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Layer 3 Rackmount Ethernet Switch - Modular Design

The Industrial Layer 3 switch is a hardened and modular design for the rigorous demands of critical and centralize applications. Featuring industrial grade reliability, network redundancy, strengthened security and easy management, it provides 28 ports total of Ethernet connectivity with combinations of (100/1000Base-X) SFP, GbE (10/100/1000BaseTX) RJ-45, Gigabit PoE modules, with 10GbE SFP+ slots for uplink ports.

Model Name	IXR-MG2404XS
Ethernet Interface	
Total Ports (Max)	28
SFP 1G/10G Base-X	4
Modular Slot	3
Power, Alarm Relay	
Redundant Power Input for Device	48VDC or 110/220VAC
Redundant Power Input for PoE	48VDC
Relay Alarm	V
Physical	
Housing	Metal, IP30
Dimension (D x W x H) (mm)	340 x 440 x 44
19" 1U Rackmount	V
Certification	
Safety	EN62368-1
Railway	EN50121-4
CE / FCC	V
Shock / Freefall / Vibration	V
Operating Temperature	
	-40 ~ 70℃





Module Name	IRM-8GT	IRM-8GP	IRM-8GS	IRM-4GT-SEC	IRM-4GS-SEC
Interface	8x RJ45	8x RJ45	8x SFP	4x RJ45	4x SFP
Speed	10/100/1000Base-T	10/100/1000Base-T	100/1000Base-X	10/100/1000Base-T	100/1000Base-X
PoE port (af/at)		8			
IEEE802.1AE MacSec				V	V

Layer 3 Rackmount Ethernet Switch - 10G Ethernet

Industrial Layer 3 switches adopt an enhanced and hardened design to meet critical and centralized requirements in Smart City, surveillance, Intelligent traffic control systems (ITS) and production automation applications. IXR series with four 10G SFP+ slots, IGR series provide full Gigabit capability, with high performance, and the ability to quickly transfer large amounts of video, voice, and data across a network. They support ERPS ring, RSTP/STP and u-Ring redundancy protocols, support a wide operating temperature range, feature fan-less design and support Layer 3 routing functionality to facilitate the deployment of applications across networks, making them ideal for large-scale industrial network backbones.

PoE




Model Name	IXR-G24044X-24PH	IXR-GS24044X	IXR-G24044X	IXR-G4804X
Ethernet Interface				
Total Ports	32	32	32	52
RJ45 10/100/1000 Base-T	24	4	24	48
SFP 100/1G Base-X	4	24	4	
SFP 1G/2.5G/10G Base-X	4	4	4	4
PoE				
PoE Port (IEEE 802.3 af/at)	24			
PoE Power Budget	400W			
Power & Alarm Relay				
Redundant Power Input	48VDC	24/48/-48 VDC or 110/220VAC	24/48/-48 VDC or 110/220VAC	24/48/-48VDC or 110/220VAC
Alarm Relay	V	V	V	V
Physical				
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	280 x 440 x 44	280 x 440 x 44	280 x 440 x 44	280 x 440 x 44
19" 1U Rackmount	V	V	V	V
Certification				
Safety	EN62368-1	EN62368-1	EN62368-1	EN62368-1
EN50121-4	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
	-40 ~ 60°C			

Layer 3 Rackmount Ethernet Switch - Gigabit Ethernet

PoE




Model Name	IGR-2408SM-24PH	IGR-S2804GTM	IGR-2408SM	IGR-4804SM
Ethernet Interface				
Total Ports	32	32	32	52
RJ45 10/100/1000 Base-T	24	4	24	48
SFP 100/1G Base-X	8	28	8	
SFP 1G Base-X				4
PoE				
PoE Port (IEEE 802.3 af/at)	24			
PoE Power Budget	400W			
Power & Alarm Relay				
Redundant Power Input	48VDC	24/48/-48 VDC or 110/220VAC	24/48/-48 VDC or 110/220VAC	24/48/-48 VDC or 110/220VAC
Alarm Relay	V	V	V	V
Physical				
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	280 x 440 x 44	280 x 440 x 44	280 x 440 x 44	280 x 440 x 44
19" 1U Rackmount	V	V	V	V
Certification				
Safety	EN62368-1	EN62368-1	EN62368-1	EN62368-1
EN50121-4	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
-10 ~ 60°C	V	V	V	V
-40 ~ 70°C				V
-40 ~ 75°C	V	V	V	

02

Layer 3 Din-Rail Ethernet Switch

Industrial grade Layer 3 DIN-RAIL type switches are suitable for critical networks and are designed for harsh environmental and operating conditions, such as hot and cold temperatures, heavy shock and vibration, and requirements for high EMC protection levels. 16 Gigabit Ethernet UTP ports and 4 10G SFP+ slots, with high performance, can transmit large amounts of video, voice and data through the network. Fanless design supports RIP and OSPF layer 3 routing functions, which is convenient deploying applications is an ideal choice for large-scale industrial network backbones.

PoE

Model Name	IGR-1604XSM-16PH	IGR-1604XSM
Ethernet Interface		
Total Ports	20	20
RJ45 10/100/1000 Base-T	16	16
SFP 100/1G/2.5G/5G/10G Base-X	4	4
PoE		
PoE Port (IEEE802.3af/at)	16	
PoE Power Budget	300W	
Power, Alarm Relay & IO		
Redundant Power Input	48VDC	12/24/48VDC
Alarm Relay	V	V
Digital Input	1	1
Physical		
Housing	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	155.6 x 77 x 160	155.6 x 77 x 160
Din Rail Kit	V	V
Wall Mount Kit	Optional	Optional
Certification		
Safety	EN62368-1	EN62368-1
EN50121-4	V	V
EN61000-6-2 / EN61000-6-4	V	V
CE / FCC	V	V
Shock / Freefall / Vibration	V	V
Operating Temperature		
	-40 ~ 60℃	

Layer 2 Rackmount Ethernet Switch - 10G Uplink

Industrial grade Layer 2 switches are deployed for critical networks, CTC offers a range of rackmount-type products that designed for use in harsh environment and operating conditions, such as high and cold temperature, heavy shock and vibration, and high protection level of EMC required. Various port type combinations of Gigabit Ethernet UTP/SFP ports and 10G SFP+ slots can adapt to different application scenarios.



Model Name	ICS-G24044X-24PH-AA	ICS-G24044X-24PH	ICS-GS24044X	ICS-G24044X	ICS-G4804X
Ethernet Interface					
Total Ports	32	32	32	32	52
RJ45 10/100/1000 Base-T	24	24	4	24	48
SFP 100/1G Base-X	4	4	24	4	
SFP 1G/2.5/5G/10G Base-X	4	4	4	4	4
PoE					
PoE Port (IEEE 802.3 af/at)	24	24			
PoE Power Budget	150W	400W			
Power & Alarm Relay					
Redundant Power Input	110/240VAC	48VDC	24/48/-48 VDC or 110/220VAC	24/48/-48 VDC or 110/220VAC	24/48/-48 VDC or 110/220VAC
Alarm Relay	V	V	V	V	V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	330 x 440 x 44	280 x 440 x 44	280 x 440 x 44	280 x 440 x 44	280 x 440 x 44
19" 1U Rackmount	V	V	V	V	V
Certification					
Safety	EN62368-1	EN62368-1	EN62368-1	EN62368-1	EN62368-1
EN50121-4		V	V	V	V
EN61000-6-2 / EN61000-6-4		V	V	V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
	-40 ~ 60°C				

Layer 2 Rackmount Switch - Gigabit Ethernet

The Layer 2 series of rack-mounted switches, which are specially designed for use in harsh environments and operating conditions, such as high temperature, shock, vibration or EMC. The IGS rack-mount series provides a maximum of 52 Gigabit Ethernet ports, and can choose between 48/24 Gigabit UTP or 28 SFP slot models according to different application scenarios. Customers can build wide bandwidth and diversified network architectures with switches that provide advanced functions for most network requirements, including IEEE1588, IPv6, SSL/SSH, IGMP/MLD, DHCP, etc. Each model also supports advanced ITU G.8032 and proprietary u-Ring for redundancy.

