PLANET
Networking & Communication

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Industrial Ethernet

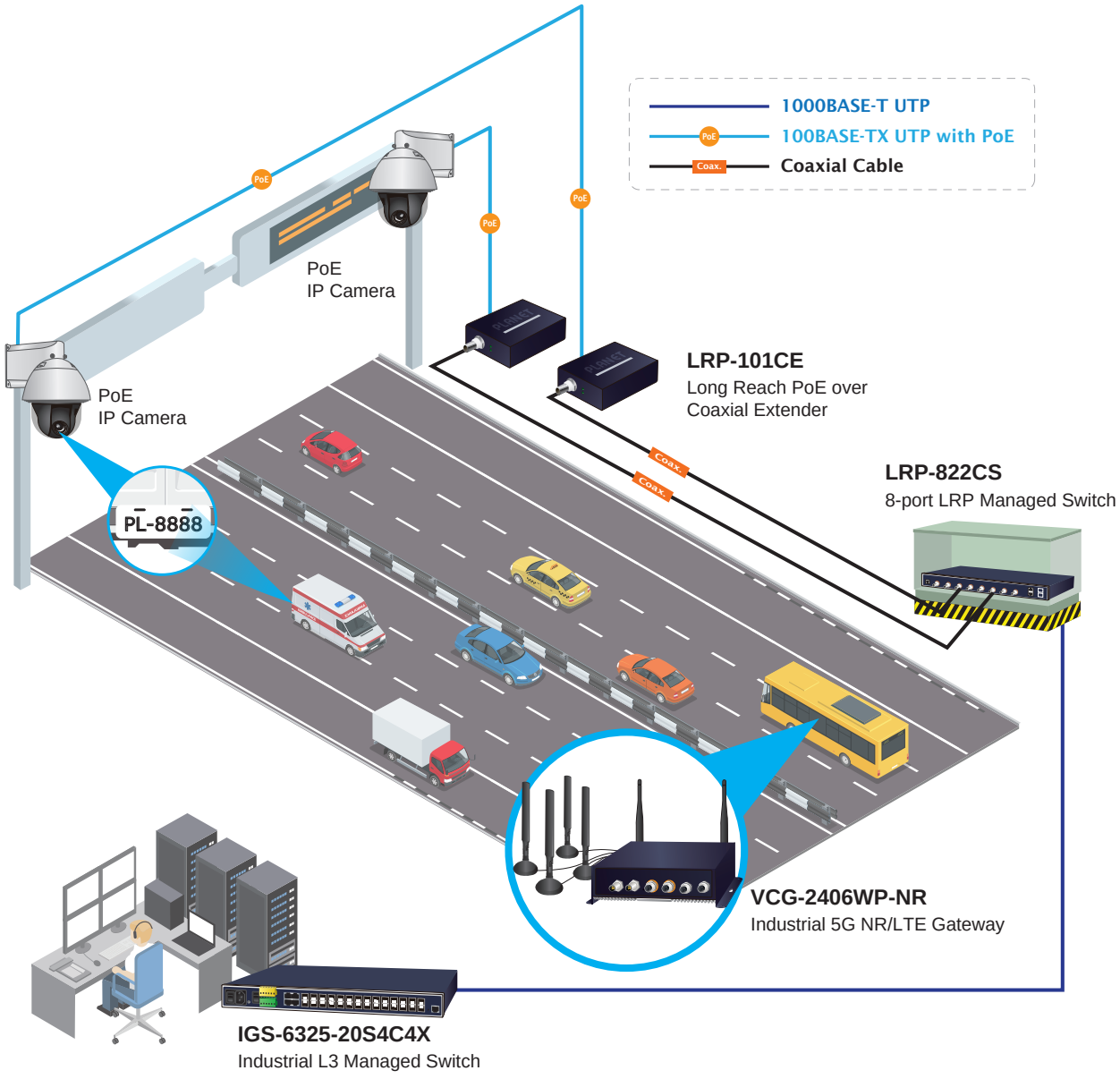
PoE Capability, High-performance
Industrial Automation and IIoT Solution

Total Industrial Networking Solution

PLANET Industrial Networking solution based on Industrial Ethernet, Industrial Automation and IIoT is highly-reliable and secure to ensure continuous operation in harsh environments such as factories, outdoors, and places where extreme temperatures are experienced. With industrial-grade certifications such as RoHS, CE, FCC, EN50155 and E-Mark, PLANET provides a complete product portfolio for a variety of Industrial Applications such as factory automation, intelligent transportation system and more.

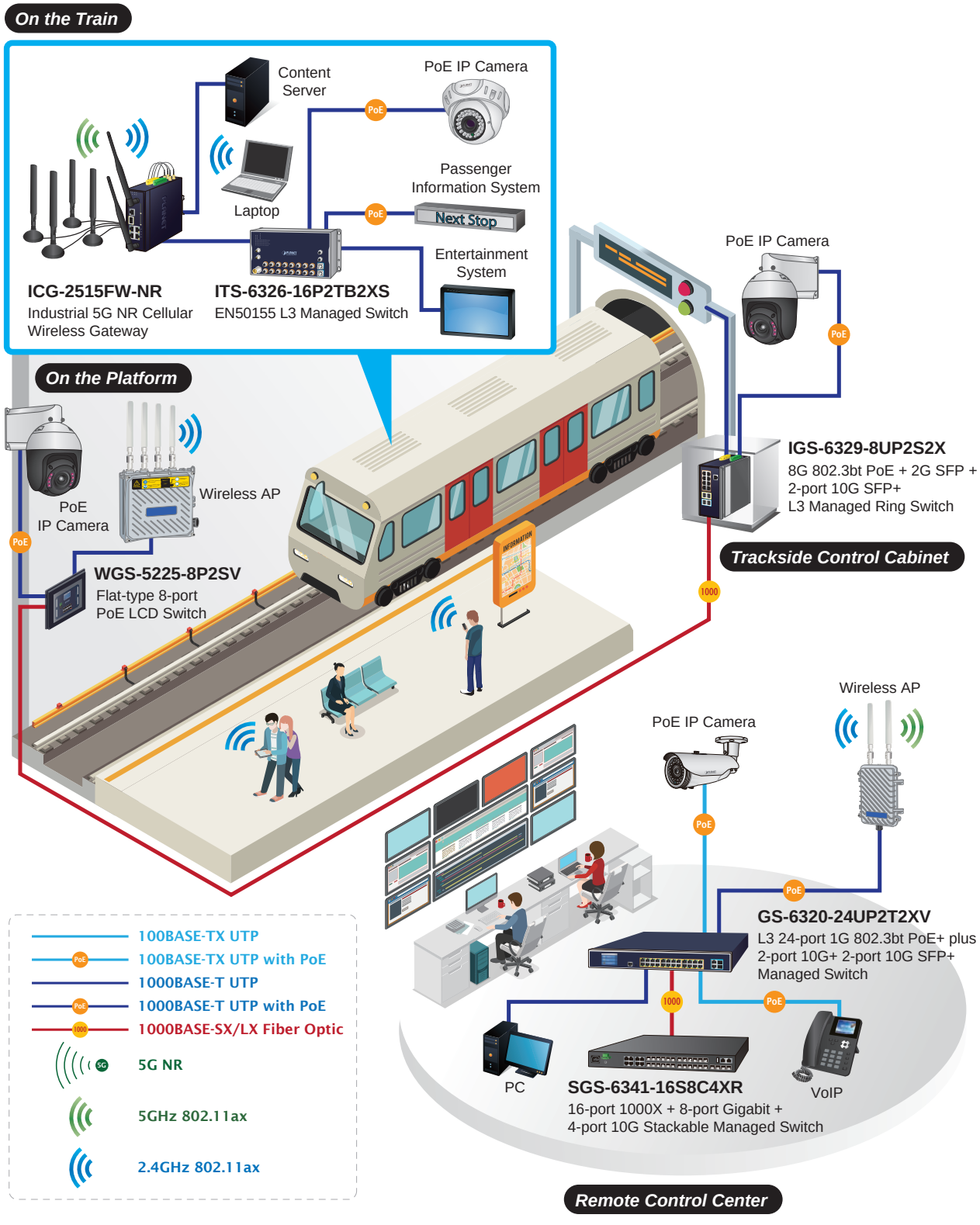
Highway

Meeting EN50155 and E-Mark standards to withstand vibration, shock, etc.



