1/v2/v3, IGMP Snooping	-	-	-
IGMPv1/v2, IGMP Snooping	√	√	√
Layer 2 Features			
802.1Q VLAN, Link Aggr	√	√	√
STP/RSTP, SW-Ring	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, SW-Ring	-	-	-
Management			
Telnet/SSH, HTTP, Console	√	√	√
Telnet/SSH, HTTP/HTTPS, Console	-	-	-
SNMPv1/v2c, SNMP Trap	-	-	-
SNMPv1/v2c/v3, SNMP Trap	√	√	√
DHCP Server/Client	√	√	√
LLDP	√	√	√
QoS	-	-	-
DDM	-	-	-
Port Mirroring	√	√	√
NTP Client	√	√	√
Security			
IEEE 802.1X, RADIUS	-	-	-
DHCP Snooping	-	-	-
Access Control Lists	-	-	-
Power Supply			
Dual Power Supply	√	√	√
220VAC (100~240VAC)	-	-	-
220VAC (85~264VAC)	-	√ (Single)	√ (Single)
12~48VDC	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40
Installation (DIN-Rail mounting)	√	√	√
Certification			
CE, FCC, RoHS	√	√	√
UL 61010-1	√	√	√





	IES6100-6T2F-W2	IES6100-6T3F
Interface		
Number of Ethernet Ports	8	9
100Base-X SC/FC/ST	2	3
10/100Base-T(X) RJ45	6	6
2.4G Wi-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		
802.1X, RADIUS	√	√
Static MAC	√	√
Power Supply		
Dual Power Supply	√	√
220VAC (100~240VAC)	√ (Single Power Supply)	√ (Single Power Supply)
12~48VDC	√	√
Environmental Limits		
Operating Temperature	-40~75°C	-40~75°C
IP Rating	IP40	IP40
Installation (Rack mounting)	√	√
Certification		
CE, FCC, RoHS	√	√
UL 61010-1	√	√







	IES7110-3GS	IES7110-2GS	IES7110-2GS-4F
Interface			
Number of Main Ports	10	10	10
1000Base-X SFP Slot	3	2	2
100Base-X SC/FC/ST	-	-	4
10/100Base-T(X) RJ45	7	8	4
Console	√	√	√
Relay	√	√	√
Switch Properties			
MAC Address Table	8K	8K	8K
Buffer	1Mbit	1Mbit	1Mbit
Switching Fabric	7.6G	7.6G	7.6G
Multicast			
Static Multicast	√	√	√
IGMPv1/v2	√	√	√
IGMP Snooping	√	√	√
Layer 2 Features			
VLAN	√	√	√
Link Aggregation	√	√	√
STP/RSTP,	√	√	√
SW-Ring	√	√	√
Management			
Telnet/SSH	√	√	√
HTTP	√	√	√
Console	√	√	√
SNMPv1/v2c	√	√	√
SNMP Trap	√	√	√
DHCP Server/Client	√	√	√
LLDP	√	√	√
Port Mirroring	√	√	√
SNTP Client	√	√	√
Security			
802.1X, RADIUS	-	-	-
Static MAC	-	-	-
Power Supply			
Dual Power Supply	√	√	√
220VAC (85~264VAC)	-	-	-
12~48VDC	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40
DIN-Rail or wall mounting	√	√	√
Certification			
CE, FCC, RoHS	√	√	√
UL 61010-1	√	√	√

Universal Unmanaged Switch

	 IES2220-16T4GS	 IES2210-8T2GC	 IES2210-4T2GC
Interface			
Number of Main Ports	20	10	6
1G Combo (RJ45 or SFP)	-	2	2
1000Base-X SFP Slot	4	-	-
10/100Base-T(X) RJ45	16	8	4
Relay	√	√	√
Switch Properties			
MAC Address Table	8K	8K	8K
Buffer	3Mbit	1Mbit	1Mbit
Switching Fabric	12.8G	7.6G	7.6G
Power Supply			
Dual Power Supply	√	√	√
220VAC (85~264VAC)	-	√ (Single Power Supply)	√ (Single Power Supply)
24/48VDC (18~72VDC)	-	-	-
12~48VDC	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40
DIN-Rail or wall mounting	√	√	√
Certification			
CE, FCC, RoHS	√	√	√
UL 61010-1	√	√	√

	 IES318-8T	 IES318-7T1F	 IES318-6T2F	 IES318-4T4F
Interface				
Number of Main Ports	8	8	8	8
100Base-X SC/FC/ST	-	1	2	4
10/100Base-T(X) RJ45	8	7	6	4
Switch Properties				
MAC Address Table	2K	2K	2K	2K
Buffer	1Mbit	1Mbit	1Mbit	1Mbit
Switching Fabric	1.6G	1.6G	1.6G	1.6G
Power Supply				
Dual Power Supply	√	√	√	√
220VAC/DC (85~264VAC/DC)	√ (Single Power Supply)	√ (Single Power Supply)	√ (Single Power Supply)	√ (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
Power Supply						
Dual Power Supply	-	-	-	-	-	-
220VAC (100~240VAC)	√	√	√	√	√	√
12~48VDC	√	√	√	√	√	√
Environmental Limits						
Operating Temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40	IP40	IP40	IP40
DIN-Rail mounting	√	√	√	√	√	√
Certification						
CE, FCC, RoHS	√	√	√	√	√	√
UL 61010-1	√	√	√	√	√	√

	 IES2300SL-16GT	 IES2300SL-8GT	 IES2300SL-5GT	 IES2100SL-16T	 IES2100SL-8T	 IES2100SL-5T
Interface						
Number of Main Ports	16	8	5	16	8	5
10/100/1000Base-T(X) RJ45	16	8	5	-	-	-
10/100Base-T(X) RJ45	-	-	-	16	8	5
Switch Properties						
MAC Address Table	4K	4K	2K	8K	2K	2K
Buffer	4.1Mbit	1.5Mbit	1.5Mbit	1.5Mbit	1.5Mbit	1.5Mbit
Switching Fabric	52G	16G	14G	3.2G	1.6G	1G
Power Supply						
Dual Power Supply	√	√	√	√	√	√
9~60VDC	√	√	√	√	√	√
Environmental Limits						
Operating Temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40	IP40	IP40	IP40
DIN-Rail mounting	√	√	√	√	√	√
Certification						
CE, FCC, RoHS	√	√	√	√	√	√
UL 61010-1	√	√	√	√	√	√

TSN & PTP Switch



	ICS5400TSN 24GT16GS4XS	ICS5400TSN 12GT12GS4XS	ICS6400TSN 16GT4XS	ICS6400TSN 8GT4XS	ICS5400PTP 24GT16GS4XS	ICS5400PTP 12GT12GS4XS
Interface						
Number of Main Ports	44	28	20	12	44	28
1G/2.5G/10GBase-X SFP Slot	4	4	4	4	4	4
100/1000Base-X SFP Slot	16	12	-	-	16	12
10/100/1000Base-T(X) RJ45	24	12	16	8	24	12
Console	√	√	√	√	√	√
Relay	√	√	√	√	√	√
Switch Properties						
MAC Address Table	32K	32K	32K	32K	32K	32K
Buffer	32Mbit	32Mbit	32Mbit	32Mbit	32Mbit	32Mbit
Switching Fabric	160G	160G	160G	160G	160G	128G
Jumbo Frame Size	10K	10K	10K	10K	10K	10K
TSN Features						
IEEE 1588v2 (PTPv2), 802.1 AS	√	√	√	√	√	√
802.1 CB/QBV/QBU/QCH/QCI/QCC	√	√	√	√	√	√
Layer 3 Features						
IPv4,IPv6	√	√	√	√	√	√
Inter-VLAN Routing, Static Routing RIPv1/v2, RIPng, OSPFv2/v3, IS-IS, BGP4, VRRPv3, NAT	√	√	√	√	√	√
Multicast						
IPv4 PIM-DM/SM, IPv6 PIM-DM/SM	√	√	√	√	√	√
MLDv1/v2, MLD Snooping, SSM Mapping	√	√	√	√	√	√
IGMPv1/v2/v3, IGMP Snooping, SSM Mapping	√	√	√	√	√	√
Layer 2 Features						
VLAN, LACP	√	√	√	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, MRP, Smart-link, SW-Ring	√	√	√	√	√	√
Management						
Telnet/SSH, HTTP/HTTPS, Console	√	√	√	√	√	√
SNMPv1/v2c/v3, SNMP Trap, RMON	√	√	√	√	√	√
DHCP Server/Client, DHCP Relay, DHCP option82	√	√	√	√	√	√
LLDP, QoS	√	√	√	√	√	√
Port Mirroring, DDM	√	√	√	√	√	√
NTP Client	√	√	√	√	√	√
Security						
IEEE 802.1X, RADIUS	√	√	√	√	√	√
DHCP Snooping	√	√	√	√	√	√
Access Control Lists	√	√	√	√	√	√
Power Supply						
Dual Power Supply	√	√	√	√	√	√
220VAC (85~264VAC)	√	-	-	-	√	-
220VAC (90~264VAC)	-	√	-	-	-	√
12~55VDC	-	-	-	-	-	-
12~48VDC	-	√	√	√	-	√
Environmental Limits						
Operating Temperature	-40~75°C	-40~60°C	-40~65°C	-40~65°C	-40~75°C	-40~60°C
IP Rating	IP40	IP40	IP40	IP40	IP40	IP40
Rack mounting	√	√	-	-	√	√
DIN-Rail mounting	-	-	√	√	-	-
Certification						
CE, FCC, RoHS	√	√	√	√	√	√
UL 61010-1	√	√	√	√	√	√