Model Name	IGS-2408SM-24PH-AA	IGS-2408SM-24PH	IGS-2408SM	IGS-S2804GTM	IGS-4804SM
Ethernet Interface					
Total Ports	32	32	32	32	52
RJ45 10/100/1000 Base-T	24	24	24	4	48
SFP 100/1G Base-X	8	8	8	28	
SFP 1G Base-X					4
PoE					
PoE Port (IEEE 802.3 af/at)	24	24			
PoE Power Budget	150W	400W			
Power & Alarm Relay					
Redundant Power Input	110/240VAC	48VDC	24/48/-48 VDC or 110/220VAC	24/48/-48 VDC or 110/220VAC	24/48/-48 VDC or 110/220VAC
Alarm Relay	V	V	V	V	V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	330 x 440 x 44	280 x 440 x 44	280 x 440 x 44	280 x 440 x 44	280 x 440 x 44
19" 1U Rackmount	V	V	V	V	V
Certification					
Safety	EN62368-1	EN62368-1	EN62368-1	EN62368-1	EN62368-1
EN50121-4		V	V	V	V
EN61000-6-2 / EN61000-6-4		V	V	V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-10 ~ 60°C		V	V	V	V
-40 ~ 60°C	V				
-40 ~ 70°C					V
-40 ~ 75°C		V	V	V	

EN50155 Managed PoE Switch

The IP40/IP54/IP67 switches can be installed in a variety of different application scenarios, even under difficult conditions of covering the full range of video surveillance and automation, such as border security, locomotive and vehicle. ITP-PH family offers switches with 8 to 32 Ethernet ports where 8,12,16,20 support IEEE802.3at PoE power injecting. The switches offer advanced functions, including IEEE1588, IPv6, SSL/SSH, IGMP/MLD, DHCP, TTDP, port bypass function, etc.




Model Name	ITP-G802SM-8PH24	ITP-G802TM-8PH24	ITP-802GSM-8PH24	ITP-802GTM-8PH24
Ethernet Interface				
Total Ports	10	10	10	10
10/100 Base-TX M12			8	8
10/100/1000 Base-T M12	8	10		2
100/1000 Base-X SFP	2		2	
PoE				
PoE Port (IEEE802.3af/at)	8	8	8	8
PoE Power Budget	180W	180W	180W	180W
Power & Alarm Relay				
Redundant Power Input	24/48VDC	24/48VDC	24/48VDC	24/48VDC
Alarm Relay	V	V	V	V
Physical				
Housing	Metal, IP67	Metal, IP67	Metal, IP67	Metal, IP67
Dimension (D x W x H) (mm)	69 x 240 x 168	69 x 240 x 168	69 x 240 x 168	69 x 240 x 168
Wall Mount	V	V	V	V
Din-Rail kit	Optional	Optional	Optional	Optional
Certification				
EN50155	V	V	V	V
EN50121-4	V	V	V	V
IEC 61373	V	V	V	V
EN45545-2	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
	-40 ~ 75°C			

EN50155 Managed PoE Switch

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NEW

Model Name	ITP-12164XTM-12PH	ITP-1204GTM-12PH	ITP-2204GTM-16PH
Ethernet Interface			
Total Ports	32	16	26
10/100 Base-TX M12	12	12	22
10/100/1000 Base-T M12	16	4	4
10G Base-T M12	4		
PoE			
PoE Port (IEEE802.3af/at)	20	12	16
PoE Power Budget	80W	120W	120W
Power & Alarm Relay			
Redundant Power Input	24/48/72/96/110VDC	24/48/72/96/110VDC	24/48/72/96/110VDC
Alarm Relay	V	V	V
Physical			
Housing	Metal, IP40	Metal, IP54	Metal, IP54
Dimension (D x W x H) (mm)	128 x 418 x 205	113 x 260 x 132	113 x 360 x 132
Wall Mount	V	V	V
Certification			
EN50155	V	V	V
EN50121-4	V	V	V
IEC 61373	V	V	V
EN45545-2	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V
CE / FCC	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
-40 ~ 60°C	V		
-40 ~ 75°C		V	V

EN50155 Unmanaged PoE Switch

Model Name	ITP-802GT-8PH24	ITP-800A-8PH24	ITP-800-8PH24
Ethernet Interface			
Total Ports	10	8	8
10/100 Base-TX M12	8	8	8
10/100/1000 Base-T M12	2		
PoE			
PoE Port (IEEE802.3af/at)	8	8	8
PoE Power Budget	120W	120W	120W
Power			
Redundant Power Input	24/48VDC	24/48VDC	24/48VDC
Physical			
Housing	Mental, IP40	Metal, IP40	Plastic, IP56
Dimension (D x W x H) (mm)	64 x 71.5 x 219	64 x 71.5 x 219	67 x 71.4 x 219.5
Wall Mount	V	V	V
Certification			
EN50155	V	V	V
EN50121-4	V	V	V
EN62368-1		V	V
EN45545-2	V	V	
EN61000-6-2 / EN61000-6-4	V	V	V
CE / FCC	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
-10 ~ 60℃	V	V	V
-40 ~ 75℃	V	V	V

EN50155 Managed Switch

The IP54/IP67 switches can be installed in a variety of different application scenarios, even under difficult conditions of covering the full range of automations, such as factory, locomotive and vehicles. Different robustly designed water-proof and dust-resistant models guaranty reliable data communications. ITP family of Fast/Gigabit Ethernet managed switches, from 10 to 26 ports, offer advanced functions, including IEEE1588, IPv6, SSL/SSH, IGMP/MLD, DHCP, TTDP, port bypass function, etc.

Model Name	ITP-G802SM	ITP-G802TM	ITP-802GSM	ITP-802GTM	ITP-1204GTM	ITP-2204GTM
Ethernet Interface						
Total Ports	10	10	10	10	16	26
10/100 Base-TX M12			8	8	12	22
10/100/1000 Base-T M12	8	10		2	4	4
100/1000 Base-X SFP	2		2			
Power & Alarm Relay						
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC	24/48/72/96/110VDC	24/48/72/96/110VDC
Alarm Relay	V	V	V	V	V	V
Physical						
Housing	Metal, IP67	Metal, IP67	Metal, IP67	Metal, IP67	Metal, IP54	Metal, IP54
Dimension (D x W x H) (mm)	69 x 240 x 168	69 x 240 x 168	69 x 240 x 168	69 x 240 x 168	113 x 260 x 132	113 x 360 x 132
Wall Mount	V	V	V	V	V	V
Din-Rail Kit	Optional	Optional	Optional	Optional		
Certification						
EN50155	V	V	V	V	V	V
EN50121-4	V	V	V	V	V	V
EN45545-2	V	V	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V	V	V
CE / FCC	V	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V	V
Operating Temperature						
	-40 ~ 75°C					

EN50155 Unmanaged Switch

NEW




Model Name	ITP-500A	ITP-500	ITP-800	ITP-800A
Ethernet Interface				
Total Ports	5	5	8	8
10/100 Base-TX M12	5	5	8	8
Power				
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC
Physical				
Housing	Plastic, IP40	Plastic, IP56	Plastic, IP56	Metal, IP40
Dimension (D x W x H) (mm)	47 x 36.5 x 206.5	44.3 x 33 x 213	40.3 x 68 x 198	45 x 71.5 x 219
Wall Mount	V	V	V	V
Certification				
EN50155	V	V	V	V
EN50121-4	V	V	V	V
EN62368-1	V	V	V	V
EN45545-2	V			V
EN61000-6-2 / EN61000-6-4	V	V	V	V
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
	-40 ~ 75°C			

05

E-Mark Certified Ethernet Switch

The E-Mark is a European conformity mark that certifies that a vehicle or vehicle component complies with EU regulations, laws and directives. CTC IVS series Ethernet switches support a total of 10 Ethernet ports, combined with multiple models of Fast Ethernet, Gigabit Ethernet and PoE ports, and have two power inputs in the range of 24/48VDC for redundancy, this switch is suitable for vehicle battery power supplies and is e-Mark certified to ensure adequate safety, meeting all environmental requirements for installation in vehicles.

Model Name	IVS-802GT-8PH24	IVS-G802T-8PH24	IVS-802GT	IVS-G802T
Ethernet Interface				
Total Ports	10	10	10	10
RJ45 10/100/1000 Base-T(X)	2	10	2	10
RJ45 10/100 Base-TX	8		8	
PoE				
PoE Port (IEEE802.3af/at)	8	8		
PoE Power Budget	120W	120W		
PoE Ouput Regulated	V	V		
Power				
Redundant Power Input	24/48VDC	24/48VDC	24/48VDC	24/48VDC
Physical				
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 55.5 x 135	106 x 55.5 x 135	106 x 55.5 x 135	106 x 55.5 x 135
Din Rail Kit	V	V	V	V
Wall Mount	Optional	Optional	Optional	Optional
Certification				
E-Mark	V	V	V	V
EN50121-4	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
-10 ~ 60°C	V	V	V	V
-40 ~ 75°C	V	V	V	V

Layer 3/2 IEC61850-3 Modular Switch

The IEC61850-3 Layer 3 & Layer 2 Ethernet switches provide up to 24 Gigabit Ethernet ports, which can be implemented through 4 types of Ethernet modules, including Gigabit copper ports, SFP slots and HSR/PRP Redbox modules, compliant with IEC 62439-3 clause 4 and 5 protocols for seamless redundancy, and it is equipped with 4 10 Gigabit SFP+ slot ports for uplinks. Its redundant power inputs increase system reliability and uninterrupted availability of the network backbone. This series is ideal for smart grids and substations for Ethernet communication deployment in substations.