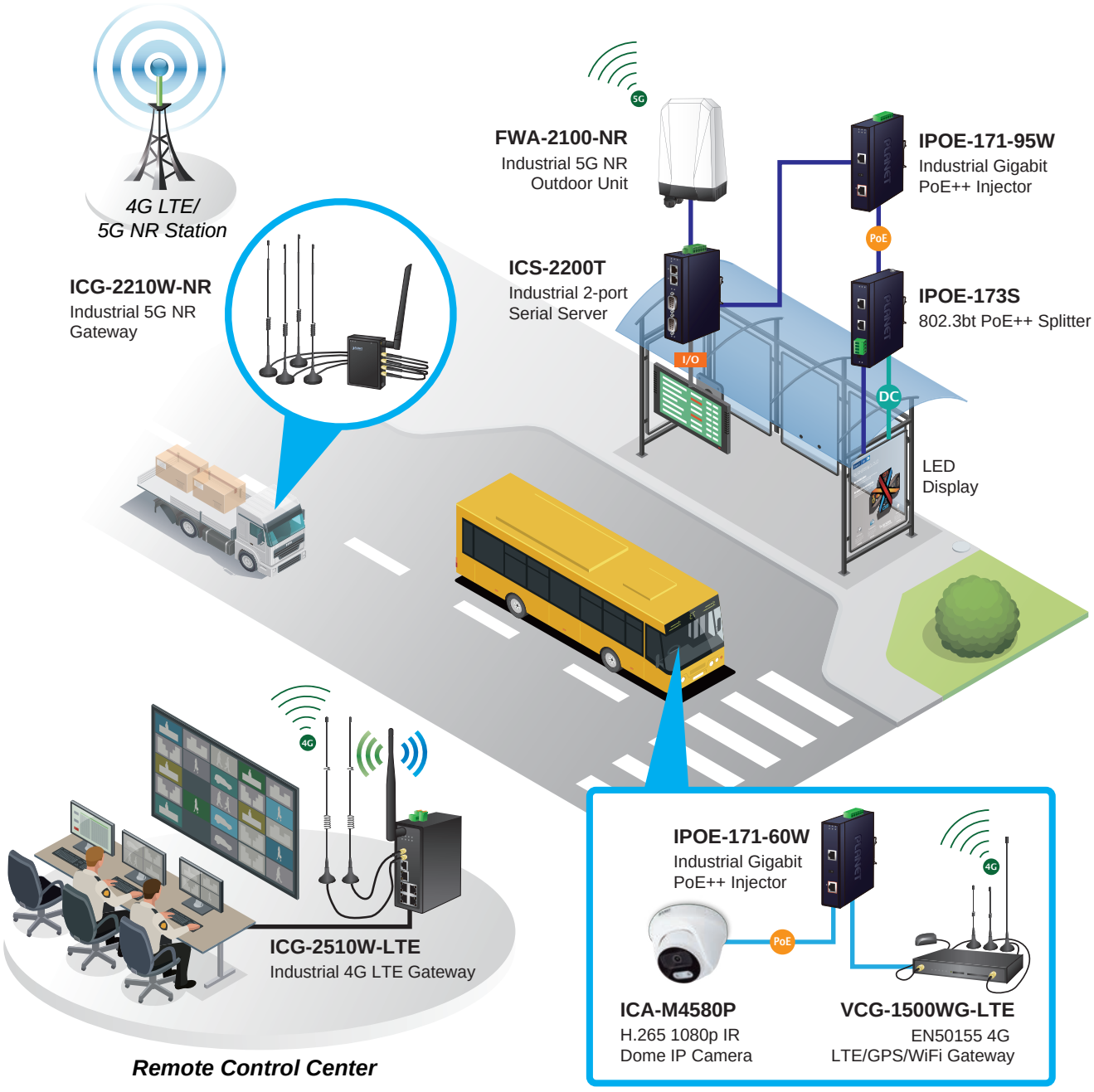
Railway Transmission System

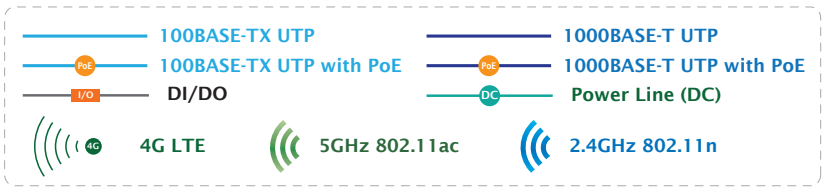
EN50155 certified equipment to ensure transmission quality



In-Vehicle Networking

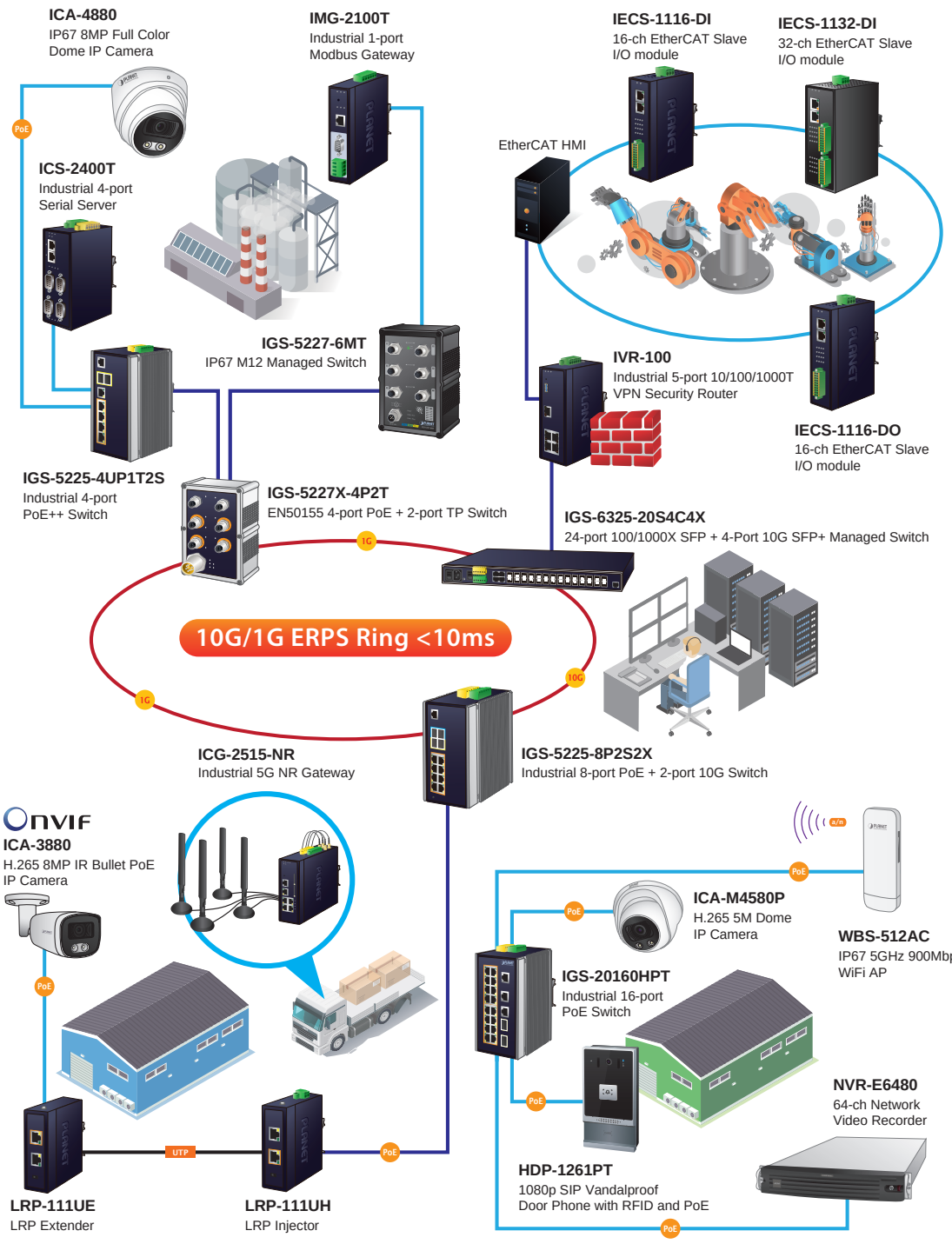
5G NR/4G LTE/GPS connectivity brings security, communications and service management in a moving vehicle.





Industrial Automation

Designed for reliable, secure and smart industrial network Infrastructures for factory automation