Managed PoE Switch



	ICS5428 16GP8GC4XS	IES6300 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	√	√	√	√	√

Unmanaged PoE Switch










	IES2220-16P4GS	IES2210-8P2GC	IES2210-4P2GC	IES2305-4GP1GT	IES2305-4GP1GS	IES2305-4GP1GF	IES2105-4P1T	IES2105-4P1F
Interface								
Number of Main Ports	20	10	6	5	5	5	5	5
1G Combo (RJ45 or SFP)	-	2	2	-	-	-	-	-
1000Base-X SFP Slot	4	-	-	-	1	-	-	-
1000Base-X SC/FC/ST	-	-	-	-	-	1	-	-
10/100/1000Base-T(X) RJ45	-	-	-	1	-	-	-	-
10/100/1000Base-T(X) PoE RJ45	-	-	-	4	4	4	-	-
100Base-X SC/FC/ST	-	-	-	-	-	-	-	1
10/100Base-T(X) RJ45	-	-	-	-	-	-	1	-
10/100Base-T(X) PoE RJ45	16	8	4	-	-	-	4	4
Switch Properties								
MAC Address Table	8K	8K	8K	2K	2K	2K	2K	2K
Buffer	3Mbit	1Mbit	1Mbit	1Mbit	1Mbit	1Mbit	1Mbit	1Mbit
Switching Fabric	12.8G	7.6G	7.6G	9.125G	9.125G	9.125G	1G	1G
Power over Ethernet								
Power Pin Assignment	1/2+, 3/6-	1/2+, 3/6-	1/2+, 3/6-	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	30W	30W	30W
Total PoE Budget	120W/200W	120W/200W	60W/120W	100W	100W	100W	100W	100W
Power Supply								
Dual Power Supply	√	√	√	-	-	-	-	-
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	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40	IP40	IP40	IP40	IP40	IP40
DIN-Rail or wall mounting	√	√	√	√	√	√	√	√
Certification								
CE, FCC, RoHS, UL 61010-1	√	√	√	√	√	√	√	√





	IES6220-16P4GS	IES6210-8P2GC	IES6210-4P2GC
Interface			
Number of Main Ports	20	10	6
1G Combo (RJ45 or SFP)	-	2	2
1000Base-X SFP Slot	4	-	-
10/100Base-T(X) PoE RJ45	16	8	4
Console	√	√	√
Relay	√	√	√
Switch Properties			
MAC Address Table	8K	8K	8K
Buffer	3Mbit	1Mbit	1Mbit
Switching Fabric	12.8G	7.6G	7.6G
Power over Ethernet			
802.3 AF/AT (PoE+)	√	√	√
Power Pin Assignment	1/3+, 2/6-	1/3+, 2/6-	1/3+, 2/6-
Max. Port PoE Budget	30W	30W	30W
Total PoE Budget	120W/200W	120W/240W	60W/120W
Multicast			
Static Multicast	√	√	√
IGMPv1/v2, IGMP Snooping	√	√	√
Layer 2 Features			
VLAN, Link Aggregation	√	√	√
STP/RSTP, SW-Ring	√	√	√
Management			
Telnet/SSH, HTTP, Console	√	√	√
SNMPv1/v2c, SNMP Trap	√	√	√
DHCP Server/Client	√	√	√
LLDP	√	√	√
Port Mirroring	√	√	√
SNTP Client	√	√	√
Security			
802.1X, RADIUS	-	√	√
IP/MAC filtering, Static MAC	√	-	-
Power Supply			
Dual Power Supply	√	√	√
48VDC (45-55VDC)	√	√	√
24VDC (18-36VDC)	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40
DIN-Rail or wall mounting	√	√	√
Certification			
CE, FCC, RoHS	√	√	√
UL 61010-1	√	√	√

EN50155 L3 Switch






	TNS5800-16GP4GT	TNS5800-16P4GT	TNS5800-8GP4GT	TNS5800-8P4GT
Interface				
Number of Main Ports	20	20	12	12
10/100/1000Base-T(X) Bypass M12	4	4	4	4
10/100/1000Base-T(X) PoE M12	16	-	8	-
10/100Base-T(X) PoE M12	-	16	-	8
Console	√	√	√	√
Relay	√	√	√	√
Switch Properties				
MAC Address Table	16K	16K	16K	16K
Buffer	12Mbit	12Mbit	12Mbit	12Mbit
Switching Fabric	128G	128G	128G	128G
Jumbo Frame Size	16K	16K	16K	16K
Power over Ethernet				
802.3 AF/AT (PoE+)	√	√	√	√
Power Pin Assignment	1/2+, 3/4-	1/3+, 2/4-	1/2+, 3/4-	1/3+, 2/4-
Max. Port PoE Budget	30W	30W	30W	30W
Total PoE Budget	100W	100W	100W	100W
Layer 3 Features				
IPv4, IPv6	√	√	√	√
Inter-VLAN Routing, Static Routing RIPv1/v2, OSPFv2, BGP4, VRRPv2, NAT	√	√	√	√
Multicast				
IPv4 PIM-DM/SM	√	√	√	√
IGMPv1/v2/v3, IGMP Snooping, SSM Mapping	√	√	√	√
Layer 2 Features				
VLAN, LACP	√	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, SW-Ring	√	√	√	√
Management				
Telnet/SSH, HTTP/HTTPS, Console	√	√	√	√
SNMPv1/v2c/v3, SNMP Trap, RMON	√	√	√	√
DHCP Server/Client, DHCP Relay, DHCP option822	√	√	√	√
LLDP, QoS	√	√	√	√
Port Mirroring	√	√	√	√
NTP Client	√	√	√	√
Security				
IEEE 802.1X, RADIUS	√	√	√	√
DHCP Snooping	√	√	√	√
Access Control Lists	√	√	√	√
Power Supply				
110VDC (66~156VDC)	-	√	-	-
24VDC (18~36VDC)	√	√	√	√
Environmental Limits				
Operating Temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40	IP40
Rack mounting	√	√	√	√
Certification				
CE, FCC, RoHS	√	√	√	√
UL 61010-1	√	√	√	√
EN 50155, EN 50121, IEC 61373, EN 45545	√	√	√	√
SFT (Salt Fog Test)	√	√	√	√
IEC 62443	√	√	√	√






	TNS5800D-16GP4GT	TNS5800D-16P4GT	TNS5800D-8GP4GT	TNS5800D-8P4GT
Interface				
Number of Main Ports	20	20	12	12
10/100/1000Base-T(X) Bypass M12	4	4	4	4
10/100/1000Base-T(X) PoE M12	16	-	8	-
10/100Base-T(X) PoE M12	-	16	-	8
Console	√	√	√	√
Relay	√	√	√	√
Switch Properties				
MAC Address Table	16K	16K	16K	16K
Buffer	12Mbit	12Mbit	12Mbit	12Mbit
Switching Fabric	56G	56G	56G	56G
Jumbo Frame Size	16K	16K	16K	16K
Power over Ethernet				
802.3 AF/AT (PoE+)	√	√	√	√
Power Pin Assignment	1/2+, 3/4-	1/3+, 2/4-	1/3+, 2/4-	1/3+, 2/4-
Max. Port PoE Budget	30W	30W	30W	30W
Total PoE Budget	100W	100W	100W	100W
Layer 3 Features				
IPv4, IPv6	√	√	√	√
Inter-VLAN Routing, Static Routing RIPv1/v2, OSPFv2, BGP4, VRRPv2, NAT	√	√	√	√
Multicast				
IPv4 PIM-DM/SM	√	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, SW-Ring	√	√	√	√
Layer 2 Features				
VLAN, LACP	√	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, SW-Ring	√	√	√	√
Management				
Telnet/SSH, HTTP/HTTPS, Console	√	√	√	√
SNMPv1/v2c/v3, SNMP Trap, RMON	√	√	√	√
DHCP Server/Client, DHCP Relay, DHCP option82	√	√	√	√
LLDP, QoS	√	√	√	√
Port Mirroring	√	√	√	√
NTP Client	√	√	√	√
Security				
IEEE 802.1X, RADIUS	√	√	√	√
DHCP Snooping	√	√	√	√
Access Control Lists	√	√	√	√
Power Supply				
110VDC (66~156VDC)	√	√	√	√
24VDC (18~36VDC)	√	√	√	√
Environmental Limits				
Operating Temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP67	IP67	IP67	IP67
Wall mounting	√	√	√	√
Certification				
CE, FCC, RoHS	√	√	√	√
UL 61010-1	√	√	√	√
EN 50155, EN 50121, IEC 61373, EN 45545	√	√	√	√
SFT (Salt Fog Test)	√	√	√	√
IEC 62443	√	√	√	√