NEW

NEW

Model Name	IPR-MG2404XS	IPS-MG2404XS
Managed	Layer 3	Layer 2
Ethernet Interface		
Total Ports (Max)	28	28
SFP 1G/10G Base-X	4	4
Modular Slot	3	3
Power & Alarm Relay		
Redundant Power Input for Device (Power optional)	24~120VDC, 100~240VAC, 120~380VDC	24~120VDC, 100~240VAC, 120~380VDC
Alarm Relay	V	V
Physical		
Housing	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	355 x 440 x 44	355 x 440 x 44
19" 1U Rackmount	V	V
Certification		
Safety	EN62368-1	EN62368-1
Power Substation	IEC61850-3, IEEE1613	IEC61850-3, IEEE1613
CE / FCC	V	V
Shock / Freefall / Vibration	V	V
Operating Temperature		
	-40 ~ 85°C	

Module Name	IPM-8GT	IPM-8GS	IPM-4GT-HPR	IPM-4GS-HPR
100/1000Base-X SFP		8		4
10/100/1000Base-T(X) RJ45	8		4	
HSR/PRP			V	V

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IEC61850-3 Ethernet Managed Switch

IEC 61850-3 switches are designed to meet the demands of power substation systems and are fully compliant with the requirement of IEC 61850-3 and IEEE 1613. The switches provide a variety of redundant functions to increase the reliability of your communications system, including redundant, isolated power supplies (24/48 VDC) and 110/220 VDC/VAC. The switches are built for real-time transmissions, achieve zero packet loss, give priority for GOOSE messages, provide synchronization with IEEE 1588 v2, and are designed to reject electrical interference in power substations.

Model Name	IPS-G803SM	IPS-803GSM	IPS-G2404SM-8C
Ethernet Interface			
Total Ports	11	11	28
RJ45 10/100 Base-TX		8	
RJ45 10/100/1000 Base-T	8		16
RJ45/SFP GbE Combo			8
SFP 100/1000 Base-X	3	3	4
Power & Alarm Relay			
Redundant Power Input	24/48VDC or 110/220VAC/DC	24/48VDC or 110/220VAC/DC	110/220VAC/DC
Alarm Relay	V	V	V
Physical			
Housing	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 82 x 152	106 x 82 x 152	331 x 440 x 44
Rack Mount			V
Din Rail Kit	V	V	
Wall Mount Kit	Optional	Optional	
Certification			
Safety	UL60950-1 EN60950-1	UL60950-1 EN60950-1	
Power Substation	IEC61850-1, IEEE1613	IEC61850-3, IEEE1613	IEC61850-3, IEEE1613
EN50121-4	V	V	
EN61000-6-2 / EN61000-6-4	V	V	
CE / FCC	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
		-40 ~ 85°C	

SyncE Switch

Industrial SyncE switches offer a total of 12~24 fiber/UTP ports and also support timing synchronization features (SyncE & IEEE1588 PTP v2) that allow operators to deliver services with optimal stability and continuity in end to end connectivity. Additionally, these SyncE switches offer wide range temperature ratings. Many needs can be satisfied with the lineup, including, fiber uplink and SFP models.

Model Name	IGS-804SM-SE	IGS-1608SM-SE
Ethernet Interface		
Total Ports	12	24
RJ45 10/100/1000 Base-T	8	16
SFP 100/1G Base-X	4	8
Synchronization		
SyncE	V	V
IEEE1588 PTP v2	V	V
Time Precision	20ns	20ns
Clock	TCXO	TCXO
DPLL	V	V
Power & Alarm Relay		
Redundant Power Input	12/24/48VDC	12/24/48VDC
Alarm Relay	V	V
Physical		
Housing	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 72 x 152	116 x 92 x 160
Din Rail Kit	V	V
Wall mount Kit	Optional	Optional
Certification		
Safety	EN60950-1	UL60950-1 EN60950-1 EN62368-1
EN50121-4	V	V
EN61000-6-2 / EN61000-6-4	V	V
CE / FCC	V	V
Shock / Freefall / Vibration	V	V
Operating Temperature		
-10 ~ 60°C	V	V
-40 ~ 75°C	V	V

08

Managed PoE Switch - Gigabit Ethernet

Industrial PoE switches provide a wide range of PoE/PoE+ and PoE++ switches, the models with up to 16 Gigabit PoE ports or up to 90W per port output. The fanless design and robust IP30 housings are ideal for DIN rail installation or wall mounting. Additionally, CTC's Industrial PoE switches are fully compliant with IEEE802.3at/af/bt standards and offer a wide operating temperature range. Many needs can be satisfied with our complete lineup, including unmanaged, managed, fiber uplink or SFP-port models.





Model Name	IQS-402XSM-4PH	IGS-402SM-4PH24	IGS+402SM-4PH24	IGS-402SW-4PB	IGS-402SM-4PU
Ethernet Interface					
Total Ports	6	6	6	6	6
RJ45 10/100/1000 Base-T		4	4	4	4
RJ45 10/100/1000M/2.5G Base-T	4				
SFP 100M/1G Base-X		1	2	2	2
SFP 100M/1G/2.5G Base-X		1			
SFP 1G/2.5/10G Base-X	2				
PoE					
PoE Port (IEEE802.3af/at)	4	4	4		4
PoE Port (IEEE802.3af/at/bt)				4	
PoE Power Budget	120W	120W	120W	240W	240W
PoE Ouput Regulated		V	V		
Power, Alarm Relay & IO					
Redundant Power Input	48VDC	24/48VDC	24/48VDC	48VDC	48VDC
Alarm Relay	V	V	V		V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	127.6 x 48.6 x 160	106 x 62.5 x 135	106 x 62.5 x 135	106 x 38.6 x 152	106 x 62.5 x 135
Din Rail Kit	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional
Certification					
Safety		UL60950-1			UL60950-1 EN62368-1 EN60950-1
EN50121-4	V	V	V	V	V
NEMA-TS2		V			
EN61000-6-2 / EN61000-6-4	V	V	V	V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-10 ~ 60℃	V	V	V	V	V
-40 ~ 75℃		V	V	V	V

Managed PoE Switch - Gigabit Ethernet




Model Name	IGS-402CSW-4PH	IGS+803SM-8PH	IGS+803SM-8PH24	IGS-A804SM-8PH	IGS-A804SM-8PH24
Ethernet Interface					
Total Ports	6	11	11	12	12
RJ45 10/100/1000 Base-T	4	8	8	8	8
SFP 100M/1G Base-X	2	3	3	4	4
PoE					
PoE Port (IEEE802.3af/at)	4	8	8	8	8
PoE Power Budget	120W	240W	180W	240W	180W
PoE Ouput Regulated			V		
Power, Alarm Relay & IO					
Redundant Power Input	48VDC	48VDC	24/48VDC	48VDC	24/48VDC
Alarm Relay		V	V	V	V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 38.6 x 142	106 x 72 x 152	106 x 72 x 152	109 x 65 x 152	109 x 65 x 152
Din Rail Kit	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional
Certification					
Safety	IEC62368 UL62368 EN62368-1	UL60950-1 EN62368-1 EN60950-1	UL60950-1 EN62368-1 EN60950-1		
EN50121-4	V	V	V	V	V
NEMA-TS2		V	V		
EN61000-6-2 / EN61000-6-4	V	V	V	V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-10 ~ 60℃	V	V	V	V	V
-40 ~ 75℃	V	V	V	V	V

Managed PoE Switch - Gigabit Ethernet




Model Name	IGS-804SM-8PH	IGS-1604XSM-16PH	IGS-1608SM-8PH	IGS-1608SM-16PH
Ethernet Interface				
Total Ports	12	20	24	24
RJ45 10/100/1000 Base-T	8	16	16	16
SFP 100M/1G Base-X	4		8	8
SFP 1G/2.5/10G Base-X		4		
PoE				
PoE Port (IEEE802.3af/at)	8	16	8	16
PoE Power Budget	240W	300W	240W	360W
Power, Alarm Relay & IO				
Redundant Power Input	48VDC	48VDC	48VDC	48VDC
Alarm Relay	V	V	V	V
Digital Input		1		1
Physical				
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 72 x 152	155.6 x 77 x 160	116 x 92 x 160	135.6 x 99 x 160
Din Rail Kit	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional
Certification				
Safety	IEC62368 UL62368 EN60950-1	EN62368-1	UL60950-1 EN62368-1 EN60950-1	EN62368-1
EN50121-4	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
-10 ~ 60℃	V		V	V
-40 ~ 60℃		V		
-40 ~ 75℃	V		V	V