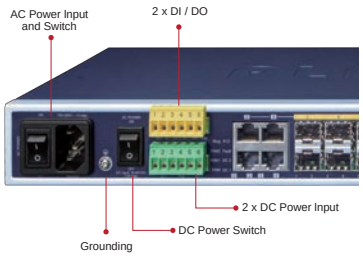
19” Rackmount Managed Ethernet Switches

		L3				L2+ Ring			
Model		IGS-6325-20T4C4X	IGS-6325-20S4C4X	IGS-6325-24UP4X	IGS-6325-24P4X IGS-6325-24P4S	IGSW-24040T	IGS-5225-16T4S	IGS-R4215-24T4X	IGS-R4215-24P4X
Product Image									
		Modbus TCP	Modbus TCP		Modbus TCP PoE	Modbus TCP	Modbus TCP		
Hardware	10/100/1000BASE-T	24	4 (Combo)	24	24	24	16	24	24
	10/100BASE-TX	–	–	–	–	–	–	–	–
	1000 mini-GBIC	4 (Combo)	24	–	4	4 (Combo)	4	Compatible	Compatible
	100BASE-FX	Compatible	Compatible	–	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP+ Slot	4 (1000X/2500X Compatible)		4 (1000X/2500X Compatible) / -		–	–	4	4
	Switch Fabric	128Gbps	158Gbps	128	128Gbps/48Gbps	48Gbps	40Gbps	128Gbps	128Gbps
	DI & DO	2 DI & DO	2 DI & DO	2 DI & 2 DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO
Power	Inputs	Dual 24~60V DC 100~240V AC		Daul 48-54V DC	Dual 48~56V DC	Dual 36~60V DC 100~240V AC		Dual 24~60V DC 100~240V AC	Dual 48~54V DC
	Connector	6-pin terminal block, AC socket		6-pin terminal block		6-pin terminal block, AC socket			6-pin terminal block
	Consumption	42.7 watts	45 watts	1,522 watts	500 watts	30 watts	15.2 watts	24.06 watts	486 watts
Mechanical	Dimensions (W x D x H)	440 x 200 x 44.5 mm		440 x 300 x 44 mm	440 x 300 x 44.5 mm	440 x 200 x 44.5 mm		444 x 200 x 44.2 mm	444 x 200 x 44.2 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal case	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	Rackmount	Rackmount	Rack-mountable	Rackmount	Rackmount	Rackmount	Rackmount	Rackmount
Environment	Operating Temperature	-40~75 degrees C		-40~75 degrees C	-40~75 degrees C	-40~75 degrees C		-10~60 degrees C (AC Input) -40~75 degrees C (DC Input)	-40~75 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)				5% to 95%RH (non-condensing)			
Regulatory	Emissions	FCC Class A, CE EN 61000-6-2	FCC Class A, CE EN 61000-6-2 EN 61000-6-4	FCC Class A, CE	FCC Class A, CE Class A			FCC Class A, CE Class A	
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)							
PoE	PoE Standard	–	–	802.3bt/802.3at/af	802.3af/802.3at	–	–	–	802.3af/at
	PoE Port	–	–	24	24	–	–	–	24
	PoE Budget	–	–	Single power input : 720W Dual power input : 1,440W	400 watts	–	–	–	Single power input : 240W Dual power input : 440W
	PSE Type	–	–	End-span + Mid-span	End-span	–	–	–	End-span
	Power Pin Assignment	–	–	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(+), 3/6(-)	–	–	–	1/2(+), 3/6(-)
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	128 VLAN	8 VLAN	8 VLAN	64 VLAN	64 VLAN
	Routing Tables	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	32	32	Static: 32	Static: 32
	Routing Protocols	OSPFv2/v3, RIP v1/v2, IPv6/IPv4 Static Routing			OSPFv2, IPv6/IPv4 Static Routing	IPv6/IPv4 Static Routing		IPv6/IPv4 Static Routing	
	Accelerated Hardware	●	●	●	●	–	–	●	●
Protocol	VLAN	Port-based VLAN/IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/MAC-based VLAN/Protocol-based VLAN/Voice VLAN							
	IGMP Snooping	v1/v2/v3/query			v1/v2/v3/query	v1/v2/v3/query		v1/ v2/ v3/ query	
	Spanning Tree	802.1w/802.1s			802.1w/802.1s	802.1w/802.1s		802.1w/ 802.1s	
	Data Redundancy	ERPS Ring < 10ms			ERPS Ring < 10ms	ERPS Ring < 10ms		ERPS Ring	
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN							
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security							
	Traffic Control	In/out rate limit, storm control							
Management	Interface	Console, Web, telnet, SSHv2 and TLSv1.2							
	SNMP	v1, v2c, v3 and trap							
	Alarm	Power and port alarm							
	System Log	System Log and remote Syslog							

Metro Fiber Switches

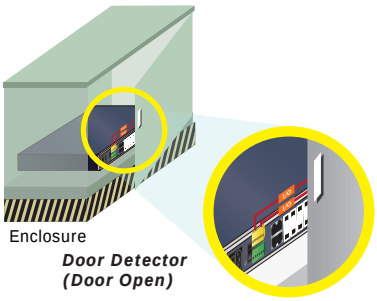
		13" Rackmount		19" Rackmount	
	Model	MGSD-10080F	MGS-6320-2T6S2X	MGSW-24160F	MGSW-28240F
	Product Image				
Hardware	10/100/1000BASE-T	2	2	8	4 (Combo)
	10/100BASE-TX	–	–	–	–
	1000/2500BASE-X	2 x 2500 6 x 1000	4 x 2500 2 x 1000	12 x 1000	10 x 2500 14 x 1000
	100BASE-FX	Compatible	–	Compatible	Compatible
	10G SFP+ Slot	–	2 (1G/2.5Gbps Compatible)	4 (100M/1G/2.5Gbps Compatible)	4 (1G/2.5Gbps Compatible)
	Switch Fabric	26Gbps	68Gbps	120Gbps	158Gbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO
Power	Inputs	Dual 36~60V DC 100~240V AC	Dual 24~57V DC 100~240V AC	Dual 36~60V DC 100~240V AC	Dual 36~60V DC 100~240V AC
	Connector	6-pin terminal block, AC socket			
	Consumption	11.2 watts	18 watts	45 watts	54 watts
Mechanical	Dimensions (W x D x H)	330 x 155 x 43.5 mm	330 x 155 x 43.5	440 x 200 x 44.5 mm	440 x 200 x 44.5 mm
	Enclosure	Metal chassis	Metal Chassis	Metal chassis	Metal chassis
	Mounting	Rackmount	Rackmount	Rackmount	Rackmount
Environment	Operating Temperature	-10~60 degrees C	-10~60 degrees C	0~60 degrees C	-10~60 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)			
Regulatory	Emissions	FCC Class A, CE Class A			
	Stability	–	–	–	–
PoE	PoE Standard	–	–	–	–
	PoE Port	–	–	–	–
	PoE Budget	–	–	–	–
	PSE Type	–	–	–	–
	Power Pin Assignment	–	–	–	–
Layer 3 Features	IP Interfaces	8 VLAN	32 VLAN	64 VLAN	128 VLAN
	Routing Tables	32	Static: 32 Dynamic: 1K	Static: 32	Static: 128 Dynamic: 4K
	Routing Protocols	IPv6/IPv4 Static Routing	RIPv1/v2, OSPFv2/v3 IPv6/IPv4 Static Routing	IPv6/IPv4 Static Routing	RIPv1/v2, OSPFv2/v3 IPv6/IPv4 Static Routing
	Accelerated Hardware	–	•	•	•
Protocol	VLAN	Port-based VLAN/IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/MAC-based VLAN/ Protocol-based VLAN/Voice VLAN/MVR/GVRP			
	IGMP Snooping	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query
	Spanning Tree	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s
	Data Redundancy	ERPS Ring < 10ms	ERPS Ring < 10ms	ERPS Ring < 450ms	ERPS Ring < 10ms
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN			
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security			
	Traffic Control	In/out rate limit, storm control			
Management	Interface	Console, Web, telnet, SSHv2 and TLS v1.2			
	SNMP	v1, v2c, v3 and trap			
	Alarm	Power and port alarm			
	System Log	System Log and remote Syslog			

Fully Front Panel Access Design



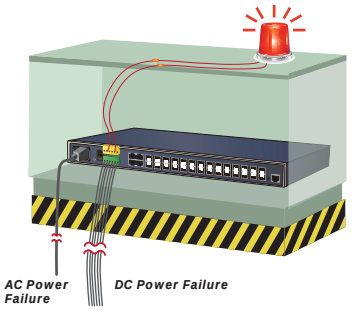
AC Power, DC Power, Digital I/O, and Network Access are all managed on the front panel.

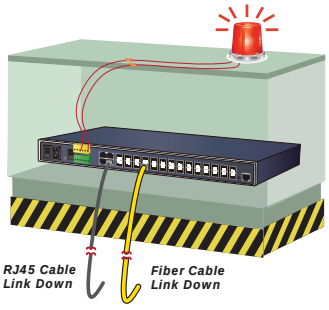
Digital Input



Designed for intrusion and environment detection to protect the assets.

Digital Output





Designed for AC, DC, link alteration

DIN-rail L3 Managed Ethernet Switches

		L3							
Model		IGS-5225-8T2S2X	IGS-6325-5X1T	IGS-6325-16T4X	IGS-6325-16T4S	IGS-6325-8T8S4X	IGS-6325-8T8S	IGS-6325-8T4X	IGS-6325-4T2X
Product Image									
		Modbus TCP				Modbus TCP	Modbus TCP	Modbus TCP	
Hardware	10/100/1000BASE-T	8	–	16	16	8	8	8	4 100/1G/2.5GBASE-T
	1000/2500BASE-X	2	–	–	4	8	8	Compatible	–
	10G/5G/2.5G/1GBASE-T	–	1	–	–	–	–	–	–
	10G SFP+ Slot	2	5	4	–	4	–	4	2
	Switch Fabric	66Gbps	120Gbps	112Gbps	52Gbps	112Gbps	56Gbps	96Gbps	60Gbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO
Power	Inputs	Dual 12~48V DC or 24V AC	Dual 9~48V DCor 24V AC			Dual 12~48V DC or 24V AC			Dual 9~48V DC or 24V AC
	Connector	6-pin terminal block		6-pin terminal block		6-pin terminal block			6-pin terminal block
	Consumption	20 watts	23 watts	24 watts	26 watts	38 watts	26 watts	29 watts	12 watts
Mechanical	Dimensions (W x D x H)	76 x 107 x 152 mm	80 x 135 x 135 mm	96 x 107 x 152 mm	76 x 107 x 152 mm	76 x 107 x 152 mm			60 x 135 x 135 mm
	Enclosure	IP30 aluminum		IP30 aluminum		IP30 aluminum			
	Mounting	DIN-rail, wall-mountable							
Environment	Operating Temperature	-40~75 degrees C							
	Operating Humidity	5% to 95%RH (non-condensing)							
Regulatory	Emissions	FCC Class A, CE Class A							
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)							
PoE	PoE Standard	–	–	–	–	–	–	–	–
	PoE Port	–	–	–	–	–	–	–	–
	PoE Budget	–	–	–	–	–	–	–	–
	PSE Type	–	–	–	–	–	–	–	–
	Power Pin Assignment	–	–	–	–	–	–	–	–
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN	32 VLAN
	Routing Tables	Static: 128 Dynamic: 4K	Static: 512 Dynamic: 3072	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 32 Dynamic: 1K
	Routing Protocols	OSPFv2, IPV6/IPv4 Static Routing	OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing			OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing			OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing
	Accelerated Hardware	●	●	●	●	●	●	●	●
Protocol	VLAN	Port-based VLAN/IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/MAC-based VLAN/Protocol-based VLAN/Voice VLAN/MVR/GVRP							
	IGMP Snooping	v1/v2/v3/query		v1/v2/v3/query		v1/v2/v3/query			
	Spanning Tree	802.1w/802.1s		802.1w/802.1s		802.1w/802.1s			
	Data Redundancy	ERPS Ring < 10ms		ERPS Ring < 10ms		ERPS Ring < 10ms			
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN							
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security							
	Traffic Control	In/out rate limit, storm control							
Management	Interface	Console, Web, telnet, SSHv2 and TLSv1.2							
	SNMP	v1, v2c, v3 and trap							
	Alarm	Power and port alarm							
	System Log	System Log and remote Syslog							