EN50155 L2 Switch






	TNS5500D-16GP4GT	TNS5500D-16P4GT	TNS5500D-8GP4GT	TNS5500D-8P4GT
Interface				
Number of Main Ports	20	20	12	12
10/100/1000Base-T(X) Bypass M12	4	4	4	4
10/100/1000Base-T(X) PoE M12	16	-	8	-
10/100Base-T(X) PoE M12	-	16	-	8
Console	√	√	√	√
Relay	√	√	√	√
Switch Properties				
MAC Address Table	16K	16K	16K	16K
Buffer	12Mbit	12Mbit	12Mbit	12Mbit
Switching Fabric	56G	56G	56G	56G
Jumbo Frame Size	16K	16K	16K	16K
Power over Ethernet				
802.3 AF/AT (PoE+)	√	√	√	√
Power Pin Assignment	1/2+, 3/4-	1/3+, 2/4-	1/3+, 2/4-	1/3+, 2/4-
Max. Port PoE Budget	30W	30W	30W	30W
Total PoE Budget	100W	100W	100W	100W
Layer 3 Features				
IPv4, IPv6	√	√	√	√
Multicast				
IGMPv1/v2/v3, IGMP Snooping, SSM Mapping	√	√	√	√
Layer 2 Features				
VLAN, LACP	√	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, SW-Ring	√	√	√	√
Management				
Telnet/SSH, HTTP/HTTPS, Console	√	√	√	√
SNMPv1/v2c/v3, SNMP Trap, RMON	√	√	√	√
DHCP Server/Client, DHCP Relay, DHCP option82	√	√	√	√
LLDP, QoS	√	√	√	√
Port Mirroring	√	√	√	√
NTP Client	√	√	√	√
Security				
IEEE 802.1X, RADIUS	√	√	√	√
DHCP Snooping	√	√	√	√
Access Control Lists	√	√	√	√
Power Supply				
110VDC (66~156VDC)	√	√	√	√
24VDC (18~36VDC)	√	√	√	√
Environmental Limits				
Operating Temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP67	IP67	IP67	IP67
Wall mounting	√	√	√	√
Certification				
CE, FCC, RoHS	√	√	√	√
UL 61010-1	√	√	√	√
EN 50155, EN 50121, IEC 61373, EN 45545	√	√	√	√
SFT (Salt Fog Test)	√	√	√	√

EN50155 L2 & Unmanaged Switch





	TNS5500D-8T	TNS5000D-8T	TNS5500D-2GX8GPoE
Interface			
Number of Main Ports	8	8	10
1G/10GBase-T(X) M12	-	-	2
10/100/1000Base-T(X) PoE M12	-	-	8
10/100Base-T(X) M12	8	8	-
Console	√	√	√
Relay	√	√	√
Switch Properties			
MAC Address Table	8K	8K	16K
Buffer	1Mbit	1Mbit	2Mbit
Switching Fabric	7.6G	7.6G	56G
Power over Ethernet			
802.3 AF/AT (PoE+)		-	√
Power Pin Assignment	-	-	1/2-, 3/4+
Max. Port PoE Budget	-	-	30W
Total PoE Budget	-	-	160W
Multicast			
Static Multicast	√	-	-
IGMPv1/v2, IGMP Snooping	√	-	-
Layer 2 Features			
802.1Q VLAN, Link Aggregation	√	-	-
STP/RSTP, SW-Ring	√	-	-
Management			
Telnet/SSH, HTTP, Console	√	-	-
SNMPv1/v2c, SNMP Trap	√	-	-
DHCP Server/Client	√	-	-
LLDP	√	-	-
Port Mirroring	√	-	-
SNTP Client	√	-	-
Power Supply			
110VDC (66~154VDC)	√	√	-
24VDC (9~36VDC)	√	√	-
24VDC (18~36VDC)	-	-	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-10~50°C
IP Rating	IP67	IP65	IP67
Wall mounting	√	√	√
Certification			
CE, FCC, RoHS	√	√	√
UL 61010-1	√	√	√
EN 50155, EN 50121, IEC 61373, EN 45545	√	√	√
SFT (Salt Fog Test)	√	√	√
Q/CR 699-2019, Q/CRRC J26-2018	√	√	-

IEC 61850 Switch



MES5300-28GS



MES5300-24GT4GS



MES5200-16GT8F4GS

	MES5300-28GS	MES5300-24GT4GS	MES5200-16GT8F4GS
Interface			
Number of Main Ports	28	28	28
100/1000Base-X SFP Slot	28	4	4
10/100/1000Base-T(X) RJ45	-	24	16
100Base-X SC/FC/ST	-	-	8
Console	√	√	√
Relay	√	√	√
Switch Properties			
MAC Address Table	32K	8K	8K
Buffer	32Mbit	4.1Mbit	4.1Mbit
Switching Fabric	90G	56G	56G
Jumbo Frame Size	10K	10K	10K
Layer 3 Features			
IPv4, IPv6	√	√	√
Multicast			
IGMPv1/v2/v3, IGMP Snooping	√	√	√
Layer 2 Features			
VLAN, LACP	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, MRP, SW-Ring	√	√	√
Management			
Telnet/SSH, HTTP/HTTPS, Console, Modbus TCP	√	√	√
SNMPv1/v2c/v3, SNMP Trap, RMON	√	√	√
DHCP Server/Client, DHCP Relay	√	√	√
LLDP, QoS	√	√	√
Port Mirroring	√	√	√
NTP Client	√	√	√
MMS Server	√(Pending)	√(Pending)	√(Pending)
Security			
IEEE 802.1X, RADIUS	√	√	√
DHCP Snooping	√	√	√
Access Control Lists	√	√	√
Power Supply			
Dual Power Supply	√	√	√
85-264VAC (77-300VDC)	√	√	√
18-72VDC	√	√	√
Environmental Limits			
Operating Temperature	-40~85°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40
Rack mounting	√	√	√
Certification			
CE, FCC, RoHS	√	√	√
IEC 61850-3, IEEE 1613	√	√	√

PROFINET Switch



IES6300PN 8GT2HS



IES6200PN 16T4GS



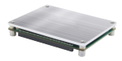
IES2008-PN

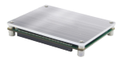


IES2005-PN

	IES6300PN 8GT2HS	IES6200PN 16T4GS	IES2008-PN	IES2005-PN
	PROFINET CC-B	PROFINET CC-B	PROFINET CC-A	PROFINET CC-A
Interface				
Number of Main Ports	10	20	8	5
1000Base-X SFP Slot	2(1G/2.5G)	4	-	-
10/100/1000Base-T(X) RJ45	8	-	-	-
10/100Base-T(X) RJ45	-	16	8	5
Console	√	√	-	-
Relay	√	√	-	-
Switch Properties				
MAC Address Table	16K	8K	2K	2K
Buffer	2Mbit	3Mbit	0.75Mbit	0.75Mbit
Switching Fabric	20G	12.8G	1.6G	1G
Jumbo Frame Size	10K	-	-	-
Multicast				
IGMPv1/v2/v3	√	√	-	-
IGMP Snooping	√	√	-	-
Layer 2 Features				
802.1Q VLAN	√	√	-	-
LACP	√	√	-	-
STP/RSTP/MSTP, ERPS	√	√	-	-
SW-Ring	√	√	-	-
MRP (MRM/MRC)	√	√	-	-
Management				
Telnet/SSH, HTTP/HTTPS, Console	√	√	-	-
SNMPv1/v2c/v3, SNMP Trap	√	√	-	-
DHCP Server/Client	√	√	-	-
LLDP	√	√	-	-
QoS	√	√	-	-
Port Mirroring	√	√	-	-
NTP Client	√	√	-	-
Security				
IEEE 802.1X, RADIUS	√	√	-	-
Access Control Lists	√	√	-	-
Power Supply				
Dual Power Supply	√	√	-	-
12~48VDC	√	√	√	√
Environmental Limits				
Operating Temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C
IP Rating	IP40	IP40	IP40	IP40
DIN-Rail mounting	√	√	√	√
Certification				
CE, FCC, RoHS	√	√	√	√