Managed PoE Switch - Fast Ethernet




Model Name	IFS-402GSW-4PB	IFS-402GSM-4PU	IFS-402GSM-4PH24	IFS-402CGSW-4PH
Ethernet Interface				
Total Ports	6	6	6	6
RJ45 10/100 Base-TX	4	4	4	4
SFP 100/1G Base-X	2	2	2	2
PoE				
PoE Port (IEEE802.3af/at)		4	4	4
PoE Port (IEEE802.3af/at/bt)	4			
PoE Power Budget	240W	240W	120W	120W
PoE Ouput Regulated			V	
Power, Alarm Relay & IO				
Redundant Power Input	48VDC	48VDC	24/48VDC	48VDC
Alarm Relay		V	V	V
Physical				
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 38.6 x 152	106 x 62.5 x 135	106 x 62.5 x 135	106 x 38.6 x 142
Din Rail Kit	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional
Certification				
Safety		UL60950-1 EN62368-1 EN60950-1	UL60950-1	IEC62368 UL62368 EN62368-1
EN50121-4	V	V	V	V
NEMA-TS2			V	
EN61000-6-2 / EN61000-6-4	V	V	V	V
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
-10 ~ 60℃	V	V	V	V
-40 ~ 75℃	V	V	V	V

Managed PoE Switch - Fast Ethernet




Model Name	IFS+803GSM-8PH	IFS+803GSM-8PH24	IFS-A804GSM-8PH	IFS-A804GSM-8PH24	IFS-1608GSM-8PH	IFS-1608GSM-16PH
Ethernet Interface						
Total Ports	11	11	12	12	24	24
RJ45 10/100 Base-TX	8	8	8	8	16	16
SFP 100/1G Base-X	3	3	4	4	8	8
PoE						
PoE Port (IEEE802.3af/at)	8	8	8	8	8	16
PoE Power Budget	240W	180W	240W	180W	240W	360W
Power, Alarm Relay & IO						
Redundant Power Input	48VDC	24/48VDC	48VDC	24/48VDC	48VDC	48VDC
Alarm Relay	V	V	V	V	V	V
Digital Input						1
Physical						
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 72 x 152	106 x 72 x 152	109 x 65 x 152	109 x 65 x 152	116 x 92 x 160	135.6 x 99 x 160
Din Rail Kit	V	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional	Optional
Certification						
Safety	UL60950-1 EN62368-1 EN60950-1	UL60950-1 EN62368-1 EN60950-1			UL60950-1 EN62368-1 EN60950-1	EN62368-1
EN50121-4	V	V	V	V	V	V
NEMA-TS2	V	V				
EN61000-6-2 / EN61000-6-4	V	V	V	V	V	V
CE / FCC	V	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V	V
Operating Temperature						
-10 ~ 60℃	V	V	V	V	V	V
-40 ~ 75℃	V	V	V	V	V	V

Unmanaged PoE Switch - Gigabit Ethernet





Model Name	IGS-402S-4PH24	IGS-402CS-4PH	IGS-600-4PH24	IGS-800C-8PH	IGS-802CS-8PH
Ethernet Interface					
Total Ports	6	6	6	8	10
RJ45 10/100/1000 Base-T	4	4	6	8	8
SFP 100/1G Base-X	2	2			2
PoE					
PoE Port (IEEE802.3af/at)	4	4	4	8	8
PoE Power Budget	120W	120W	120W	240W	240W
PoE Ouput Regulated	V				
Power, Alarm Relay & DIP SW					
Redundant Power Input	24/48VDC	48VDC	24/48VDC	48VDC	48VDC
Alarm Relay	V		V		
DIP SW	V	V	V		
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 62.5 x 134.8	106 x 38.6 x 142	106 x 62.5 x 134.8	100 x 42 x 115	106 x 45 x 152
Din Rail Kit	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional
Certification					
Safety	UL60950-1	IEC62368 UL62368 EN62368-1	UL60950-1		
EN50121-4	V	V	V	V	
EN61000-6-2 / EN61000-6-4	V	V	V	V	
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-10 ~ 60℃	V	V	V	V	V
-40 ~ 70℃				V	V
-40 ~ 75℃	V	V	V		

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Unmanaged PoE Switch - Fast Ethernet



Model Name	IFS-402CGS-4PH	IFS-802GS-8PH	IFS-1602GS-8PH
Ethernet Interface			
Total Ports	6	10	18
RJ45 10/100 Base-TX	4	8	16
SFP 1G Base-X		2	2
SFP 100/1G Base-X	2		
PoE			
PoE Port (IEEE802.3af/at)	4	8	8
PoE Power Budget	120W	240W	240W
Power, Alarm Relay & DIP SW			
Redundant Power Input	48VDC	48VDC	48VDC
Alarm Relay		V	V
DIP SW	V	V	V
Physical			
Housing	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 38.6 x 142	106 x 72 x 152	106 x 72 x 152
Din Rail Kit	V	V	V
Wall Mount Kit	Optional	Optional	Optional
Certification			
Safety	IEC62368 UL62368 EN62368-1		
EN50121-4	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V
CE / FCC	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
-10 ~ 60℃	V	V	V
-40 ~ 75℃	V	V	V

Ethernet Managed Switch - Gigabit Ethernet

CTC Industrial Ethernet switches offer a total of 5~20 fiber/UTP ports and feature industrial-grade reliability and network redundancy. The managed switches offer advanced functions to cover most network requirements, including IEEE1588, IPv6, SSL/SSH, IGMP/MLD, DHCP, etc. Each model also supports advanced ITU G.8032 or proprietary u-Ring for redundancy. Additionally, these switches offer operation over a wide temperature range. Many needs can be satisfied with our complete lineup, including unmanaged, managed, fiber uplink and SFP models.




Model Name	IQS-402XSM	IGS-402CSW	IGS+404SM	IGS+803SM
Ethernet Interface				
Total Ports	6	6	8	11
RJ45 10/100/1000 Base-T		4	4	8
RJ45 10/100/1000/2.5G Base-T	4			
SFP 100/1G Base-X		2	4	3
SFP 1G/2.5/10G Base-X	2			
Power & Alarm Relay				
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC
Alarm Relay	V		V	V
Physical				
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	127.6 x 48.6 x 160	106 x 31.6 x 142	106 x 62.5 x 135	106 x 72 x 152
Din Rail Kit	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional
Certification				
Safety		IEC62368 UL62368 EN62368-1		UL60950-1 EN62368-1 EN60950-1
EN50121-4	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
-10 ~ 60℃	V	V	V	V
-40 ~ 75℃		V	V	V

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Ethernet Managed Switch - Gigabit Ethernet




Model Name	IGS-804SM	IGS-A804SM	IGS-812SM	IGS-1604SM	IGS-1604XSM
Ethernet Interface					
Total Ports	12	12	20	20	20
RJ45 10/100/1000Base-T	8	8	8	16	16
SFP 100/1G Base-X	4	4	12	4	
SFP 1G/2.5/10G Base-X					4
Power & Alarm Relay					
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC
Alarm Relay	V	V	V	V	V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 72 x 152	109 x 65 x 152	106 x 72 x 152	106 x 72 x 152	155.6 x 77 x 160
Din Rail Kit	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional
Certification					
Safety	EN60950-1		EN62368-1 UL60950-1	EN62368-1 UL60950-1	EN62368-1
EN50121-4	V	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-10 ~ 60℃	V	V	V	V	
-40 ~ 60℃					V
-40 ~ 75℃	V	V	V	V	

Ethernet Managed Switch - Fast Ethernet

Model Name	IFS-402CGSW	IFS-402GSM	IFS+402GSM	IFS+803GSM	IFS-A804GSM	IFS-1604GSM
Ethernet Interface						
Total Ports	6	6	6	11	12	20
RJ45 10/100 Base-TX	4	4	4	8	8	16
SFP 100/1G Base-X	2	2	2	3	4	4
Power & Alarm Relay						
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC
Alarm Relay		V	V	V	V	V
Physical						
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 31.6 x 142	106 x 62.5 x 135	106 x 62.5 x 135	106 x 72 x 152	109 x 65 x 152	106 x 72 x 152
Din Rail Kit	V	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional	Optional
Certification						
Safety	IEC62368 UL62368 EN62368-1	UL60950-1		UL60950-1 EN62368-1 EN60950-1		UL60950-1 EN62368-1
EN50121-4	V	V	V	V	V	V
NEMA-TS2		V		V		
EN61000-6-2 / EN61000-6-4	V	V	V	V	V	V
CE / FCC	V	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V	V
Operating Temperature						
-10 ~ 60℃	V	V	V	V	V	V
-40 ~ 75℃	V	V	V	V	V	V