DIN-rail Managed TSN Ethernet Switches

		L3 TSN	L2+ TSN			
Model		TSN-6325-8T4S4X	TSN-5225-6T2C	TSN-5225-4T2S	TSN-5225-4T	TSN-900-2T2S
Product Image						
Hardware	10/100/1000BASE-T	8	8	4	4	2
	1000/2500BASE-X	4	2 x 1000X Combo	2	–	2
	10G/5G/2.5G/1GBASE-T	–	–	–	–	–
	10G SFP+ Slot	4	–	–	–	–
	Switch Fabric	116Gbps	16Gbps	12Gbps	8Gbps	4Gbps
	DI/DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO
Power	Inputs	Dual 9~48V DC or 24V AC	Dual 9~48V DC or 24V AC	Dual 9~48V DC or 24V AC	Dual 9~48V DC or 24V AC	Dual 9~48V DC or 24V AC
	Connector	6-pin terminal block	6-pin terminal block	6-pin terminal block	6-pin terminal block	6-pin terminal block
	Consumption	39 watts	14 watts	10 watts	10 watts	11 watts
Mechanical	Dimensions (W x D x H)	86 x 135 x 152 mm	60 x 135 x 135 mm	60 x 135 x 135 mm	60 x 135 x 135 mm	60 x 135 x 135 mm
	Enclosure	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum
	Mounting	DIN-rail, wall-mountable				
Environment	Operating Temperature	-40~75 degrees C				
	Operating Humidity	5% to 95%RH (non-condensing)				
Regulatory	Emissions	FCC Class A, CE Class A				
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)				
PoE	PoE Standard	–	–	–	–	–
	PoE Port	–	–	–	–	–
	PoE Budget	–	–	–	–	–
	PSE Type	–	–	–	–	–
	Power Pin Assignment	–	–	–	–	–
Layer 3 Features	IP Interfaces	128 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN
	Rounting Tables	Static: 512 Dynamic: 3072	Static: 32	Static: 32	Static: 32	Static: 32
	Rounting Protocols	OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing	–	–	–	–
	Accelerated Hardware	●	–	–	–	–
Protocol	VLAN	Port-based VLAN/IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/MAC-based VLAN/Protocol-based VLAN/Voice VLAN/MVR/GVRP				
	IGMP Snooping	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query
	Spanning Tree	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s
	Data Redundancy	ERPS Ring < 10ms	ERPS Ring < 10ms	ERPS Ring < 10ms	ERPS Ring < 10ms	ERPS Ring < 10ms
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN				
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security				
	Traffic Control	In/out rate limit, storm control				
Time-Sensitive Networking Protocols	Synchronization	IEEE 1588v2 PTP(Precision Time Protocol), PTP Master/PTP Slave/Boundary clock IEEE 802.1AS-Rev gPTP default profile				
	Shapers	802.1Qbv (Time Aware Scheduling) 802.1Qch (Cyclic Queuing and Forwarding)				
	TSN Stream Policing	802.1Qci (Per Stream Filtering and Policing)				
	Redundancy	802.1CB (Seamless redundancy, Frame Replication and Elimination for Redundancy) Also standard Linear and Ring protection				
	Delay reduction	802.1Qbu/802.3br (Frame Preemption)				
Management	Interface	Console, Web, Telnet, SSHv2 and TLSv1.2				
	SNMP	v1, v2c, v3 and trap				
	Alarm	Power and port alarm				
	System Log	System Log and remote Syslog				

DIN-rail L2+ Managed Ethernet Switches

		L2+				
Model		IGS-20040MT	IGS-12040MT	IGS-10020MT	IGS-10080MFT	IGS-5225-4T2S
Product Image						
		Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP
Hardware	10/100/1000BASE-T	16	8	8	2	4
	1000/2500BASE-X	4 x 1000	2 x 2500 2 x 1000	2	2 x 2500 6 x 1000	2
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP+ Slot	–	–	–	–	–
	Switch Fabric	40Gbps	30Gbps	26Gbps	26Gbps	18Gbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO	–	–	–
Power	Inputs	Dual 12~48V DC or 24V AC	Dual 12~72V DC or 24V AC	Dual 12~48V DC or 24V AC	Dual 12~48V DC or 24V AC	Dual 12~48V DC or 24V AC
	Connector	6-pin terminal block		6-pin terminal block		
	Consumption	17 watts	12 watts	10 watts	13.92 watts	6.5 watts
Mechanical	Dimensions (W x D x H)	76 x 107 x 152 mm	76 x 107 x 152 mm	56 x 87.8 x 135 mm	76 x 107 x 152 mm	32 x 87 x 135 mm
	Enclosure	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 metal
	Mounting	DIN-rail, wall-mountable	DIN-rail, wall-mountable	DIN-rail, wall-mountable	DIN-rail, wall-mountable	DIN-rail, wall-mountable
Environment	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)		
Regulatory	Emissions	FCC Class A, CE Class A	FCC Class A, CE Class A	FCC Class A, CE Class A	FCC Class A, CE Class A	FCC Class A, CE Class A
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)				
Layer 3 Features	IP Interfaces	8 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN
	Routing Tables	32	32	32	32	32
	Routing Protocols	IPv6/IPv4 Static Routing	IPv6/IPv4 Static Routing	IPv6/IPv4 Static Routing	IPv6/IPv4 Static Routing	IPv6/IPv4 Static Routing
Protocol	VLAN	Port-based VLAN/IEEE 802.0Q VLAN/Q-in-Q/Private VLAN/MAC-based VLAN/Protocol-based VLAN/Voice VLAN/MVR/GVRP				
	IGMP Snooping	v1/v2/v3/query				
	Spanning Tree	802.1w/802.1s				
	Data Redundancy	ERPS Ring < 10ms				
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN				
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security				
	Traffic Control	In/out rate limit, storm control				
Management	Interface	Console, Web, telnet, SSHv2 and TLSv1.2				
	SNMP	v1, v2c, v3 and trap				
	Alarm	Power and port alarm	Power and port alarm	Power alarm	Power alarm	Power alarm
	System Log	System Log and remote Syslog				

DIN-rail L2/L4 Managed Ethernet Switches

		L2+			L2/L4			
Model		IGS-4215-8T4X	IGS-4215-16T4X	IGS-4215-24T4X	IGS-4215-4T2S	IGS-4215-8T2S	IGS-4215-16T2S IGS-4215-16T2S-U	IGS-801M
Product Image								
Hardware	10/100/1000BASE-T	8	16	24	4	8	16	8
	1000/2500BASE-X	Compatible	Compatible	Compatible	2 x 1000	2 x 1000	2 x 1000	–
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	–
	10G SFP+ Slot	4	4	4	–	–	–	–
	Switch Fabric	96Gbps	112Gbps	128Gbps	12Gbps	20Gbps	36Gbps	16Gbps
	DI & DO	2 DI & 2 DO			–	–	–	–
Power	Inputs	Dual 9~48V DC or 24V AC			Dual 9~48V DC or 24V AC		Dual 12~48V DC or 24V AC	
	Connector	6-pin terminal block			6-pin terminal block		6-pin terminal block	
	Consumption	16 watts	18 watts	20 watts	5 watts	7 watts	15 watts	10 watts
Mechanical	Dimensions (W x D x H)	76 x 135 x 152 mm	86 x 135 x 152 mm	96 x 135 x 152 mm	32 x 87 x 135 mm	50 x 87.8 x 135 mm	72 x 107 x 152 mm	32 x 87 x 135 mm
	Enclosure	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable			DIN-rail, wall-mountable		DIN-rail, wall-mountable	
Environment	Operating Temperature	-40~75 degrees C			-40~75 degrees C		-40~75 degrees C	
	Operating Humidity	5%~95% RH (Non-condensing)			5%~95% RH (Non-condensing)			
Regulatory	Emissions	FCC Class A, CE Class A						
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)						
Protocol	VLAN	IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/Protocol-based VLAN/Voice VLAN/GVRP						
	IGMP Snooping	v1/v2/v3/query						
	Spanning Tree	802.1w/802.1s						
	Data Redundancy	ERPS Ring						
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN						
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security						
	Traffic Control	In/out rate limit, storm control						
Management	Interface	Console, Web, telnet, SSHv2 and TLSv1.2						
	SNMP	v1, v2c, v3 and trap						
	Alarm	Power and port alarm						
	System Log	System Log and remote Syslog						