Embedded Switch Module





	ICM7428G	IEM6300-20G	IEM6300-12G
Interface			
Number of Main Ports	28	20	12
QSGMII	8	-	-
1000Base-X	4	4	4
10/100/1000Base-T(X)	16	16	8
UART (Console)	√	√	√
Switch Properties			
MAC Address Table	16K	8K	8K
Buffer	12Mbit	4Mbit	4Mbit
Switching Fabric	128G	40G	24G
Jumbo Frame Size	16K	9K	9K
Layer 3 Features			
IPv4, IPv6	√	√	√
Inter-VLAN Routing, Static Routing RIPv1/v2, OSPFv2, BGP4, VRRPv2, NAT	√	-	-
Multicast			
IPv4 PIM-DM/SM	√	-	-
IGMPv1/v2/v3, IGMP Snooping	√	√	√
Layer 2 Features			
802.1Q VLAN	√	√	√
LACP	√	√	√
STP/RSTP/MSTP, ERPSv1/v2, SW-Ring	√	√	√
Management			
Telnet/SSH, HTTP/HTTPS, Console	√	√	√
SNMPv1/v2c/v3, SNMP Trap, RMON	√	√	√
DHCP Server/Client, DHCP Relay	√	√	√
LLDP	√	√	√
QoS	√	√	√
Port Mirroring	√	√	√
NTP Client	√	√	√
Security			
IEEE 802.1X, RADIUS	√	√	√
DHCP Snooping	√	√	√
Port Security	√	√	√
Access Control Lists	√	√	√
Power Supply			
3.3VDC±5%	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
Installation	Embedded mounting	Embedded mounting	Embedded mounting
Dimension(W*H*D)	90mm×72mm×14.6mm	90mm×72mm×14.6mm	90mm×10.4mm×72mm
Certification			
CE, FCC, RoHS	√	√	√





	IEM7110-3G	IEM618-4D-2C	IEM615-2D
Interface			
Number of Main Ports	10	8	5
1000Base-X or 10/100/1000Base-T(X)	3	-	-
1000Base-X or 10/100Base-T(X)	7	8	5
UART (Console)	√	√	√
UART	-	√ (4)	√ (2)
CAN	-	√ (2)	-
Switch Properties			
MAC Address Table	8K	2K	2K
Buffer	1Mbit	1Mbit	0.5Mbit
Switching Fabric	7.6G	2G	1.2G
UART Features			
RS-232/422/485 Optional	-	√	√
Baud Rate	-	300bps~115200bps	300bps~115200bps
Data Bit	-	5, 6, 7, 8	8
Parity Bit	-	None, Even, Odd, Space, Mark	None, Even, Odd
Stop Bit	-	1, 1.5, 2	1, 2
Operating Mode	-	Realcom, TCP Server, TCP Client, UDP, TCP Auto	
CAN Features			
CAN 2.0A/B	-	√	-
CAN-H, CAN-L	-	√	-
Baud Rate	-	5-1000kbps	-
Operating Mode	-	TCP Server/Client, UDP, TCP Auto	-
Multicast			
Static Multicast	√	√	√
IGMPv1/v2, IGMP Snooping	√	√	√
Layer 2 Features			
VLAN, Link Aggregation	√	√	√
STP/RSTP, SW-Ring	√	√	√
Management			
Telnet/SSH, HTTP, Console	√	√	√
SNMPv1/v2c, SNMP Trap	√	√	√
DHCP Server/Client	√	√	√
LLDP	√	√	√
Port Mirroring	√	√	√
SNTP Client	√	√	√
Power Supply			
3.3VDC±5%	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~85°C	-40~75°C
Installation	Embedded mounting	Embedded mounting	Embedded mounting
Dimension(W*H*D)	72mm×8.9mm×54mm	72mm×9.5mm×54mm	55mm×9.7mm×40mm
Certification			
CE, FCC, RoHS	√	√	√

Media Converter Chassis & Card





	RACK2100-R	RACK2000D
Media Converter Slot		
MC Slot	18	16
NMU Slot	1	-
Adapted Media Converter Card	ECU100 series, ECU100M series	MODEL1100-C, MODEL3012-C
Management		
SNMPv1/v2c	√	√
Web(HTTP)	√	√
DHCP Client	√	√
NTP Client	√	√
SMTP Alarm	√	√
Power Supply		
Dual Power Supply	√	√
85~264VAC/DC	√	-
100-260VAC	-	√
Environmental Limits		
Operating Temperature	-40~75°C	-20~60°C
Storage Temperature	-40~85°C	-20~60°C
Relative Humidity	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
Installation	Rack mounting	Rack mounting
Dimension(W*H*D)	432.04mm×88.1mm×278mm	483.4mm×90.5mm×291.2mm
Certification		
CE, FCC, RoHS	√	√





	MODEL3012-C	MODEL1100-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	√	√











	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	√	√	√	√	√









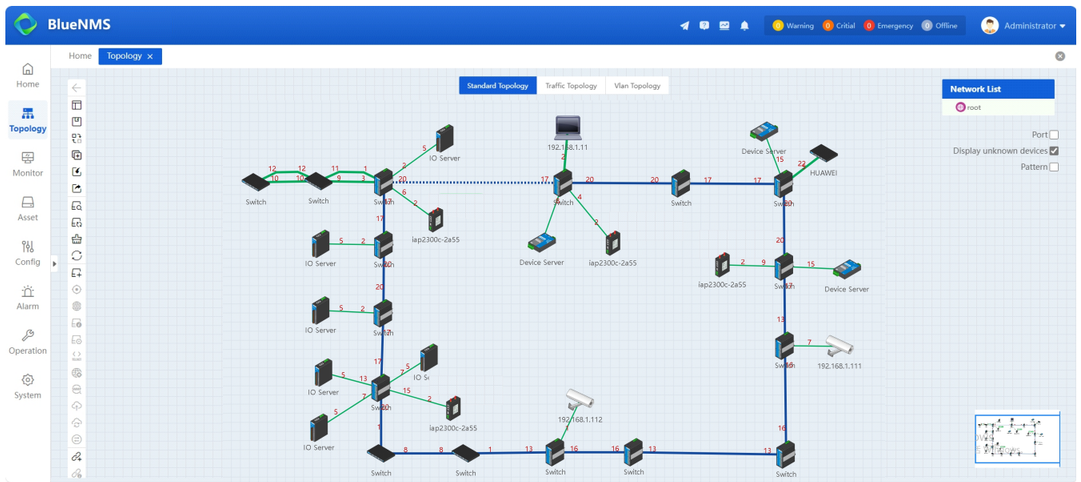


	ECU100-1GT2GS	ECU100-2GT1GF	ECU100-1GT1GF	ECU100-2T1F	ECU100-1T1F
Interface					
Number of Main Ports	3	3	2	3	2
1000Base-X SFP	2	-	-	-	-
1000Base-X SC/FC/ST	-	1	1	-	-
10/100/1000Base-T(X) RJ45	1	2	1	-	-
100Base-X SC/FC/ST	-	-	-	1	1
10/100Base-T(X) RJ45	-	-	-	2	1
Transmission Distance					
Ethernet	100M				
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	√	√	√	√	√

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 Managemnet	
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	Eeal-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



Media Converter











	IPMC100-1GS-1GPOE	IPMC100-1GS-2GPOE	IPMC101-F-POE	IMC100-2GT1GS	IMC100-2GT1GF	IMC100-1GT1GS	IMC100-1GT1GF	IMC100-2T1F	IMC100-1T1F
Interface									
Number of Main Ports	2	3	2	3	3	2	2	3	2
1000Base-X SFP	1	1	-	1	-	1	-	-	-
1000Base-X SC/FC/ST	-	-	-	-	1	-	1	-	-
10/100/1000Base-T(X) RJ45	-	-	-	2	2	1	1	2	1
10/100/1000Base-T(X) PoE RJ45	1	2	-	-	-	-	-	-	-
100Base-X SC/FC/ST	-	-	1	-	-	-	-	1	1
10/100Base-T(X) RJ45	-	-	-	-	-	-	-	2	1
10/100Base-T(X) PoE RJ45	-	-	1	-	-	-	-	-	-
Transmission Distance									
Ethernet	100M								
Single-mode Fiber	20/40/80KM@1310NM or 1550NM								
Multi-mode Fiber	2KM@1310NM								
Switch Properties									
Switching Fabric	14G	14G	1.6G	18.2G	18.2G	18.2G	18.2G	1G	1G
MAC Address Table	8K	8K	2K	2K	2K	2K	2K	2K	2K
Power Supply									
12-48VDC	-	-	-	√	√	√	√	√	√
100-240VAC/DC	-	-	-	√	√	√	√	√	√
45-55VDC	√	√	√	-	-	-	-	-	-
Environmental Limits									
Operating Temperature	-40-80°C	-40-80°C	-40-75°C	-40-75°C	-40-75°C	-40-75°C	-40-75°C	-40-75°C	-40-75°C
DIN-Rail mounting	√	√	√	√	√	√	√	√	√
Certification									
CE, FCC, RoHS	√	√	√	√	√	√	√	√	√