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Ethernet Unmanaged Switch - Gigabit Ethernet




Model Name	IGS-402CS	IGS-402F	IGS-802CS	IGS-500	IGS-800
Ethernet Interface					
Total Ports	6	6	10	5	8
RJ45 10/100/1000 Base-T	4	4	8	5	8
Fiber Optical 1000 Base-X		2x SC/ ST			
SFP 100/1G Base-X	2		2		
Power, Alarm Relay & DIP SW					
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC	12/24/48VDC, 24VAC	12/24/48VDC, 24VAC
Alarm Relay		V	V	V	V
DIP SW	V	V	V	V	V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 31.6 x 142	106 x 62.5 x 134.8	106 x 45 x 152	106 x 31.6 x 142	106 x 31.6 x 142
Din Rail Kit	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional
Certification					
Safety	IEC62368 UL62368 EN62368-1	UL60950-1			
EN50121-4	V	V		V	V
EN61000-6-2 / EN61000-6-4	V	V		V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-10 ~ 60℃	V	V	V	V	V
-40 ~ 75℃	V	V	V	V	V

Ethernet Unmanaged Switch - Fast Ethernet





Model Name	IFS-401F	IFS-402F	IFS-402CGS	IFS-500C	IFS-500
Ethernet Interface					
Total Ports	5	6	6	5	5
RJ45 10/100M Base-TX	4	4	4	5	5
Fiber Optical 100M Base-FX	1x SC/ ST	2x SC/ ST			
SFP 100/1G Base-X			2		
Power, Alarm Relay & DIP SW					
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC	Single 12/24/48VDC	12/24/48VDC
Alarm Relay	V	V			V
DIP SW	V	V	V		V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 31.6 x 142	106 x 31.6 x 142	106 x 31.6 x 142	70 x 30 x 103	106 x 31.6 x 142
Din Rail Kit	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional
Certification					
Safety			IEC62368 UL62368 EN62368-1		
EN50121-4	V	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-10 ~ 60℃	V	V	V	V	V
-40 ~ 75℃	V	V	V	V	V

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Ethernet Unmanaged Switch - Fast Ethernet



Model Name	IFS-800	IFS-802GS	IFS-1602GS
Ethernet Interface			
Total Ports	8	10	18
RJ45 10/100M Base-TX	8	8	16
SFP 1G Base-X		2	2
Power, Alarm Relay & DIP SW			
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC
Alarm Relay	V	V	V
DIP SW	V	V	V
Physical			
Housing	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106x31.6x142	106 x 72 x 152	106 x 72 x 152
Din Rail Kit	V	V	V
Wall Mount Kit	Optional	Optional	Optional
Certification			
EN50121-4	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V
CE / FCC	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
-10 ~ 60℃	V	V	V
-40 ~ 75℃	V	V	V

Optical Fiber Bypass Switch

Model Name	IBP-202
Fiber Interface	
Fiber Connector Type	SC/ST/LC
Fiber Connector Q'ty	4
Fiber Type	Single Mode / Multimode
Data Rate	100M,1G,10G
Power, Alarm Relay & DIP SW	
Redundant Power Input	12/24/48VDC
Rotary Switch	For Boot Up Delay Setting (0~180 sec.)
Physical	
Housing	Metal, IP30
Dimension (D x W x H) (mm)	106 x 62.5 x 135
Din Rail	V
Wall Mount Kit	Optional
Certification	
EN50121-4	V
EN61000-6-2 / EN61000-6-4	V
CE / FCC	V
Shock / Freefall / Vibration	V
Operating Temperature	
-20 ~ 70℃	V

Cellular Router

Industrial cellular routers combine Ethernet WAN/LAN, Wireless LAN and 4G LTE cellular technologies to provide flexible network connectivity for remote access applications. CTC's industrial cellular router series support secure VPN communications, GPS, static and dynamic IP routing of RIP1/2 and OSPF, NAT, port forwarding, Firewall, built-in DI/DO and Serial port services. These devices use the highest level of industrial grade design for operating in harsh environments. Models available that support 2CA and use Cat 6 modules.

NEW

Model Name	ICR-W401	ICR-W402A	ICR-GW404
WAN Port			
4G LTE, 3G	1, cat 4	1, cat 4	1, cat 4
SIM Card Slot	1	2	2
LTE Anterna (SMA)	2	2	2
RJ45 10/100 Base-TX	1	1 (configuable)	
RJ45 10/100/1000 Base-T			1 (configuable)
LAN Port, WiFi, I/O & GPS			
WiFi IEEE802.11	b/g/n	b/g/n	b/g/n/ac
WiFi Antenna (RP-SMA)	2	2	2
RJ45 10/100 Base-TX	1	3	
RJ45 10/100/1000Base-T			4
RS232	1	1	1
RS485		1	1
DI/DO	1x DI, 1x DO	1x DI, 1x DO	2x DI, 1x DO
GPS	V	V	V
GPS Antenna (SMA)	V	V	V
Power			
Power Input	Single 12/24/48VDC	Dual 12/24/48VDC	Single 12/24VDC
Physical			
Housing	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	75 x 92 x 30	98 x 98 x 32	132 x 112 x 44
Din Rail Kit	V	V	V
Certification			
Safety	EN62368-1	EN62368-1	EN62368-1
EN50121-4			
EN61000-6-2 / EN61000-6-4			
Radio	RED, NCC	RED	RED
CE	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
	-30 ~ 70℃	-30 ~ 70℃	-30 ~ 70℃
Network Protocols			
Modbus/TCP		V	V
MQTT	V		

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Industrial Media Converter Chassis & Card

This 20 slot, industrial grade, media converter chassis, the IRC200, is a 2U rack, fan-less design, that supports two hot swappable modular power supplies. The twenty slots support one management card and up to nineteen media converter cards. The chassis is able to operate temperature ranges (-10~65°C). The media converter cards available support conversion for Fast Ethernet, Gigabit Ethernet, serial communications or I/O Contact Closure over fiber media. This chassis may be deployed in Industrial Ethernet, automation, security, intelligent transportation systems (ITS) and utility market applications where environmental conditions exceed commercial product specifications.

Model Name	IRC200-CH20	IRC200-CH01M	IRC200-CH01
Managed	V		
Interface			
Total Modular Ports	20	1	1
Modular Slot for Line Card	19	1	1
Modular Slot for NMC Management Card	1		
Power, Alarm Relay			
Redundant Power Module slot for AC or DC	2	1 or 2 Power Fixed	1 or 2 Power Fixed
AC Power 100~240VAC, Optional Module	V	1 or 2 AC Fixed Optional	1 or 2 AC Fixed Optional
DC Power 36~60VDC, Optional Module	V	1 or 2 DC Fixed Optional	1 or 2 DC Fixed Optional
Relay Alarm	V		
Physical			
Housing	Metal, 19" 2U Rack Mount	Metal	Metal
Dimension (D x W x H) (mm)	302 x 43.8 x 88	185 x 30 x 135	180 x 30 x 135
Fanless	V	V	V
Installation	19" Rack Mount	Desk top	Desk top
Certification			
Safety	EN62368-1	EN62368-1	EN62368-1
CE / FCC	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
-10 ~ 65°C	V	V	V

IRC200-NMC

IRC200-10/100i

IRC200-1000DS

IRC200-Serial

IRC200-2000MS

IRC200-CCF40 & CCF20

Optional Module	
IRC200-NMC	Network Management Control Card for IRC200
IRC200-10/100i	In-Band Management 10/100Base-TX to 100Base-FX Converter
IRC200-2000MS	Web Managed OAM 10/100/1000Base-T to 100/1000Base-X Converter
IRC200-1000DS	1000Base-X SFP to 1000Base-X SFP Media Converter
IRC200-Serial	RS-232/422/485 to Fiber Converter
IRC200-CCF40	4 Channel Contact Closure Fiber (155M SFP) Converter
IRC200-CCF20	2 Channel Contact Closure Fiber (155M SFP) Converter

Media Converter with PoE

CTC's industrial PoE media converters support IEEE 802.3at/af PSE standard, to transmit power and data over Ethernet/UTP cable. The industrial grade design provides reliable, stable and is cost-effective for users to convert Ethernet data over optical fiber for extending distance and use in harsh industrial environments.