DIN-rail L3/L2+ Power over Ethernet Managed Switches

	802.3bt PoE++							802.3at PoE+
Model	IGS-5225-4UP1T2S	IGS-5225-4UP1T2S-12V	IGS-6325-4UP2X	IGS-6325-8UP2S2X IGS-6325-8UP2S	IGS-6329-8UP2S2X	IGS-6329-8UP2S4X	IGS-4215-8UP4X	IGS-6325-16P4S
Product Image								
	Modbus TCP 90W		Modbus TCP 90W	Modbus TCP 90W	Modbus TCP 90W	Modbus TCP 90W		Modbus TCP
Hardware	10/100/1000BASE-T	5	5	4 x 2.5G	8	8	8	8	16
	1000/2500BASE-X	2	2	Compatible	2	2	2	Compatible	4
	100BASE-FX	Compatible	Compatible	–	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP Slot	–	–	2	2/-	2	4	4	–
	Switch Fabric	20Gbps	20Gbps	60Gbps	60/26Gbps	60Gbps	100Gbps	96Gbps	52Gbps
	DI & DO	2 DI & DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & DO
Power	Inputs	Dual 48~54V DC	Dual 9~54V DC	Dual 48~54V DC	Dual 48~54V DC	Dual 48~54V DC	Dual 48~54V DC	Dual 48~54V DC	Dual 48~54V DC
	Connector	6-pin terminal block	4-pin terminal block	6-pin terminal block		6-pin terminal block		6-pin terminal block	
	Consumption	391 watts	380 watts max.	381 watts	340/335 watts	401 watts	405 watts	390 watts	440 watts
Mechanical	Dimensions (W x D x H)	76 x 107 x 152 mm	76 x 135 x 152 mm	76 x 135 x 152 mm	76 x 107 x 152 mm	76 x 135 x 152 mm		76 x 135 x 152 mm	
	Enclosure	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum
	Mounting	DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable	
Environment	Operating Temperature	-40~75 degrees C		-40~75 degrees C		-40~75 degrees C		-40~75 degrees C	
	Operating Humidity	5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)	
Regulatory	Emissions	FCC Class A, CE Class A		FCC Class A, CE Class A		FCC Class A, CE Class A EN 61000-6-2, EN 61000-6-4, EN50121-4		FCC Class A, CE Class A	
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)							
PoE	PoE Standard	802.3bt PoE++	802.3bt PoE++	802.3bt PoE++	802.3bt PoE++	802.3bt PoE++	802.3bt PoE++	802.3bt PoE++	802.3af/802.3at
	PoE Port	4	4	4	8	8	8	8	16
	PoE Budget	360 watts	120 watts max. < 24V 240 watts max. 24-48V 360 watts max. >=48V	360 watts	320 watts	360 watts	360 watts	360 watts max.	320 watts max.
	PSE Type	Mid-span + End-span				Mid-span + End-span			End-span
	Power Pin Assignment	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)				Pair 1: 1/2(-), 3/6(+) Pair 2: 4/5(+), 7/8(-)			1/2(+), 3/6(-)
Layer 3 Features	IP Interfaces	8 VLAN	8 VLAN	32 VLAN	128 VLAN	128 VLAN	128 VLAN	64 VLAN	128 VLAN
	Routing Tables	Static: 32	Static: 32	Static: 32 Dynamic: 1K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 32	Static: 128 Dynamic: 4K
	Routing Protocols	IPv6/IPv4 Static Routing		OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing				IPv6/IPv4 Static Routing	OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing
	Accelerated Hardware	–	–	●	●	●	●	●	●
Protocol	VLAN	Port-based VLAN/IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/MAC-based VLAN/Protocol-based VLAN/Voice VLAN/MVR/GVRP							
	IGMP Snooping	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query
	Spanning Tree	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s
	Data Redundancy	ERPS Ring < 10ms		ERPS Ring < 10ms		ERPS Ring < 10ms		ERPS Ring	ERPS Ring < 10ms
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN							
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security							
	Traffic Control	In/out rate limit, storm control							
Management	Interface	Console, Web, telnet, SSHv2 and TLSv1.2							
	SNMP	v1, v2c, v3 and trap							
	Alarm	Power and port alarm							
	System Log	System Log and remote Syslog							

DIN-rail L3/L2+ Power over Ethernet Managed Switches

802.3at PoE+									
Model		IGS-20160HPT	IGS-5225-8P2S2X	IGS-5225-8P4S IGS-5225-8P4S-12V	IGS-5225-8P2T2S	IGS-5225-8P2T4S	IGS-10020PT IGS-10020HPT IGS-10020HPT-U	IGS-5225-4P2S	IGS-4215-16P4X
Product Image		Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	
Hardware	10/100/1000BASE-T	18	8	8	8	8	8	4	16
	1000/2500BASE-X	2	2	2 x 1000 2 x 1000/2500	2	2 x 1000 2 x 1000/2500	2	2 x 1000	Compatible
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP+ Slot	–	2	–	–	–	–	–	4
	Switch Fabric	46Gbps	60Gbps	24Gbps	20Gbps	34Gbps	26Gbps	12Gbps	112Gbps
	DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & 2 DO	2 DI & DO	–	2 DI & 2 DO
Power	Inputs	Dual 48~54V DC		Dual 48~54V DC Dual 12~54V DC	Dual 48~54V DC		Dual 12~48V DC Dual 48~56V DC	Dual 48~54V DC	Dual 48~54V DC
	Connector	6-pin terminal block		6-pin terminal block		6-pin terminal block		6-pin terminal block	
	Consumption	382 watts	300 watts	262 watts	262 watts	265 watts	255 watts	140 watts	395 watts
Mechanical	Dimensions (W x D x H)	86 x 107 x 152 mm	76 x 107 x 152 mm		76 x 107 x 152 mm		76 x 107 x 152 mm	56 x 87 x 135 mm	86 x 135 x 152 mm
	Enclosure	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP40 metal	IP30 aluminum
	Mounting	DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable	
Environment	Operating Temperature	-40~75 degrees C		-40~75 degrees C		-40~75 degrees C		-40~75 degrees C	
	Operating Humidity	5% to 95% RH (non-condensing)		5% to 95% RH (non-condensing)		5%~95% RH (non-condensing)		5% to 95% RH (non-condensing)	
Regulatory	Emissions	FCC Class A, CE Class A		FCC Class A, CE Class A		FCC Class A, CE Class A		FCC Class A, CE Class A	
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)							
PoE	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at
	PoE Port	16	8	8	8	8	8	4	16
	PoE Budget	360 watts max.	240 watts max.	240 watts max.	240 watts max.	240 watts	240 watts max.	120 watts max.	360 watts max.
	PSE Type	End-span	End-span	End-span	End-span	End-span	End-span	End-span	End-span
	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(-)
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN	64 VLAN
	Routing Tables	Static: 128 Dynamic: 4K		32	32	32	32	32	Static: 32
	Routing Protocols	OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing		IPv6/IPv4 Static Routing		IPv6/IPv4 Static Routing		IPv6/IPv4 Static Routing	
	Accelerated Hardware	●	●	–	–	–	–	–	●
Protocol	VLAN	802.1Q VLAN/Q-in-Q/Private VLAN/MAC-based VLAN/Protocol-based VLAN/Voice VLAN/MVR/GVRP							
	IGMP Snooping	v1/v2/v3/query		v1/v2/v3/query		v1/v2/v3/query		v1/v2/v3/query	
	Spanning Tree	802.1w/802.1s		802.1w/802.1s		802.1w/802.1s		802.1w/802.1s	
	Data Redundancy	ERPS Ring < 10ms		ERPS Ring < 10ms		ERPS Ring < 10ms		ERPS Ring < 10ms	ERPS Ring
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN							
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security							
	Traffic Control	In/out rate limit, storm control							
Management	Interface	Console, Web, telnet, SSHv2 and TLSv1.2							
	SNMP	v1, v2c, v3 and trap							
	Alarm	Power and port alarm							
	System Log	System Log and remote Syslog							

DIN-rail L2/L4 Power over Ethernet Managed Switches

		802.3bt PoE++		802.3at PoE+			
Model		IGS-4215-8UP2T2S	IGS-4215-4UP4T2S	IGS-4215-4P4T	IGS-4215-4P4T2S	IGS-4215-8P2T2S	IGS-4215-16P2T2S
Product Image							
Hardware	10/100/1000BASE-T	10	8	8	8	10	18
	1000 BASE-X	2	2	–	2	2	2
	1000/2500BASE-X	–	–	–	–	–	–
	100BASE-FX	Compatible	Compatible	–	Compatible	Compatible	Compatible
	10G SFP+ Slot	–	–	–	–	–	–
	Switch Fabric	24Gbps	20Gbps	16Gbps	20Gbps	24Gbps	40Gbps
	DI & DO	–	–	–	–	–	2 DI & 2 DO
Power	Inputs	Dual 48~54V DC	Dual 48~54V DC	Dual 48~56V DC	Dual 48~54V DC	Dual 48~54V DC	Dual 48~54V DC
	Connector	6-pin terminal block	6-pin terminal block	6-pin terminal block	6-pin terminal block	6-pin terminal block	6-pin terminal block
	Consumption	380 watts	260 watts	160 watts	170 watts	280 watts	351 watts
Mechanical	Dimensions (W x D x H)	76 x 107 x 152 mm	76 x 107 x 152 mm	76 x 107 x 152 mm	76 x 107 x 152 mm	76 x 107 x 152 mm	76 x 135 x 152 mm
	Enclosure	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum
	Mounting	DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable	
Environment	Operating Temperature	-40~75 degrees C		-40~75 degrees C		-40~75 degrees C	
	Operating Humidity	5%~95% RH(Non-condensing)		5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)	
Regulatory	Emissions	FCC Class A, CE Class A	FCC Class A, CE Class A	FCC Class A, CE Class A		FCC Class A, CE Class A	
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)					
PoE	PoE Standard	802.3bt PoE++	802.3bt PoE++	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at
	PoE Port	8	4	4	4	8	16
	PoE Budget	360 watts	240 watts	144 watts	144 watts	240 watts	320 watts
	PSE Type	Mid-span + End-span	Mid-span + End-span	End-span	End-span	End-span	End-span
	Power Pin Assignment	Pair 1: 1/2(-), 3/6(+) Pair 2: 4/5(+), 7/8(-)	Pair 1: 1/2(-), 3/6(+) Pair 2: 4/5(+), 7/8(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)
Layer 3 Features	IP Interfaces	–	–	–	–	–	–
	Routing Tables	–	–	–	–	–	–
	Routing Protocols	–	–	–	–	–	–
	Accelerated Hardware	–	–	–	–	–	–
Protocol	VLAN	IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/Protocol-based VLAN/Voice VLAN/MVR/GVRP					
	IGMP Snooping	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query	v1/v2/v3/query
	Spanning Tree	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s
	Data Redundancy	ERPS Ring	ERPS Ring	ERPS Ring	ERPS Ring	ERPS Ring	ERPS Ring
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN					
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security					
	Traffic Control	In/out rate limit, storm control					
Management	Interface	Console, Web, telnet, SSHv2 and TLSv1.2					
	SNMP	v1, v2c, v3 and trap					
	Alarm	Power and port alarm					
	System Log	System Log and remote Syslog					