INDUSTRIAL WIRELESS NETWORKING

WIRELESS AP

WIRELESS AP PCB BOARD

WIRELESS ROAMING CLIENT

CELLULAR NETWORK ROUTER



Wireless AP







	IAP3600S-2225-2GT	IAP3300L-2E-4GT1GP	IAP2300-2N2-5T
Interface			
10/100/1000Base-T(X) LAN/WAN RJ45	1	1	-
10/100/1000Base-T(X) LAN RJ45	1	4	-
10/100Base-T(X) WAN RJ45	-	-	1(LAN/WAN)
10/100Base-T(X) LAN RJ45	-	-	4
5G Wi-Fi Antenna Interface	2	-	-
2.4G Wi-Fi Antenna Interface	2	-	2
2.4G/5G Wi-Fi Antenna Interface	-	2	-
WLAN Feature			
WLAN Standard	IEEE 802.11 a/b/g/n/ac/ax	IEEE 802.11 a/b/g/n/ac/ax	IEEE 802.11 a/b/g/n
Radio Frequency	802.11b/g/n/ax: 2.412GHz~2.4835GHz 802.11a/n/ac/ax: 5.18GHz~5.825GHz	802.11b/g/n/ax: 2.412GHz~2.4835GHz 802.11a/n/ac/ax: 5.18GHz~5.825GHz	802.11 b/g/n: 2.412GHz~2.4835GHz
RF Power	20dBm	20dBm	23dBm
Encryption Type	WPA/WPA2/WPA3/RADIUS	WPA/WPA2/WPA3/RADIUS	WPA/WPA2/WPA3/RADIUS
Management			
Operating Mode	Router, AP, Bridge, Client	Router, AP, Bridge, Client	Router, AP, Bridge, Client
Web (HTTP/HTTPS)	√	√	√
SSH	√	√	√
SNMPv1/v2c, SNMP Trap	√	√	√
AC Management	√	√	√
Wireless User white list	√	√	√
Wireless User Black list	√	√	√
IP filtering	√	√	√
MAC filtering	√	√	√
URL filtering	√	√	√
Port Forwarding	√	√	√
Port Redirection	√	√	√
QoS (Traffic Shaping)	√	√	√
Syslog	√	√	√
NTP Client	√	√	√
Power Supply			
48VDC PoE Input	√	√	√
12~36VDC	-	-	√
12~48VDC	√	√	-
Environmental Limit			
Operating Temperature	-40~75°C	-40~55°C	-40~75°C
Storage Temperature	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
IP Rating	IP68	IP40	IP30
Installation	Wall/Pole mounting	DIN-Rail or wall mounting	DIN-Rail mounting
Dimension(W*H*D)	275mm×245mm×76mm	53mm×138mm×110mm	53mmx138mmx110mm
Certification			
CE, FCC, RoHS	√	√	√

Wireless AP PCB Board



IAP3600EXI-2225-2GS4GT-SMA



IAP3500-2E-1GT1GS



IAP2300F-2N2-5T

	IAP3600EXI-2225-2GS4GT-SMA	IAP3500-2E-1GT1GS	IAP2300F-2N2-5T
Interface			
10/100/1000Base-T(X) LAN/WAN SFP	2	1	-
10/100/1000Base-T(X) LAN RJ45	4	1	-
10/100Base-T(X) WAN RJ45	-	-	1(LAN/WAN)
10/100Base-T(X) LAN RJ45	-	-	4
5G Wi-Fi Antenna Interface	2	-	-
2.4G Wi-Fi Antenna Interface	2	-	2
2.4G/5G Wi-Fi Antenna Interface	-	2	-
WLAN Feature			
WLAN Standard	IEEE 802.11 a/b/g/n/ac/ax	IEEE 802.11 a/b/g/n/ac/ax	IEEE 802.11 a/b/g/n
Radio Frequency	802.11b/g/n/ax: 2.412GHz~2.4835GHz 802.11a/n/ac/ax: 5.18GHz~5.825GHz	802.11b/g/n/ax: 2.412GHz~2.4835GHz 802.11a/n/ac/ax: 5.18GHz~5.825GHz	802.11 b/g/n: 2.412GHz~2.4835GHz
RF Power	20dBm	20dBm	23dBm
Encryption Type	WPA/WPA2/WPA3/RADIUS	WPA/WPA2/WPA3/RADIUS	WPA/WPA2/WPA3/RADIUS
Management			
Operating Mode	Router, AP, Bridge, Client	Router, AP, Bridge, Client	Router, AP, Bridge, Client
Web (HTTP/HTTPS)	√	√	√
SSH	√	√	√
SNMPv1/v2c, SNMP Trap	√	√	√
AC Management	√	√	√
Wireless User white list	√	√	√
Wireless User Black list	√	√	√
IP filtering	√	√	√
MAC filtering	√	√	√
URL filtering	√	√	√
Port Forwarding	√	√	√
Port Redirection	√	√	√
QoS (Traffic Shaping)	√	√	√
Syslog	√	√	√
NTP Client	√	√	√
Power Supply			
9~24VDC	-	√	-
12~36VDC	-	-	√
12~48VDC	√	-	-
Environmental Limit			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
Storage Temperature	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
IP Rating	/	/	/
Installation	Embedded mounting	Embedded mounting	Embedded mounting
Dimension(W*H*D)	180mm×15.1mm×145mm	85mm×14.7mm×138mm	130mm×14.6mm×90mm
Certification			
CE, FCC, RoHS	√	√	√

Wireless Roaming Client



IAP2300C 2E-2T-1D



IAP2300C 2E2E-2T-1D



IAP2300C 2E-5T-1D



IAP2300C 2E2E-5T-1D



IAP2200PRO 2525-5GT-1D

	IAP2300C 2E-2T-1D	IAP2300C 2E2E-2T-1D	IAP2300C 2E-5T-1D	IAP2300C 2E2E-5T-1D	IAP2200PRO 2525-5GT-1D
Interface					
10/100/1000Base-T(X) LAN RJ45	-	-	-	-	5
10/100Base-T(X) WAN RJ45	1 (WAN/LAN)	1 (WAN/LAN)	1(LAN/WAN)	1(LAN/WAN)	-
10/100Base-T(X) LAN RJ45	1	1	4	4	-
5G Wi-Fi Antenna Interface	-	-	-	-	4
2.4G/5G Wi-Fi Antenna Interface	2	4	2	4	-
RS-232/422/485	1	1	-	-	-
RS-232/485	-	-	1	1	-
RS-485	-	-	-	-	1
Serial Interface Feature					
Baud Rate	300bps~115200bps	300bps~115200bps	300bps~115200bps	300bps~115200bps	9600/115200 bps
Data Bit	8	8	8	8	8
Parity Bit	None, Even, Odd	None, Even, Odd	None, Even, Odd	None, Even, Odd	-
Stop Bit	1	1	1	1	-
Interface Form	Terminal Block	Terminal Block	Terminal Block	Terminal Block	Terminal Block
WLAN Feature					
WLAN Standard	IEEE 802.11a/b/g/n				IEEE 802.11 a/b/g/n/ac
Radio Frequency	802.11B/g/n: 2.412GHz~2.4835GHz 802.11a/n: 5.18GHz~5.825GHz				802.11 a/b/g/n/ac: 4.920GHz~6.060GHz
RF Power	20dBm				27dBm
Encryption Type	WPA/WPA2/WPA3/RADIUS				WPA/WPA2
Fast Roaming	√	-	√	-	-
Seamless Roaming	-	√	-	√	√
Management					
Operating Mode	Router, AP, Bridge, Client	Router, AP, Bridge, Client, Dual-link	Router, AP, Bridge, Client	Router, AP, Bridge, Client, Dual-link	Bridge, Client
Web (HTTP/HTTPS), SSH	√	√	√	√	√
SNMPv1/v2c, SNMP Trap	√	√	√	√	-
AC Management	√	√	√	√	-
Serial Device Server	RealCom Mode, TCP Server Mode, TCP Client Mode, UDP Server Mode, UDP Client operating mode				TCP Server Mode, TCP Client Mode, UDP operating mode
Modbus Conversion	RTU Master, RTU Slave, ASCII Master, ASCII Slave operating mode				RTU Slave mode
Wireless User Black/white list	√	√	√	√	-
IP/MAC/URL filtering	√	√	√	√	-
Syslog	√	√	√	√	√
NTP Client	√	√	√	√	-
Power Supply					
Dual Power Supply	-	-	√	√	-
12~36VDC	√	√	√	√	-
12~48VDC	-	-	-	-	√
Environmental Limit					
Operating Temperature	-40~75°C				-20~55 °C
Storage Temperature	-40~85°C				-40~85 °C
Relative Humidity	5% ~ 95% (no condensation)				5% ~ 95% (no condensation)
IP Rating	IP30				IP41
Installation	DIN-Rail or wall mounting				DIN-Rail or wall mounting
Dimension(W*H*D)	26mm×114mm×77mm		30mm×124mm×96mm		90mm×32mm×140mm
Certification					
CE, FCC, RoHS	√	√	√	√	√