Model Name	IMC-1000WS-PB	IMC-1000MS-PH12	IMC-1001S-PH	IMC-1001-PH
Managed	V	V		
Ethernet Interface				
Total Ports	2	2	2	2
RJ45 10/100/1000Base-T	1	1	1	1
Fiber 1000Base-FX SC				1
SFP 100/1000Base-X	1	1	1	
PoE				
PoE Port (IEEE802.3af/at)		1	1	1
PoE Port (IEEE802.3af/at/bt)	1			
PoE Power Budget	90W	30W	30W	30W
PoE Regulated Output		V		
Power , Alarm Relay, DIP SW, LFPT, FEF				
Redundant Power Input	48VDC	12/24/48VDC	48VDC	48VDC
Relay Alarm		1		
DIP SW			V	V
LFPT (Link Fault Pass Through)	V	V	V	V
FEF (Far End Fault)	V	V	V	V
Physical				
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	70 x 30 x 103	106 x 62.5 x 135	70 x 30 x 103	70 x 30 x 103
Din Rail Kit	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional
Certification				
EN50121-4	V	V		
EN61000-6-2 / EN61000-6-4	V	V		
CE / FCC	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V
Operating Temperature				
-20 ~ 70°C	V		V	V
-20 ~ 75°C		V		

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Media Converter with PoE



Model Name	IMC-1000S-PB	IMC-1000S-PH12	IMC-100-PH12
Ethernet Interface			
Total Ports	2	2	2
RJ45 10/100Base-T			1
RJ45 10/100/1000Base-T	1	1	
Fiber 100Base-FX SC			1
SFP 100/1000Base-X	1	1	
PoE			
PoE Port (IEEE802.3af/at)		1	1
PoE Port (IEEE802.3af/at/bt)	1		
PoE Power Budget	90W	30W	30W
PoE Regulated Output		V	V
Power , Alarm Relay, DIP SW, LFPT, FEF			
Redundant Power Input	48VDC	12/24/48VDC	12/24/48VDC
Relay Alarm			V
DIP SW	V	V	V
LFPT (Link Fault Pass Through)	V	V	V
FEF (Far End Fault)	V	V	V
Physical			
Housing	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	80 x 30 x 115	106 x 62.5 x 135	106 x 62.5 x 135
Din Rail Kit	V	V	V
Wall Mount Kit	Optional	Optional	Optional
Certification			
EN50121-4	V	V	
EN61000-6-2 / EN61000-6-4	V	V	
CE / FCC	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
-20 ~ 70°C	V		
-20 ~ 75°C		V	V

Media Converter

CTC industrial media converters provide managed and unmanaged models. Features make them reliable, stable and flexibility for the users to convert Ethernet data to fiber optic signals, even in harsh industrial environments, such as industrial networking and intelligent transportation systems (ITS) and are also suitable for many military and utility market applications.





Model Name	IMC-1000MS	IMC-1001C	IMC-1001CS	IMC-100C	IMC-100
Managed	V				
Ethernet Interface					
Total Ports	2	2	2	2	2
RJ45 10/100 Base-TX				1	1
RJ45 10/100/1000 Base-T	1	1	1		
Fiber 100 Base-FX SC/ST				1	1
Fiber 1000 Base-X SC/ST		1			
SFP 100/1000 Base-X	1		1		
Power, Alarm Relay, DIP SW, LFPT, FEF					
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC		12/24/48VDC
Single Power Input				12/24/48VDC	
Relay Alarm	1				V
DIP SW		V	V	V	V
LFPT (Link Fault Pass Through)	V	V	V	V	V
FEF (Far End Fault)	V	V	V	V	V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 38.6 x 142	70 x 30 x 103	70 x 30 x 103	70 x 30 x 103	106 x 38.6 x 142
Din Rail Kit	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional
Certification					
Safety	UL60950-1				UL60950-1
EN50121-4	V	V	V	V	V
EN61000-6-2 / EN61000-6-4		V	V	V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-20 ~ 70°C		V	V		
-20 ~ 75°C	V				
-40 ~ 75°C				V	V

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Serial to Ethernet Protocol Gateway

The MQTT/Modbus Wi-Fi / Ethernet / Serial Gateway, provides an easy to deploy device to send RS-232/RS-485 Serial Modbus RTU Data communications to TCP networks on hard-wired Ethernet or over wireless WiFi. The Gateway works with standard Modbus Slave devices, such as PLCs, IoT Sensors, Energy meters (AMRs), Solar Inverters, Wind Turbines, IO Modules, Flow Meters and more. The MQTT Gateway is built for use in light industrial environments and features a compact wall-mount design.

Model Name	GW211W-MQ	GW211W-MB
Ethernet Interface		
RJ45 10/100 Base-TX	1	1
WiFi Interface		
IEEE802.11b/g/n WiFi	1	1
Antenna	1 SMA	1 SMA
Serial Interface		
Total Serial port	2	2
RS232	1	1
RS422/485	1	1
Baud rate	300~921.6 Kbps	300~921.6 Kbps
Function		
Gateway	Modbus RTU to MQTT	Modbus TCP to Modbus RTU
Power		
Power input	9~32VDC	9~32VDC
Connector	Power Jack & Terminal	Power Jack & Terminal
Physical		
Dimension (D x W x H) (mm)	110 x 90 x 26	110 x 90 x 26
Mount	Wall Mount	Wall Mount
Operating Temperature		
-20 ~ 70°C	V	V
Certification		
CE	V	V
FCC	V	V

Ethernet Device Server

The Serial to Ethernet with/without Wi-Fi Converter, provides a bridging device to connect RS-232/RS-485 Serial Data communications to hardwired Ethernet networks or WiFi. It connects serial devices such as PLC, alarm sensors and PTZ camera control to IP networks. Applications include industrial/factory automation, public safety, and surveillance systems. The Serial converter is built for use in light industrial environments, featuring a compact wall-mount design.

Model Name	STE211W	STE211
Ethernet Interface		
RJ45 10/100 Base-TX	1	1
WiFi Interface		
IEEE802.11b/g/n WiFi	1	
Antenna	1 SMA	
Serial Interface		
Total Serial port	2	2
RS232	1	1
RS422/485	1	1
Baud rate	300~921.6 Kbps	300~921.6 Kbps
Function		
Device Server	Modbus RTU to TCP	Modbus RTU to TCP
Power		
Power input	9~32VDC	9~32VDC
Connector	Power Jack & Terminal	Power Jack & Terminal
Physical		
Dimension (D x W x H) (mm)	110 x 90 x 26	110 x 90 x 26
Mount	Wall Mount	Wall Mount
Operating Temperature		
-20 ~ 70°C	V	V
Certification		
CE	V	V
FCC	V	V

Serial to Fiber Media Converter

Serial to Fiber Converters support transparent conversion of copper wire to optical fiber, can be applied to serial network, have selectable interface modes to connect RS-232/RS-422/485, support three-way communication and have a second independent RS-232 communication channel. Offering one alarm relay contact and two redundant DC power inputs, models are available in two operating temperature ranges, a standard -10° to 60°C commercial temperature range and an extended -40° to 75°C range. These are reliable solutions to keep your industrial automation applications running smoothly and continuously, even in harsh environments.