Renewable Energy PoE Switch

Model	BSP-360	BSP-4215-6P2T2X	BSP-115PV-15A	BSP-115HP-5A
Product Image				
Interface	5 x 10/100/1000BASE-T	8 x 10/100/1000BASE-T 2 x 1G/2.5G/10GBASE-X SFP+	5 x 10/100/1000BASE-T 1x 100/1000BASE-X	5 x 10/100/1000BASE-T 1x 100/1000BASE-X
PoE Standard	802.3at PoE+	2 x 802.3bt PoE++ 4 x 802.3at PoE+	24V Passive PoE 802.3at PoE+/802.3bt PoE++	802.3at PoE+
PoE Budget	120 watts	360 watts	65 watts	120 watts
PSE Type	End-span	End-span + Mid-span	End-span	End-span
PoE Power Pin	1/2(+), 3/6(-)	Port 1-2: 1/2(-), 3/6(+), 4/5(+), 7/8(-) Port 3~6: 1/2(-), 3/6(+)	Port 1: 1/2(+), 3/6(-), 4/5(+), 7/8(-) Port 2~5: 1/2(+), 3/6(-) Port 4~5: 24V Passive 4/5(+), 7/8(-)	Port 1: 1/2(+), 3/6(-), 4/5(+), 7/8(-) Port 2~5: 1/2(+), 3/6(-)
PoE Power Voltage	52V DC	54V DC	24V DC (passive)/48V DC	48V DC
Management	Web/SNMP	Console/Telnet/SSH/Web/SNMP	–	–
Power Requirement	Power IN: 24~54V DC Battery in/out: 24V DC	Power IN: 15~27V DC for Battery in/out: 12V DC Power IN: 32~45V DC for Battery in/out: 24V DC	Power IN: 20~27V DC for Battery in/out: 12V DC Power IN: 32~45V DC for Battery in/out: 24V DC	Power IN: 15~27V DC for Battery in/out: 12V DC Power IN: 32~45V DC for Battery in/out: 24V DC
Battery Type	Lead-acid, Lithium	Lead-acid, Lithium, Lithium iron	Lead-acid, Lithium, Lithium iron	Lead-acid, Lithium, Lithium iron
Max. Charge Current	8.8A	20A	5A	15A
Features	*24V DC, 1A output load *Low voltage protection and alert *PoE schedule and management *USB backup	*Low voltage protection and alert *PoE schedule and PD alive check *DI and DO interfaces *ERPS Ring *PLANET NMS-360 and CloudNMS	*Passive PoE *PD alive check *Temperature Sensor for Battery Protection	*Smart LCD Display *PD alive check *Temperature Sensor for Battery Protection

Note: Check the total power consumption of your device and the sunshine duration of your area from weather bureau for a proper PV. Improper PV could shorten the battery life or provide insufficient power to Renewable Energy PoE Switch.

Renewable Energy Off-Grid PoE+ Network System Application

Industrial Power over Ethernet Unmanaged Switches

802.3at PoE+									
	Model	ISW-504PT	ISW-514PTF	ISW-504PT-E	IGS-504PT	IGS-504HPT	IGS-514PT	IGS-614HPT	IGS-624HPT
	Product Image								Redundant Fiber
Hardware	10/100/1000BASE-T	–	–	–	5	5	5	5	4
	10/100BASE-TX	5	4	5	–	–	–	–	–
	1000BASE-SX/LX	–	–	–	–	–	1	1	2, compatible with 2500X
	100BASE-FX	–	1	–	–	–	Compatible	Compatible	Compatible
	Fiber Connector Type	–	SFP	–	–	–	SFP	SFP	SFP
	Switch Fabric	1Gbps	1Gbps	1Gbps	10Gbps	10Gbps	10Gbps	12Gbps	12Gbps
	MAC Table	1K	1K	1K	2K	2K	2K	2K	4K
Mechanical	Dimensions (W x D x H)	50 x 87.8 x 135 mm		30 x 76 x 100 mm	30 x 70 x 104 mm	50 x 87 x 135 mm	30 x 70 x 104 mm	50 x 87 x 135 mm	50 x 87 x 135 mm
	Enclosure	IP40 metal	IP40 metal	IP40 metal	IP30 metal	IP40 metal	IP30 metal	IP40 metal	IP40 metal
	Power Requirement	Dual 12~48V DC	Dual 12~48V DC	Dual 48~55V DC	Dual 48~54V DC	Dual 12~56V DC	Dual 48~54V DC	Dual 12~56V DC	Dual 12~56V DC
	Mounting	DIN-rail, wall-mountable			DIN-rail, wall-mountable			DIN-rail, wall-mountable	
Regulatory	EMI/Safety	FCC Class A, CE			FCC Class A, CE Class A			FCC Class A, CE	FCC Class A, CE
Environment	Operating Temperature	-40~75 degrees C			-40~75 degrees C			-40~75 degrees C	
PoE	PoE Standard	802.3at	802.3at	802.3at	802.3at	802.3at	802.3at	802.3at	802.3at
	PoE Port	4	4	4	4	4	4	4	4
	PoE Budget	60 watt max. @ 12V DC 120 watts max. @ 24~48V DC		120 watts	120 watts	60 watt max. @ 12V DC 120 watts max. @ 24~48V DC	120 watts	60 watt max. @ 12V DC 120 watts max. @	
	PSE Type	End-span	End-span	End-span	End-span	End-span	End-span	120 watts max. @	End-span
	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(-)

802.3at PoE+						802.3bt PoE++			
	Model	IGS-1020PTF	IGS-1020PTF-12V	IFGS-1022HPT	IFGS-624PTF	IPOE-E174	IGS-824UPT	IGS-1000-8UP4X	IGS-1000-4UP2X
	Product Image					PoE Extension			
Hardware	10/100/1000BASE-T	8	8	2	–	5	6	8	4 x 2.5GBASE-T
	10/100BASE-TX	–	–	8	4	–	–	–	–
	1000BASE-SX/LX	2	2	2	2	–	2	Compatible	Compatible
	100BASE-FX	Compatible	Compatible	–	–	–	Compatible	–	Compatible
	10G SFP+ slot	–	–	–	–	–	–	4	2
	Fiber Connector Type	SFP	SFP	SFP	SFP	–	SFP	SFP+	SFP+
	Switch Fabric	20Gbps	20Gbps	5.6Gbps	4.8Gbps	10Gbps	16Gbps	96Gbps	60Gbps
	MAC Table	8K	8K	16K	4K	8K	8K	16K	4K
Mechanical	Dimensions (W x D x H)	76 x 107 x 152 mm	76 x 107 x 152 mm	72 x 105 x 152 mm	50 x86.1x135 mm	32 x 87.8 x 135 mm	50 x 87 x 135 mm	76 x 135 x 152 mm	76.8 x 107.3 x 152 mm
	Enclosure	IP30 metal	IP30 aluminum	IP30 aluminum	IP40 metal	IP30 metal	IP30 metal	IP30 aluminum	IP30 aluminum
	Power Requirement	Dual 48~56V DC	Dual 12~56V DC	48~56V DC	Dual 12~54V DC	End-span + Mid-span 802.3bt PoE++ PD	48~56V DC	Dual 48 ~ 54V DC	Dual 48~54V DC
	Mounting	DIN-rail, wall-mountable				DIN-rail, wall-mountable			
Regulatory	EMI/Safety	FCC Class A, CE Class A		FCC Class A, CE	FCC Class A, CE	FCC Class A, CE			FCC Class A, CE
Environment	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C			-40~75 degrees C
PoE	PoE Standard	802.3at	802.3at	802.3at	802.3at	802.3af/802.3at	802.3bt	802.3bt PoE++	802.3br PoE++
	PoE Port	8	8	8	4	4	4	8	4
	PoE Budget	240 watts	60 watts max.@12V DC 120 watts max.@24V DC 240 watts max.@48~56V DC	240 watts max.	120 watts	50 watts max.	240 watts max.	360 watts max.	360 watts max.
	PSE Type	End-span	End-span	End-span	End-span	End-span	Mid-span + End-span		
	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(+) 4/5(+), 7/8(-)	Pair 1: 1/2(-), 3/6(+) Pair 2: 4/5(+), 7/8(-)	Pair 1: 1/2(-), 3/6(+) Pair 2: 4/5(+), 7/8(-)