Cellular Network Router





	ICPE2600A-BW-8A25-2GT	ICPE2300-2A-1GC3GT-2C4D4IO-2225
Interface		
1G Combo (LAN/WAN)	-	1
10/100/1000Base-T(X) WAN RJ45	1	-
10/100/1000Base-T(X) LAN RJ45	1	3
5G NR Cellular Interface	4	4
5G Wi-Fi Antenna Interface	2	2
2.4G Wi-Fi Antenna Interface	2	2
SIM Card Slot	1 (Micro-SIM & Nano-SIM)	1 (Micro-SIM & Nano-SIM)
Serial Interface	-	2*RS-232, 2*RS-422/485
CAN	-	2
DI	-	4
DO	-	4
Cellular Network		
Service Type	5G NR/LTE FDD/ LTE TDD/ WCDMA/ TD-SCDMA/ CDMA/ EVDO	
5G Band	5G NR: n1/n2/n3/n5/n7/n8/n12/n20/n28/n38/n40/n41/n48/n66/n71/n77/n78/n79	
Service Type	4G LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B9/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 4G LTE-TDD: B34/B38/39/B40/B41/B42/B48	
3G Band	3G WCDMA: B1/B2/B3/B4/B5/B6/B8/B19	
WLAN Feature		
WLAN Standard	IEEE 802.11b/g/n/a/ac	IEEE 802.11b/g/n/a/ac
Radio Frequency	802.11B/g/n: 2.412GHz~2.4835GHz 802.11Ac/n/a: 5.18GHz~5.825GHz	802.11B/g/n: 2.412GHz~2.4835GHz 802.11Ac/n/a: 5.18GHz~5.825GHz
RF Power	20dBm	20dBm
Encryption Type	WPA1/WPA2/WPA3	WPA/WPA2/WPA3
Operating Mode	Router mode	Router mode
VPN Tunnel		
GRE	√	√
PPTP Server/Client	√	√
L2TP Server/Client	√	√
IPSec	√	√
Management		
Web (HTTP/HTTPS), SSH	√	√
Wireless User Black/white list	√	√
IP/MAC/URL filtering	√	√
Port Forwarding/Redirection	√	√
Syslog	√	√
NTP Client	√	√
Power Supply		
Dual Power Supply	-	√
48VDC PoE Input	√	√
12~48VDC	√	√
Environmental Limit		
Operating Temperature	-40~75°C	-40~75°C
Storage Temperature	-40~85°C	-40~85°C
Relative Humidity	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
IP Rating	IP68	IP40
Installation	Wall/Pole mounting	DIN-Rail mounting
Dimension(W*H*D)	275mm×76mm×245mm	88mm×150mm×135mm
Certification		
CE, FCC, RoHS	√	√





	IRT5300-AW-5T2D	IRT5300L-5T2D
Interface		
10/100/1000Base-T(X) or 1000M SFP WAN	-	-
10/100/1000Base-T(X) WAN RJ45	-	-
10/100/1000Base-T(X) LAN RJ45	-	-
10/100Base-T(X) WAN RJ45	1(LAN/WAN)	1(LAN/WAN)
10/100Base-T(X) LAN RJ45	4	4
5G NR Cellular Interface	-	-
4G LTE Cellular Interface	2	2
5G Wi-Fi Antenna Interface	-	-
2.4G Wi-Fi Antenna Interface	2	2
SIM Card Slot	2 (Micro-SIM)	1 (Micro-SIM & Nano-SIM)
Serial Interface	2*RS-232/485	1*RS-232/422/485
Cellular Network		
Service Type	LTE FDD/ LTE TDD/ WCDMA/ TD-SCDMA/ CDMA/ EVDO	
LTE Band	TDD-LTE: B38/39/40/41 FDD-LTE: B1/3/5/7/8/20	TDD-LTE: B34/38/39/40/41 FDD-LTE: B1/2//3/4/5/7/8/12/13/18/19/20/25/26/28/66
3G Band	WCDMA: Band1/5/8, TD-SCDMA: B34/39	B1/2/4/5/6/8/19
GSM	B3/8	B2/3/5/8
WLAN Feature		
WLAN Standard	IEEE 802.11b/g/n	IEEE 802.11b/g/n
Radio Frequency	802.11b/g/n: 2.412GHz~2.4835GHz	802.11b/g/n: 2.412GHz~2.4835GHz
RF Power	23dBm	20dBm
Encryption Type	WPA1/WPA2/WPA3	WPA1/WPA2/WPA3
Operating Mode	Router mode	Router mode
VPN Tunnel		
GRE	√	√
PPTP Server/Client	√	√
L2TP Server/Client	√	√
IPSec	√	√
OpenVPN Client	-	√
Management		
Web (HTTP/HTTPS), SSH	√	√
Wireless User Black/white list	√	√
IP/MAC/URL filtering	√	√
Port Forwarding/Redirection	√	√
Syslog	√	√
NTP Client	√	√
Power Supply		
Dual Power Supply	√	√
12~36VDC	√	√
Environmental Limit		
Operating Temperature	-40~75°C	-40~75°C
Storage Temperature	-40~75°C	-40~85°C
Relative Humidity	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
IP Rating	IP30	IP40
Installation	DIN-Rail mounting	DIN-Rail mounting
Dimension(W*H*D)	53mmx138mmx110 mm	40.6mmx103mmx78 mm
Certification		
CE, FCC, RoHS	√	√

INDUSTRIAL DEVICE NETWORKING

SECURE SERIAL DEVICE SERVER
SERIAL DEVICE SERVER
MODBUS GATEWAY
EDGE COMPUTING GATEWAY
CAN SERVER

FILEDBUS-TO-FIBER MODEM
SERIAL-TO-FIBER MODEM
USB-TO-SERIAL CONVERTER
INTERFACE CONVERTER/HUB/REPEATER



Secure Serial Device Server






	NP5000 SERIES (RS-485)	NP5000 SERIES (3IN1)	NP5100 SERIES (3IN1)	NP5200 SERIES (3IN1)
Serial Interface				
Quantity	4/8	1/2/4/8	8/16/32	1/2/4
RS-232	-	√	√	√
RS-422	-	√	√	√
RS-485	√	√	√	√
Baud Rate	110bps~115200bps (customizable 110bps~921600bps)		110bps~921600bps	110bps~115200bps
Data Bit	5, 6, 7, 8		5, 6, 7, 8	5, 6, 7, 8
Parity Bit	None, Even, Odd, Space, Mark		None, Even, Odd, Space, Mark	None, Even, Odd, Space, Mark
Stop Bit	1, 1.5, 2		1, 1.5, 2	1, 1.5, 2
Serial Interface Form	Terminal Block	DB9 Male, 8-pin RJ45	8-pin RJ45	DB9 Male
Ethernet Interface				
10/100Base-T(X) RJ45	2	1/2	2	2
Dual IPs & MACs	√	√	√	√
Single IP	√	√	√	√
Management				
OLED Display	-	-	√	-
Web (HTTP/HTTPS), Telnet, SSH, Console	√	√	√	√
SNMPv1/v2c/v3	√	√	√	√
SMTP Alarm	√	√	√	√
NTP Client	√	√	√	√
Operating Mode	RealCom, Reverse RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast, Telnet, Reverse Telnet, RFC2217, Redundant COM, DRDAS RealCom and DRDAS TCP Server			
Encrypted Socket Tansmission	√	√	√	√
Power Supply				
Dual Power Supply	-	-	√	√
9~48VDC	-	-	-	-
12~48VDC	√	√	-	√
85~265VAC	-	-	√	-
Environmental Limit				
Operating Temperature	-40~75°C		-40~75°C	-40~75°C
Storage Temperature	-40~85°C		-40~85°C	-40~85°C
Relative Humidity	5% ~ 95% (no condensation)		5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
Installation	Desktop/wall mounting		Rack mounting	DIN-Rail mounting
Dimension(W*H*D)	1/2-port model: 97mm×25mm×110mm 4/8-port model: 170mm×30mm×110mm		440mm×44mm×265.6mm	1/2-port model: 33mm×138mm×110mm 4-port model: 53mm×138mm×110mm
Certification				
CE, FCC, RoHS	√	√	√	√
UL 62368-1	√	√	√	√
UL 61010-1	-	-	√	-
IEC 62443	-	-	√	-