Model Name	IFC-Serial-PRO	IFC-Serial	IFC-FDC
Fiber Interface			
SC / ST	1	1	2
Ring / Daisy Chain / Redundant			V
Serial Interface			
RS232 (3-wire)		2	2
RS422 (4-wire) / RS485 (2/4-wire)	1	1	1
Baud Rate (Max.)	12Mbps	1Mbps	1Mbps
Isolation	2.5KV	2.5KV	2.5KV
Fieldbus Application			
Modbus or Other Serial	V	V	V
Profibus or Other Serial	V		
Power & Alarm Relay			
Redundant Power Input	12/24/48VDC	12/24/48VDC	12/24/48VDC
Alarm Relay	V	V	V
Physical			
Housing	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	85 x 30 x 115	106 x 38.6 x 142	106 x 38.6 x 142
Din Rail	V	V	V
Wall Mount Kit	Optional	Optional	Optional
Certification			
Safety		UL60950-1	UL60950-1
EN61000-6-2 / EN61000-6-4	V	V	V
CE / FCC	V	V	V
Shock / Freefall / Vibration	V	V	V
Operating Temperature			
-10 ~ 60°C	V	V	V
-40 ~ 75°C	V	V	V

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CCF Binary Transducer

Model Name	IFC-BT40
Binary Input	
Channel	4
Input type	Binary 18V or 70V Threshold Voltage Select by DIP SW
Output Relay	
Relay	4 MSR Relay
Relay Breaking Capacity (Max.)	250VAC/300VDC AC 2000VA, DC Resistive 50~280W, DC Inductive 30W
Open Latency(Max)	5ms
Close Latency (Max)	10ms
Transmission	
Fiber Connector	1 SC/ST
Fiber Type	M/M, S/M or BiDi
Power	
Power Input	60~300VDC or 60~264VAC
Physical	
Housing	Metal, IP40
Dimension (D x W x H) (mm)	106 x 62.5 x 135
Din Rail	V
Wall Mount Kit	Optional
Certification	
EN61000-6-2 / EN61000-6-4	V
CE / FCC	V
Shock / Freefall / Vibration	V
Operating Temperature	
-40 ~ 75℃	V

Contact Closure over Fiber Converter

NEW

NEW

Model Name	IFC-CCF40A	IFC-CC20A
Binary Input		
Channel	4	2
Input type	Open/Close	Open/Close
Output Relay		
Relay	4 Relay	2 Relay
Relay Breaking Capacity (Max.)	250VAC/220VDC AC 62.5VA, DC Resistive 60W	250VAC/220VDC AC 62.5VA, DC Resistive 60W
Open Latency(Max)	5ms	5ms
Close Latency (Max)	6ms	6ms
Transmission		
Fiber Connector	1 SC/ST/SFP	1 SC/ST/SFP
Fiber Type	M/M, S/M or BiDi	M/M, S/M or BiDi
Power		
Power Input	12/24/48VDC	12/24/48VDC
Physical		
Housing	Metal, IP40	Metal, IP40
Dimension (D x W x H) (mm)	106 x 31.6 x 142	106 x 31.6 x 142
Din Rail	V	V
Wall Mount Kit	Optional	Optional
Certification		
EN61000-6-2 / EN61000-6-4	V	V
CE / FCC	V	V
Shock / Freefall / Vibration	V	V
Operating Temperature		
-40 ~ 75℃	V	V

Ethernet Extender

NEW NEW NEW NEW NEW

Model Name	IEXT101-P2W	IEXT101C-P2W	IEXT101-2W	IEXT101C-2W	IEXT-G104-4P	IEXT101-PH	IEXT101
Ethernet Interface							
RJ45 10/100 Base-TX	1	1	1	1		1	1
RJ45 10/100/1000 Base-T					5		
Long Distance Extension							
Connector	RJ11	BNC	RJ11	BNC		RJ45	RJ45
Extension Distance (Max)	500 meter	500 meter	500 meter	500 meter	100 +100meter	800 meter	800 meter
Data Rate (Max)	100Mbps	100Mbps	100Mbps	100Mbps	1000Mbps	100Mbps	100Mbps
PoE Input / Delivery Power (Max)					90W (IEEE802.3 af/at/bt)	30W (IEEE802.3 af/at)	
PoE (Output)							
PoE Port (IEEE802.3af/at/bt)					1		
PoE Port (IEEE802.3af/at)	1	1			3	1	
Power Input, DIP Switch, LFPT							
Power Input	55~57VDC (Local Side)	55~57VDC (Local Side)	12/24/48VDC	12/24/48VDC	Powered from PoE PD port (Max 90W bt)	55~57VDC (Local Side)	12/24/48VDC
DIP Switch						V	V
LFPT (Link Fault Pass Through)						V	V
Physical							
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	102.5x52x25	102.5x52x25	102.5x52x25	102.5x52x25	76.8 x 28 x 138	102.5 x 52 x 25	102.5 x 52 x 25
Wall Mount	v	v	v	v	Optional	V	V
Din Rail					V		
Certification							
EN50121-4	V	V	V	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V	V	V	V
CE / FCC	V	V	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V	V	V
Operating Temperature							
-20 ~ 75°C	V	V	V	V			
-40 ~ 75°C					V	V	V

PoE Injector

CTC's industrial PoE Injectors provide a wide range of PoE/PoE+ that combines power and data while delivering them to a powered device over Ethernet cable. CTC's industrial PoE injector series provide PoE of up to 72 watts. The -40 to 75°C wide operating temperature capability makes the CTC PoE Injectors ideally suited to operating in harsh industrial environments





Model Name	INJ-IX01-PB	INJ-IX01-2PB	INJ-IG01-PH	INJ-IG02-PH	INJ-IG60-24
Ethernet Interface					
Total Port	2	4	2	2	2
RJ45 10/100/1000M/2.5G/5G/10G Base-T	2	4			
RJ45 10/100/1000 Base-T			2	2	2
PoE PSE					
PoE Port (IEEE802.3af/at/bt)	1	2			
PoE Port (IEEE802.3af/at)	1		1		1
Passive PoE				1	
PoE Power Budget	90W	90W/port, total 180W	15.4/30/36/60W	15.4/30/36/60W	15.4/30/36/72W
PoE Regulated Output					V
Power, Alarm Relay & IO					
Redundant Power Input	48VDC	48VDC			12/24/48VDC
Single Power Input			48VDC	24 or 48VDC	
Relay Alarm					V
Physical					
Housing	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	106 x 38.6 x 152	106 x 38.6 x 152	70 x 30x 103	70 x 30x 103	106 x 31.6 x 142
Din Rail Kit	V	V	V	V	V
Wall Mount Kit	Optional	Optional	Optional	Optional	Optional
Certification					
Safety			EN62368-1	EN62368-1	EN60950-1
EN50121-4	V	V	V	V	V
EN61000-6-2 / EN61000-6-4	V	V	V	V	V
CE / FCC	V	V	V	V	V
Shock / Freefall / Vibration	V	V	V	V	V
Operating Temperature					
-10 ~ 60°C	V	V	V	V	V
-40 ~ 75°C	V	V	V	V	V

Passive PoE Converter

Model Name	INJ-IG03-PH
Ethernet Interface	
RJ45 10/100/1000 Base-T	2
PoE	
PoE Port (IEEE802.3af/at)	1
Passive PoE	1
Power	
Power Input	IEEE802.3af/at
Power Output Passive PoE 12/19/24VDC	Passive PoE 12/19/24VDC
Output Current	0.8A
Physical	
Housing	Metal, IP30
Dimension (D x W x H) (mm)	22 x 84.2 x 80.7
Wall Mount	V
Certification	
EN50121-4	V
EN61000-6-2 / EN61000-6-4	V
CE / FCC	V
Shock / Freefall / Vibration	V
Operating Temperature	
-10 ~ 60℃	V
-40 ~ 75℃	V

PoE Splitter

Model Name	INJ-SPL01
Ethernet Interface	
RJ45 10/100/1000 Base-T	2
PoE	
PoE (IEEE802.3af/at) Input	1
Power	
Power Output	12/19/24VDC
Power Output current (max)	1.4A / 1.05A / 0.85A
Physical	
Housing	Metal, IP30
Dimension (D x W x H) (mm)	22 x 84.2 x 80.7
Wall Mount	V
Certification	
EN50121-4	V
EN61000-6-2 / EN61000-6-4	V
CE / FCC	V
Shock / Freefall / Vibration	V
Operating Temperature	
-10 ~ 60℃	V
-40 ~ 75℃	V

Auto Backup Kit

Model Name	BUK1-RJ	BUK1-M12
Connector		
USB Type C	1	1
RJ45 RS232	1x RJ45 to RJ45	1x RJ45 to M12
Function		
Push Button	V	V
LED Indicator	V	V
Power Input, DIP Switch		
Power Supply	Charged battery on board / Charged by USB	
DIP Switch	V	V
Physical		
Housing	Metal, IP30	Metal, IP30
Dimension (D x W x H) (mm)	30 x 72 x 26.8	30 x 72 x 26.8
Certification		
CE / FCC	V	V
Operating Temperature		
-10 ~ 60℃	V	V

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Industrial SFP Transceiver

CTC Union's industrial SFP Transceivers are highly reliable, for serial optical data communications applications specified for single mode fiber operation at 10G/155M bps. They operate with +3.3V power supplies and are intended for single mode or multi-mode fiber, operating at a nominal wavelength of 1310nm/1550nm/850nm. Each SFP Transceiver consists of a transmitter optical subassembly (TOSA), a receiver optical subassembly (ROSA) and an electrical subassembly. CTC Union's industrial SFP transceivers ensure your networks operate with maximum reliability, performance, and flexibility.