EN50155 L3 Intelligent Transportation Managed Switches

		Wide Voltage Input/ 802.3at PoE+/ 10G Q-ODC Fiber			Wide Voltage Input/ 802.3at PoE+			
Model		ITS-6326-16P2TB2XS-WV	ITS-6326-16P2T2XS-WV	ITS-6326-8P10T2XS-WV	ITS-6326-16P2TB-WV	ITS-6326-16P2T-WV	ITS-6326-16P-WV	ITS-6326-8P8T-WV
Product Image								
Hardware	10/100/ 1000BASE-T	16 x M12, 8-pin X-coded connector			16 x M12, 8-pin X-coded connector		16 x M12, 8-pin X-coded connector	
	1000/ 2500BASE-X	–	–	–	–	–	–	–
	10G/5G/2.5G/ 1GBASE-T	2 x M12, 8-pin X-coded connector			2 x M12, 8-pin X-coded connector		–	–
	Power Failure Bypass Pair	1 (Port 17-18) Link Speed up to 10GBASE-T	–	–	1 (Port 17-18) Link Speed up to 10GBASE-T	–	–	–
	10GBASE-X	2 x Q-ODC, single mode Fiber			–	–	–	–
	Switch Fabric	112Gbps	112Gbps	112Gbps	72Gbps	72Gbps	32Gbps	32Gbps
	DI/DO	1 DI & 1 DO	1 DI & 1 DO	1 DI & 1 DO	1 DI & 1 DO	1 DI & 1 DO	1 DI & 1 DO	1 DI & 1 DO
Power	Inputs	Dual 24~110V DC			Dual 24~110V DC		Dual 24~110V DC	
	Connector	5-pin M23 male connector			5-pin M23 male connector		5-pin M23 male connector	
	Consumption	170 watts	170 watts	170 watts	153 watts	153 watts	145 watts	145 watts
Mechanical	Dimensions (W x D x H)	390 x 195 x 70 mm	390 x 195 x 70 mm	390 x 195 x 70 mm	390 x 195 x 70 mm	390 x 195 x 70 mm	390 x 195 x 70 mm	390 x 195 x 70 mm
	Enclosure	IP40 aluminum	IP40 aluminum	IP40 aluminum	IP40 aluminum	IP40 aluminum	IP40 aluminum	IP40 aluminum
	Mounting	Wall-Mountable						
Environment	Operating Temperature	-40~70 degrees C						
	Operating Humidity	5% to 95%RH (non-condensing)						
Regulatory	Emissions	FCC Class A, CE Class A						
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)						
PoE	PoE Standard	802.3at PoE+	802.3at PoE+	802.3at PoE+	802.3at PoE+	802.3at PoE+	802.3at PoE+	802.3at PoE+
	PoE Port	16	16	8	16	16	16	8
	PoE Budget	80 watts max. < 36V (Default) 100 watts max. >=36V						
	PSE Type	End-span	End-span	End-span	End-span	End-span	End-span	End-span
	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(-)
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN	32 VLAN
	Routing Tables	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K
	Routing Protocols	OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing						
	Accelerated Hardware	•	•	•	•	•	•	•
Protocol	VLAN	Port-based VLAN/ IEEE802.1Q VLAN/ Q-in-Q/ Private VLAN/ Mac-based VLAN/ Protocol-based VLAN/ Voice VLAN/ MVR/ GVRP						
	IGMP Snooping	v1/ v2/ v3/ query	v1/ v2/ v3/ query	v1/ v2/ v3/ query	v1/ v2/ v3/ query	v1/ v2/ v3/ query	v1/ v2/ v3/ query	v1/ v2/ v3/ query
	Spanning Tree	802.1w/ 802.1s	802.1w/ 802.1s	802.1w/ 802.1s	802.1w/ 802.1s	802.1w/ 802.1s	802.1w/ 802.1s	802.1w/ 802.1s
	Data Redundancy	ERPS Ring < 10 ms	ERPS Ring < 10 ms	ERPS Ring < 10 ms	ERPS Ring < 10 ms	ERPS Ring < 10 ms	ERPS Ring < 10 ms	ERPS Ring < 10 ms
	QoS	Port-based/ 802.1P/ IP DSCP Policy-based/ Voice VLAN						
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security						
	Traffic Control	In/out rate limit, storm control						
Management	Interface	Console, Web, Telnet, SSHv2 and TLSv1.2						
	SNMP	v1, v2c, v3 and trap						
	Alarm	Port alarm						
	System Log	System Log and remote Syslog						

EN50155 L3 Intelligent Transportation Managed Switches

		Wide Voltage Input		Low Voltage Input/ 802.3at PoE		
Model		ITS-6326-18T2XS-WV	ITS-6326-16T-WV	ITS-6326-16P-LV	ITS-6326-8P8T-LV	ITS-6326-16T-LV
Product Image						
Hardware	10/100/ 1000BASE-T	16 x M12, 8-pin X-coded connector	16 x M12, 8-pin X-coded connector	16 x M12, 8-pin X-coded connector	16 x M12, 8-pin X-coded connector	16 x M12, 8-pin X-coded connector
	1000/ 2500BASE-X	–	–	–	–	–
	10G/5G/2.5G/ 1GBASE-T	2 x M12, 8-pin X-coded connector	–	–	–	–
	Power Failure Bypass Pair	–	–	–	–	–
	10GBASE-X	2 x Q-ODC, single mode Fiber	–	–	–	–
	Switch Fabric	112Gbps	32Gbps	32Gbps	32Gbps	32Gbps
	DI/DO	1 DI & 1 DO	1 DI & 1 DO	1 DI & 1 DO	1 DI & 1 DO	1 DI & 1 DO
Power	Inputs	Dual 24~110V DC	Dual 24~110V DC	Dual 24~54V DC	Dual 24~54V DC	Dual 24~54V DC
	Connector	5-pin M23 male connector	5-pin M23 male connector	5-pin M23 male connector	5-pin M23 male connector	5-pin M23 male connector
	Consumption	32 watts	25 watts	145 watts	145 watts	25 watts
Mechanical	Dimensions (W x D x H)	390 x 195 x 70 mm	390 x 195 x 70 mm	390 x 195 x 70 mm	390 x 195 x 70 mm	390 x 195 x 70 mm
	Enclosure	IP40 aluminum	IP40 aluminum	IP40 aluminum	IP40 aluminum	IP40 aluminum
	Mounting	Wall-Mountable				
Environment	Operating Temperature	-40~70 degrees C				
	Operating Humidity	5% to 95%RH (non-condensing)				
Regulatory	Emissions	FCC Class A, CE Class A				
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)				
PoE	PoE Standard	–	–	802.3at PoE+	802.3at PoE+	–
	PoE Port	–	–	16	8	–
	PoE Budget	–	–	80 watts max. < 36V (Default) 100 watts max. >=36V	80 watts max. < 36V (Default) 100 watts max. >=36V	–
	PSE Type	–	–	End-span	End-span	–
	Power Pin Assignment	–	–	1/2(+), 3/6(-)	1/2(+), 3/6(-)	–
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN
	Routing Tables	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K	Static: 128 Dynamic: 4K
	Routing Protocols	OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing				
	Accelerated Hardware	●	●	●	●	●
Protocol	VLAN	Port-based VLAN/ IEEE802.1Q VLAN/ Q-in-Q/ Private VLAN/ Mac-based VLAN/ Protocol-based VLAN/ Voice VLAN/ MVR/ GVRP				
	IGMP Snooping	v1/ v2/ v3/ query	v1/ v2/ v3/ query	v1/ v2/ v3/ query	v1/ v2/ v3/ query	v1/ v2/ v3/ query
	Spanning Tree	802.1w/ 802.1s	802.1w/ 802.1s	802.1w/ 802.1s	802.1w/ 802.1s	802.1w/ 802.1s
	Data Redundancy	ERPS Ring < 10 ms	ERPS Ring < 10 ms	ERPS Ring < 10 ms	ERPS Ring < 10 ms	ERPS Ring < 10 ms
	QoS	Port-based/802.1P/IP DSCP Policy-based/ Voice VLAN				
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security				
	Traffic Control	In/out rate limit, storm control				
Management	Interface	Console, Web, Telnet, SSHv2 and TLSv1.2				
	SNMP	v1, v2c, v3 and trap				
	Alarm	Port alarm				
	System Log	System Log and remote Syslog				