Modbus Gateway













	GW1101-1D(RS-485)	GW1101-1DI(3IN1)	GW1102-2D(RS-485)	GW1102-2DI(3IN1)	GW1114-4DI(RS-485)	GW1114-4DI(3IN1)	GW1118-8DI(RS-485)	GW1118-8DI(3IN1)	IGW1111-1DI(3IN1)	IGW1112-2DI(3IN1)	IGW1114-4DI(3IN1)
Serial Interface											
Quantity	1	1	2	2	4	4	8	8	1	2	4
RS-232	-	√	-	√	-	√	-	√	√	√	√
RS-422	√	√	√	√	-	√	-	√	√	√	√
RS-485	√	√	√	√	√	√	√	√	√	√	√
Baud Rate	110bps~115200bps				110bps~115200bps				110bps~115200bps		
Data Bit	7, 8				7, 8				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		
Serial Interface Form	Terminal Block	DB9	Terminal Block	DB9	Terminal Block	8-pin RJ45	Terminal Block	8-pin RJ45	DB9 Male	DB9 Male	DB9 Male
Ethernet Interface											
10/100Base-T(X) RJ45	1	1	1	1	2	2	2	2	2	2	2
Dual IPs & MACs	-	-	-	-	√	√	√	√	√	√	√
Single IP	√	√	√	√	√	√	√	√	√	√	√
Management											
Web (HTTP/HTTPS), Telnet, SSH	√	√	√	√	√	√	√	√	√	√	√
Console	-	-	-	-	√	√	√	√	√	√	√
Operating Mode	RTU Master, RTU Slave, ASCII Master and ASCII Slave				RTU Master, RTU Slave, ASCII Master and ASCII Slave				RTU Master, RTU Slave, ASCII Master and ASCII Slave		
Power Supply											
Dual Power Supply	-	-	-	-	-	-	-	-	√	√	√
12~48VDC	√	√	√	√	√	√	√	√	√	√	√
Environmental Limits											
Operating Temperature	-40~75°C				-40~75°C				-40~75°C		
Installation	Wall Mounting				Desktop/wall Mounting				DIN-Rail mounting		
Certification											
CE, FCC, RoHS	√	√	√	√	√	√	√	√	√	√	√
UL 62368-1	√	√	√	√	√	√	√	√	√	√	√

Serial Device Server











	NP301	NP302T-2D(RS-232)	NP302T-2DI(RS-485)	NP314T-4DI(RS-485)	NP314T-4D(3IN1)	NP318T-8DI(RS-485)	NP318T-8D(3IN1)	NP3116T-16DI(RS-485)	NP3116T-16D(3IN1)
Serial Interface									
Quantity	1	2	2	4	4	8	8	16	16
RS-232	√	√	-	-	√	-	√	-	√
RS-422	√	-	√	-	√	-	√	-	√
RS-485	√	-	√	√	√	√	√	√	√
Baud Rate	300bps~115200bps			110bps~115200bps					
Data Bit	5, 6, 7, 8			5, 6, 7, 8					
Parity Bit	None, Even, Odd, Space, Mark			None, Even, Odd, Space, Mark					
Stop Bit	1, 2			1, 1.5, 2					
Serial Interface Form	Terminal Block, DB9 Male	8-pin RJ45	8-pin RJ45	Terminal Block	8-pin RJ45	Terminal Block	8-pin RJ45	Terminal Block	8-pin RJ45
Ethernet Interface									
10/100Base-T(X) RJ45	1	1	1	2	2	2	2	2	2
Dual IPs & MACs	-	-	-	√	√	√	√	√	√
Single IP	√	√	√	√	√	√	√	√	√
Management									
Web (HTTP), Telnet, SSH	√ (No SSH)		√	√	√	√	√	√	√
Operating Mode	RealCom, TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang, UDP Multicast								
Power Supply									
Dual Power Supply	-	-	-	-	-	-	-	√	√
9~48VDC	√	√	√	-	-	-	-	-	-
12~48VDC	-	-	-	√	√	√	√	-	-
85~265VAC	-	-	-	-	-	-	-	√	√
Environmental Limit									
Operating Temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C
Wall/DIN-Rail Mounting	√	√	√	-	-	-	-	-	-
Desktop/wall mounting	-	-	-	√	√	√	√	-	-
Rack Mounting	-	-	-	-	-	-	-	√	√
Certification									
CE, FCC, RoHS	√	√	√	√	√	√	√	√	√
UL 62368-1	√	√	√	√	√	√	√	√	√

Edge Computing Gateway







	TCU2000-U00	TCU1200-U02	TCU1200-U01
System			
Processor	ARM quad-core CPU 1.2GHz	ARM quad-core CPU 1.2GHz	ARM quad-core CPU 1.2GHz
OS	Ubuntu 20.04.4 LTS (GNU/Linux 5.4.128 armv7l)		
Memory	2GB DDR3	2GB DDR3	2GB DDR3
Storage	16Gb (8GB, 32GB optional)	8Gb (16GB, 32GB optional)	8Gb (16GB, 32GB optional)
AI Module	-	Computing power IPU 2TOPS (optional)	Computing power IPU 2TOPS (optional)
Management			
Secondary Development	√	√	√
Interface			
1000Base-X SFP Slot	4	-	2
10/100/1000Base-T(X) RJ45	8	4	-
10/100Base-T(X) RJ45	-	-	8
RS-232	2	2	1
RS-485	4	4	4
CAN	-	1	1
DI	4	3	-
DO	4	3	-
HDMI	1	-	-
USB	1	1	1
Serial Feature			
RS-232 Signal (TxD, RxD, GND)	√	√	√
RS-485 Signal (D+, D-, GND)	√	√	√
Baud Rate	300bps~921600bps	300bps~921600bps	300bps~921600bps
Data Bit	5, 6, 7, 8	5, 6, 7, 8	5, 6, 7, 8
Parity Bit	None, Even, Odd, Space, Mark	None, Even, Odd, Space, Mark	None, Even, Odd, Space, Mark
Stop Bit	1, 2	1, 2	1, 2
LTE Feature			
Network Type	-	-	-
TDD-LTE Frequency Band	-	-	-
FDD-LTE Frequency Band	-	-	-
TD-SCDMA Frequency Band	-	-	-
WCDMA Frequency Band	-	-	-
CDMA Frequency Band	-	-	-
GSM/EDGE Frequency Band	-	-	-
Power Supply			
Dual Power Supply	√	√	√
12~48VDC	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
Storage Temperature	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
Installation	DIN-Rail or wall mounting	DIN-Rail or wall mounting	DIN-Rail or wall mounting
Dimension(W*H*D)	70mm×160mm×130mm	53mm×138mm×110mm	53mm×138mm×110mm
Certification			
CE, FCC, RoHS	√	√	√







	TCU1200-U00	RCU1200	RCU100
System			
Processor	ARM quad-core CPU 1.2GHz	ARM quad-core CPU 1.2GHz	ARM quad-core CPU 300MHz
OS	Ubuntu 20.04.4 LTS (GNU/Linux 5.4.128 armv7l)		
Memory	2GB DDR3	1GB DDR3 (2GB optional)	128MB
Storage	8Gb (16GB, 32GB optional)	8Gb (16GB optional)	250MB
AI Module	Computing power IPU 2TOPS (optional)	-	-
Management			
Secondary Development	√	-	-
Interface			
1000Base-X SFP Slot	-	-	-
10/100/1000Base-T(X) RJ45	2	-	-
10/100Base-T(X) RJ45	-	2	2
RS-232	1	1	2
RS-485	1	4	2
DI	1	-	-
DO	1	-	-
USB	1	1	1
SIM Card Slot	1	1	1
LTE Cellular Interface	1	1	2
Serial Feature			
RS-232 Signal (TxD, RxD, GND)	√	√	DCD, RxD, TxD, DTR, GND, DSR, RTS, CTS
RS-485 Signal (D+, D-, GND)	√	√	TxD-(A), TxD+(B), RxD+(B), RxD-(A), GND
Baud Rate	300bps~921600bps	300bps~115200bps	300bps~115200bps
Data Bit	5, 6, 7, 8	5, 6, 7, 8	7, 8
Parity Bit	None, Even, Odd, Space, Mark	None, Even, Odd	None, Even, Odd, Space, Mark
Stop Bit	1, 2	1, 1.5, 2	1, 2
LTE Feature			
Network Type	LTE FDD/ LTE TDD/WCDMA/TD-SCDMA/CDMA/ GSM		
TDD-LTE Frequency Band	B34/38/39/40/41		
FDD-LTE Frequency Band	B1/3/5/8		
TD-SCDMA Frequency Band	B34/39		
WCDMA Frequency Band	B1/8		
CDMA Frequency Band	Bc0		
GSM/EDGE Frequency Band	900/1800MHz		
Power Supply			
Dual Power Supply	-	-	-
12~48VDC	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
Storage Temperature	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
Installation	DIN-Rail mounting	DIN-Rail or wall mounting	DIN-Rail or wall mounting
Dimension(W*H*D)	35mm×85mm×110mm	33mm×138mm×110mm	138mm×33mm×110mm
Certification			
CE, FCC, RoHS	√	√	√