10Gbps 10GBase-X Fiber SFP+

Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget(dB)	Saturation (dBm)	Power Consumption	DDMI	Operating Temperature
ISFP-M9000-85-D(E)	MM	300m (OM3)	850	-6.5 ~ -1	-9.9	3.4	-1	1W	V	-10 ~ 70℃
	MM	300m (OM3)	850	-6.5 ~ -1	-9.9	3.4	-1	1W	V	-40 ~ 85℃
ISFP-S9010-31-D(E)	SM	10km	1310	-8 ~ 0.5	-14.4	6.4	0.5	1W	V	-10 ~ 70℃
	SM	10km	1310	-8 ~ 0.5	-14.4	6.4	0.5	1W	V	-40 ~ 85℃
ISFP-S9040-31-D(E)	SM	40km	1310	0.5 ~ 5	-15.5	16	0.5	1W	V	-10 ~ 70℃
	SM	40km	1310	0.5 ~ 5	-15.5	16	0.5	1W	V	-40 ~ 85℃
ISFP-S9040-55-D(E)	SM	40km	1550	-2 ~ 4	-15.8	13.8	0.5	1W	V	-10 ~ 70℃
	SM	40km	1550	-2 ~ 4	-15.8	13.8	0.5	1W	V	-40 ~ 85℃

10Gbps 10GBase-T UTP SFP

Model Name	Cable Type	Typical Distance	Operating Temperture	Power Consumation
ISFP-T9T00-00-E	UTP Cat 6A	30m	-40 ~ 85℃	3.1W

1.25Gbps 1000Base-X Fiber SFP

Gigabit Duplex LC

Gigabit BiDi LC

Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Power Consumption	DDMI	Operating Temperature
ISFP-M7000-85-D(E)	MM	550m	850	-9.5 ~ -4	-17	7.5	-3	1W	V	-10 ~ 70℃
	MM	550m	850	-9.5 ~ -4	-17	7.5	-3	1W	V	-40 ~ 85℃
ISFP-M7002-31-D(E)	MM	2km	1310	-9 ~ -1	-19	10	-1	1W	V	-10 ~ 70℃
	MM	2km	1310	-9 ~ -1	-19	10	-1	1W	V	-40 ~ 85℃
ISFP-S7020-31-D(E)	SM	20km	1310	-8 ~ -2	-23	15	-1	1W	V	-10 ~ 70℃
	SM	20km	1310	-8 ~ -2	-23	15	-1	1W	V	-40 ~ 85℃
ISFP-S7040-31-D(E)	SM	40km	1310	-2 ~ 3	-23	21	-3	1W	V	-10 ~ 70℃
	SM	40km	1310	-2 ~ 3	-23	21	-3	1W	V	-40 ~ 85℃
ISFP-S7020-WA-D(E)	SM	20km	T1310 / R1550	-8 ~ -2	-23	15	-2	1W	V	-10 ~ 70℃
	SM	20km	T1310 / R1550	-8 ~ -2	-23	15	-2	1W	V	-40 ~ 85℃
ISFP-S7020-WB-D(E)	SM	20km	T1550 / R1310	-8 ~ -2	-23	15	-2	1W	V	-10 ~ 70℃
	SM	20km	T1550 / R1310	-8 ~ -2	-23	15	-2	1W	V	-40 ~ 85℃

1.25Gbps 1000Base-X Fiber SC Type SFP

SC-WA

SC-WB

Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Power Consumption	DDMI	Operating Temperature
ISFP-S7020-WA-SC-DE	SM (BiDi)	20km	T1310 / R1550	-8 ~ -2	-23	15	-2	1W	V	-40 ~ 85℃
ISFP-S7020-WB-SC-DE	SM (BiDi)	20km	T1550 / R1310	-8 ~ -2	-23	15	-2	1W	V	-40 ~ 85℃

1.25Gbps 100/1000Base-T UTP SFP

Model Name	Cable Type	Typical Distance	Power Consumption	Operating Temperature
ISFP-T7T00-00(E)	UTP Cat 5e	100m	1.1W	-10 ~ 70℃
	UTP Cat 5e	100m	1.1W	-40 ~ 85℃

155Mbps 100Base-FX Fiber SFP

Duplex LC

BiDi LC

Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Power Consumption	DDMI	Operating Temperature
ISFP-M5002-31-D(E)	MM	2km	1310	-20 ~ -14	-32	12	-8	1W	V	-10 ~ 70℃
	MM	2km	1310	-20 ~ -14	-32	12	-8	1W	V	-40 ~ 85℃
ISFP-S5030-31-D(E)	SM	30km	1310	-15 ~ -8	-34	19	-5	1W	V	-10 ~ 70℃
	SM	30km	1310	-15 ~ -8	-34	19	-5	1W	V	-40 ~ 85℃
ISFP-S5050-31-D(E)	SM	50km	1310	-5 ~ 0	-35	30	-5	1W	V	-10 ~ 70℃
	SM	50km	1310	-5 ~ 0	-35	30	-5	1W	V	-40 ~ 85℃
ISFP-S5020-WA-D(E)	SM	20km	T1310 / R1550	-14 ~ -8	-32	18	-3	1W	V	-10 ~ 70℃
	SM	20km	T1310 / R1550	-14 ~ -8	-32	18	-3	1W	V	-40 ~ 85℃
ISFP-S5020-WB-D(E)	SM	20km	T1550 / R1310	-14 ~ -8	-32	18	-3	1W	V	-10 ~ 70℃
	SM	20km	T1550 / R1310	-14 ~ -8	-32	18	-3	1W	V	-40 ~ 85℃

Industrial Power Supply

Having reliable and stable power for your industrial grade switches or converters is the best way to improve reliability and keep any down time to a minimum. CTC Union's safety certified AC to DC power supplies that are 100% compatible with all of our industrial grade switches and converters.






Model Name	NDR-480-48	NDR-240-48	NDR-120-48 NDR-120-24	DR-120-24	MDR-40-48 MDR-40-24	MDR-20-24
Output						
Adj. DC Voltage	48V ~ 55V	48V ~ 55V	48V ~ 55V 24V ~ 28V	24V ~ 28V	48V ~ 56V 24V ~ 30V	21.6V ~ 26.4V
Rated Current	10A	5A	2.5A 5A	5A	0.83A 17A	1A
Rated Power	480W	240W	120W	120W	39.8W	24W
Input						
Voltage Range	90~ 264VAC 127 ~ 370VDC	90~ 264VAC 127 ~ 370VDC	90~ 264VAC 127 ~ 370VDC	88 ~ 132VAC 176 ~ 264VAC	85 ~ 264VAC 120 ~ 370VDC	85 ~ 264VAC 120 ~ 370VDC
Frequency Range	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Efficiency (Typ.)	92.5%	90%	89%	84%	88%	84%
Function						
LED	DC OK	DC OK	DC OK		DC OK	DC OK
Alarm Relay, Relay Contact Rating (max.)					30V/1A resistive	30V/1A resistive
Housing						
Dimension (W x H x D) (mm)	85.5 x 125.2 x 128.5	63 x 125.2 x 113.5	40 x 125.2 x 113.5	65.5 x 12.5 x100	40 x 90 x 100	22.5 x 90 x 100
Installation Mounting	DIN Rail	DIN Rail	DIN Rail	DIN Rail	DIN Rail	DIN Rail
Certification						
Safety Standard	UL508, TUV EN62368-1, EAC TP TC 004, BSMI CNS14336-1 (meet EN60204-1)	UL508, TUV EN62368-1, EAC TP TC 004, BSMI CNS14336-1 (meet EN60204-1)	UL508, TUV EN62368-1, EAC TP TC 004 (meet EN60204-1)	UL508, UL60950, TUV60950-1	UL508, UL62368-1, TUV EN62368-1, Class I, Div. 2 Group A, B, C, D Hazardous Locations T4, EAC TP TC 004, BSMI CNS14336-1, AS/NZS 60950.1	UL508, TUV EN62368-1, EAC TP TC 004, BSMI CNS14336-1, AS/NZS 62368.1
EMC Emission	EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2, -3, EAC TP TC 020, CNS13438 Class B	EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020, CNS13438	EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020	EN55011, EN55022, CISPR22 Class B, EN61000-3-2 EN61000-3-3	EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020, CNS13438 Class B	EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020, CNS13438 Class B
EMC Immnuity	EN61000-4-2,3,4,5,6,8,11, EN55024,EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, EAC TP TC 020	EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, EAC TP TC 020	EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, EAC TP TC 020	EN55024, EN61000-6-2	EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, EN61204-3, EAC TP TC 020	EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-1, EN61204-3, EAC TP TC 020
Operating Temperature						
	-20 ~ 70°C	-20 ~ 70°C	-20 ~ 70°C	-10 ~ 60°C	-20 ~ 70°C	-20 ~ 70°C