CAN Server





	CP202-2CI	ICP222-1T2F-2CI	CP300-W0-1T-2CI
CAN Interface			
Quantity	2	2	2
CAN 2.0A, CAN 2.0B Protocol	√	√	√
Standard Baud Rate	5kbps~1000kbps	5kbps~1000kbps	5kbps~1000kbps
Interface Form	Terminal Block	Terminal Block	Terminal Block
Ethernet Interface			
10/100Base-T(X) RJ45	1	1	1
100Base-X SC/FC/ST	-	2	-
Ring (SW-Ring)	-	√	-
WLAN Feature			
Wi-Fi4 (802.11b/g/n)	-	-	√
Operating Mode	-	-	AP, STA
Management			
Web (HTTP/HTTPS), Telnet/SSH	√	√	√
Operating Mode	TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang and UDP Multicast		
Power Supply			
12~48VDC	√	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-40~75°C	-40~75°C
Installation	Wall Mounting	DIN-Rail mounting	Wall Mounting
Certification			
CE, FCC, RoHS	√	√	√
UL 62368-1	√	√	√

Filedbus-to-fiber Modem





	MC201	IPB200	IPB201
Fieldbus Interface			
Quantity	1	1	1
CAN	√	-	-
Profibus	-	√	√
Interface Form	Terminal Block	DB9 Female	DB9 Female
Baud Rate	2.5kbps~1000kbps	9600bps~12Mbps	9600bps~12Mbps
Fiber Optic			
Quantity	1	1	2
Interface Form	SC/FC/ST	SC/ST	SC/ST
Link Type	P2P	P2P	P2P, Ring
Power Supply			
5VDC	√	-	-
12~48VDC	-	-	-
18~32VDC	-	√	√
Environmental Limits			
Operating Temperature	-40~75°C	-20 °C~70 °C	-20 °C~70 °C
Installation	Wall Mounting	DIN-Rail mounting	DIN-Rail mounting
Certification			
CE, FCC, RoHS	√	/	/

Serial-to-fiber Modem





	MODEL277	MODEL277A	MODEL277B
Fieldbus Interface			
Quantity	1	1	1
RS-232	√	√	-
RS-422	√	-	√
RS-485	√	-	√
Serial Interface Form	Terminal Block	DB9 Female	Terminal Block
Baud Rate	300bps~115200bps	300bps~115200bps	300bps~115200bps
Fiber Optic			
Quantity	1	1	1
Interface Form	SC/FC/ST	SC/FC/ST	SC/FC/ST
Link Type	P2P	P2P	P2P
Power Supply			
5VDC	-	√	√
12~48VDC	√	-	-
-48VDC	-	√	√
220VAC	-	√	√
Fiber Optic			
Operating Temperature	-40~75°C	-10~60°C	-10~60°C
Installation	Wall or DIN-Rail Mounting	Wall or DIN-Rail Mounting	Wall or DIN-Rail Mounting
Certification			
CE, FCC, RoHS	√	√	√





	IMF204	IMF208	IMF2100
Fieldbus Interface			
Quantity	4	8	1
RS-232	-	-	√
RS-422	-	-	√
RS-485	√	√	√
Interface Form	Terminal Block	Terminal Block	Terminal Block
Baud Rate	0~115200bps	0~115200bps	300bps~115200bps
Fiber Optic			
Quantity	2	2	1/2
Interface Form	SC/FC/ST	SC/FC/ST	SC/FC/ST
Link Type	Ring	Ring	P2P or Ring
Power Supply			
12~48VDC	√	√	√
220VAC	√	-	√
Environmental Limits			
Operating Temperature	-10~70°C	-10~70°C	-40~75°C
Installation	Wall Mounting	Wall Mounting	DIN-Rail mounting
Certification			
CE, FCC, RoHS	√	√	√

USB-to-Serial Converter

	USB4232	USB4485	USB8232I	USB8485I
Serial Interface				
Conversion	USB to 4-port RS-232	USB to 4-port RS-422/485	USB to 8-port RS-232	USB to 8-port RS-422/485
RS-232	√	-	√	-
RS-422	-	√	-	√
RS-485	-	√	-	√
USB	√	√	√	√
Baud Rate	300bps~115200bps	300bps~230400bps	300bps~115200bps	300bps~115200bps
Interface Form	DB9 Male, USB	DB9 Male, USB	DB9 Male, USB	DB9 Male, USB
Surge Protection	1500W	1500W	-	-
Electrostatic Protection	15kV	15kV	15kV	15kV
Power Supply				
External Power Supply	5VDC	5VDC	9VDC	9VDC
Power over USB	√	√	-	-
Environmental Limits				
Operating Temperature	-20~60°C	-20~60°C	-40~75°C	-40~75°C
Storage Temperature	-40~85°C	-40~85°C	-40~85°C	-40~85°C
Relative Humidity	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)	5% ~ 95% (no condensation)
Installation	Desktop mounting	Desktop mounting	Desktop mounting	Desktop mounting
Dimension(W*H*D)	160mm×28mm×94mm	160mm×28mm×94mm	230mm×40mm×148mm	230mm×40mm×148mm
Certification				
CE, FCC, RoHS	√	√	√	√

Interface Converter/Hub/Repeater

	MODEL485P	SW485GI	SW4485I
Serial Interface			
Conversion	RS-232 to RS-422/485	RS-232 to RS-422/485, RS-485 Repeater	4-port RS-485 Hub
RS-232	√	√	√
RS-422	√	√	√
RS-485	√	√	√
Baud Rate	110bps~115200bps	300bps~115200bps	300bps~115200bps
Interface Form	DB9 Female, Terminal Block	DB9 Female, Terminal Block	Terminal Block
Surge Protection	1500W	1500W	-
Electrostatic Protection	15kV	15kV	15kV
Photoelectric Isolation	2500V	3000V	-
Power Supply			
9VDC	√	-	-
12~36VDC	-	√	-
12~48VDC	-	-	√
Environmental Limits			
Operating Temperature	-20~75°C	-10~75°C	-40~75°C
Storage Temperature	-25~85°C	-40~75°C	-40~85°C
Relative Humidity	5% ~ 95%(no condensation)	5% ~ 95%(no condensation)	5% ~ 95%(no condensation)
Installation	Wall Mounting	Wall Mounting	DIN-Rail mounting
Dimension(W*H*D)	62.4mm×22mm×93mm	69mm×22mm×100mm	35mm×110mm×95mm
Certification			
CE, FCC, RoHS	√	√	√

	SW485A	SW485C	SW485WA	MODEL232D/9
Serial Interface				
Conversion	RS-232 to RS-485	RS-232 to RS-422/485	RS-232 to RS-485	RS-232 Repeater
RS-232	√	√	√	√
RS-422	-	√	-	-
RS-485	√	√	√	-
Baud Rate	0~38400bps	0~115200bps	0~38400bps	300bps~115200bps
Interface Form		DB9 Female, Terminal Block		DB9 Female, DB9 Male
Surge Protection	600W	600W	600W	600W
Electrostatic Protection	15kV	15kV	15kV	15kV
Photoelectric Isolation	-	-	1500V	2500V
Power Supply				
Power over RS-232 (TXD, RTS, DTR)	√	√	√	√
Environmental Limits				
Operating Temperature		-40~80°C		-40~80°C
Storage Temperature		-40~85°C		-40~85°C
Relative Humidity		5% ~ 95%(no condensation)		
Dimension(W*H*D)	71mm×33mm×16.5mm	90mm×33mm×16.5mm	82mm×33mm×16.5mm	72mm×33mm×16.5mm
Certification				
CE, FCC, RoHS	√	√	√	√

	TLC422	TLC485
Serial Interface		
Conversion	RS-232 to RS-422	RS-232 to RS-485
RS-232	√	√
RS-422	√	-
RS-485	-	√
Baud Rate	0~115200bps	
Interface Form	DB9 Female, Terminal Block	
Surge Protection	-	
Electrostatic Protection	15kV	-
Photoelectric Isolation	-	15kV
Power Supply		
Power over RS-232 (TXD, RTS, DTR)	√	√
Environmental Limits		
Operating Temperature	-20~60°C	
Storage Temperature	-25~85°C	
Relative Humidity	5% ~ 95%(no condensation)	
Dimension(W*H*D)	90mm×33mm×16.5mm	
Certification		
CE, FCC, RoHS	√	√