EN50155 Railway/Ethernet Switches & Extenders

				802.3at PoE+			L2+ Ring	
Model		ITS-5216-8P2TB-WV	ITS-5216-8P4T-WV	IGS-5227X-4P2T	IGS-604HPT-M12	IGS-604HPT-RJ	IGS-5227-6MT-X	IGS-5227-6T
Product Image								
				Modbus TCP	Modbus TCP	Modbus TCP		Modbus TCP
Hardware	10/100/1000BASE-T	10 x M12, 8-pin X-coded connector	12 x M12, 8-pin X-coded connector	6 x M12, 8-pin X-coded connector	6 x M12, 8-pin A-coded connector	6 x Waterproof RJ45	6 x M12, 8-pin X-coded connector	6 x Waterproof RJ45
	1000BASE-X	–	–	–	–	–	–	–
	100BASE-FX	–	–	–	–	–	–	–
	Switch Fabric	20Gbps	24Gbps	12Gbps	12Gbps	12Gbps	12Gbps	12Gbps
	DI & DO	1 DI & 1 DO	1 DI & 1 DO	–	–	–	–	–
Power	Inputs	Dual 24~110V DC	Dual 24~110V DC	Dual 12~48V DC	Dual 48~56V DC	Dual 48~56V DC	Dual 9~48V DC	Dual 9~48V DC
	Connector	5-pin K-coded male connector	5-pin K-coded male connector	5-pin M23 male connector	5-pin A-Coded M12 male connector		5-pin A-Coded M12 male connector	
	Consumption	120 watts	120 watts	160 watts	160 watts	160 watts	10 watts	10 watts
Mechanical	Dimensions (W x D x H)	176 x 107 x 110mm		163 x 103 x 53 mm	163 x 103 x 53 mm	163 x 103 x 53 mm	163 x 103 x 53 mm	163 x 103 x 53 mm
	Enclosure	IP50 metal		IP67 aluminum	IP67 aluminum	IP67 aluminum	IP67 aluminum	IP67 aluminum
	Mounting	Wall-mountable		DIN-rail, wall-mountable				
Environment	Operating Temperature	-40~70 degrees C		-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)				
Regulatory	Emissions	FCC Class A, CE Class A		FCC Class A, CE Class A				
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)						
PoE	PoE Standard	802.3at PoE+		802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	–	–
	PoE Port	8		4	4	4	–	–
	PoE Budget	80 watts max. < 36V (Default) 100 watts max. >=36V		60 watts max.@12V DC 90 watts max.@24V DC 144 watts max.@48~56V DC	144 watts	144 watts	–	–
	PSE Type	End-span	End-span	End-span	End-span	End-span	–	–
	Power Pin Assignment	1/2(+), 3/6(-)		1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	–	–
Layer 3 Features	IP Interfaces	64 VLAN		8 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN
	Routing Tables	32	32	32	32	32	32	32
	Routing Protocols	IPv6/IPv4 Static Routing		IPv6/IPv4 Static Routing				
	Accelerated Hardware	●	●	–	–	–	–	–
Protocol	VLAN	IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/ Protocol-based VLAN/Voice VLAN/MVR/GVRP		Port-based VLAN/IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/ MAC-based VLAN/Protocol-based VLAN/Voice VLAN/MVR			802.1Q VLAN/Q-in-Q/Private VLAN/ MAC-based VLAN, Protocol-based VLAN/Voice VLAN/MVR	
	IGMP Snooping	v1/v2/v3/query		v1/v2/v3/query		v1/v2/v3/query	v1/v2/v3/query	
	Spanning Tree	802.1w/802.1s		802.1w/802.1s		802.1w/802.1s	802.1w/802.1s	
	Data Redundancy	ERPS Ring < 450ms		ERPS Ring < 20ms		ERPS Ring < 20ms	ERPS Ring < 20ms	
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN		Port-based/802.1P/IP DSCP Policy-based/Voice VLAN				
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security		802.1x, Static MAC, MAC filter, Port Security and IP Security				
	Traffic Control	In/out rate limit, storm control		In/out rate limit, storm control				
Management	Interface	Web, telnet, SSHv2 and TLSv1.3		Web, telnet, SSH and SSL				
	SNMP	v1, v2c, v3 and trap		v1, v2c, v3 and trap				
	Alarm	Power and port alarm		Power and port alarm				
	System Log	System Log and remote Syslog		System Log and remote Syslog				

EN50155 Railway/Ethernet Switches & Extenders

		M12 Switches			RJ45 Extenders
Model		ISW-800T-M12	ISW-808PT-M12	ISW-800PT-M12A	IPOE-E302
	Product Image				95W
Hardware	Interface	8 x M12, 4-pin D-coded connector	8 x M12, 4-pin D-coded connector	8 x M12, 4-pin D-coded connector	3 x IP67 waterproof RJ45
	Data Rate	10/100Mbps	10/100Mbps	10/100Mbps	10/100/1000Mbps
	Power over Ethernet	–	8-port 802.3at PoE+	8-port 802.3at PoE+	1-port 802.3bt PoE PD 2-port 802.3bt/at PoE PSE
	Switch Fabric	1.6Gbps	1.6Gbps	1.6Gbps	6Gbps
Mechanical	Dimensions (W x D x H)	103 x 53 x 163 mm	103 x 53 x 163 mm	103 x 53 x 163 mm	150 x 72 x 44 mm
	Weight	976g	1,150g	1,150g	320g
	Enclosure	IP67 aluminum	IP67 aluminum	IP50 metal	IP67 aluminum
	Mounting	DIN-rail, wall-mountable	DIN-rail, wall-mountable	DIN-rail, wall-mountable	Wall-mountable
Power	Inputs	Dual 12~48V DC	Dual 12~56V DC	Dual 12~56V DC	50~57V DC PoE
	Connector	5-pin A-coded M12 male connector	5-pin A-coded M23 male connector		RJ45
	Consumption	4 watts	250 watts	250 watts	60~95 watts
Environment	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)	5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)
Regulatory	Emissions/Safety	FCC Class A, CE Class A	FCC Class A, CE Class A	FCC Class A, CE Class A	FCC Class A, CE Class A
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)			

Flat-type Unmanaged Ethernet Switches

		Switch	PoE+ Switch			
Model		WGS-803	WGS-804HP	WGS-818HP	WGS-814HP	WGS-E304PT
	Product Image					
Hardware	10/100/1000BASE-T	8	8	8	8	5
	10/100BASE-TX	–	–	–	–	–
	1000 mini-GBIC	–	–	–	–	–
	100BASE-FX	–	–	–	–	–
	Fiber Connector Type	–	–	–	–	–
	Switch Fabric	16Gbps	16Gbps	16Gbps	16Gbps	10Gbps
Power	Inputs	12~48V DC or 24V AC	Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC	802.3bt PoE++ Type 4 PD
	Connector	3-pin terminal block, DC socket		DC Socket	DC Socket	-
Mechanical	Dimensions (W x D x H)	148 x 25 x 134 mm	148 x 25 x 134 mm	148 x 25 x 134 mm	148 x 25 x 134 mm	148 x 24.2 x 134 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable and magnetic wall mount				
Environment	Operating Temperature	-10~60 degrees C	-10~60 degrees C	-20~60 degrees C	-20~60 degrees C	-40~75 degrees C
Regulatory	Emissions	FCC Class A, CE Class A		FCC Class A, CE Class A		FCC Class A, CE
PoE	PoE Standard	–	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3at/802.3at
	PoE Port	–	4	8	4	4
	PoE Budget	–	120 watts	120 watts	60 watts	70 watts max.
	PSE Type	–	End-span	End-span	End-span	End-span
	Power Pin Assignment	–	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)

Flat-type Managed Ethernet Switches

		L3 PoE++	L2/L2+ PoE++/PoE+ Switches						
Model		WGS-6325-8UP2X	WGS-5215-16UP4X	WGS-5215-16UP4XV	WGS-5225-8UP2SV	WGS-5225-8P2SV	WGS-5225-8P2S	WGS-4215-8P2XV	WGS-4215-8P2X
Product Image									
Hardware	LCD	–	–	2.4" Color TFT touch screen			–	2.4" Color TFT Touch Screen	–
	10/100/1000BASE-T	4 x 2.5G 4 x 1G	16	16	8	8	8	8	8
	10/100BASE-TX	–	–	–	–	–	–	–	–
	1000/2500BASE-X	Compatible	Compatible		2	2	2	Compatible	Compatible
	100BASE-FX	–	Compatible		Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP+ Slot	2	4		–	–	–	2	2
	Switch Fabric	68Gbps	112Gbps		26Gbps	26Gbps	26Gbps	56Gbps	56Gbps
	DI/DO	–	2 DI + 2 DO		–	–	–	–	–
Power	Inputs	Dual 48~54V DC	Dual 48~54V DC		Dual 48~54V DC	Dual 48~54V DC	Dual 48~54V DC	Dual 48~54V DC	
	Connector	4-pin terminal block	4-pin terminal block		4-pin terminal block	3-pin terminal block, DC socket		4-pin terminal block	
	Consumption	497 watts	773 watts	775 watts	750 watts	265 watts	265 watts	344.3 watts	337.3 watts
Mechanical	Dimensions (W x D x H)	245 x 36 x 140 mm	245 x 59 x 140 mm		245 x 36 x 140 mm	180 x 25 x 134 mm	180 x 25 x 134 mm	246 x 36 x 140 mm	
	Enclosure	IP30 aluminum	IP30 aluminum		IP30 aluminum	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	Wall-mountable	Wall-mountable	Wall-mountable	Wall-mountable	DIN-rail, wall-mountable and magnetic wall mount		Wall-mountable	
Environment	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-20~70 degrees C	-20~70 degrees C	-20~70 degrees C	-40~75 degrees C	-20~70 degrees C	-40~75 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)							
Regulatory	Emissions	FCC Class A, CE Class A							
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)							
PoE	PoE Standard	802.3bt PoE++				802.3af/802.3at			
	PoE Port	8	16	16	8	8	8	8	8
	PoE Budget	480 watts	720 watts	720 watts	720 watts	240 watts	240 watts	288 watts max.	288 watts max.
	PSE Type	Mid-span + End-span				End-span			
	Power Pin Assignment	1/2(-), 3/6(+) 4/5(+),7/8(-)				1/2(+), 3/6(-)			
Layer 3 Features	IP Interfaces	32 VLAN	64 VLAN	64 VLAN	8 VLAN	8 VLAN	8 VLAN	64 VLAN	64 VLAN
	Routing Tables	Static: 32 Dynamic: 1K	Static: 32	Static: 32	32	32	32	Static: 32	Static: 32
	Routing Protocols	OSPFv2/v3, RIPv1/v2, IPv6/IPv4 Static Routing	IPv6/IPv4 Static Routing			IPv6/IPv4 Static Routing			
	Accelerated Hardware	●	●	●	–	–	–	●	●
Protocol	VLAN	IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/Protocol-based VLAN/Voice VLAN/GVRP							
	IGMP Snooping	v1/v2/v3/query							
	Spanning Tree	802.1w/802.1s							
	Data Redundancy	ERPS Ring < 10ms	ERPS Ring < 450ms	ERPS Ring < 450ms	ERPS Ring < 10ms	ERPS Ring < 10ms	ERPS Ring < 10ms	ERPS Ring < 450ms	ERPS Ring < 450ms
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN							
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security							
	Traffic Control	In/out rate limit, storm control							
Management	Interface	Web, telnet, SSHv2 and TLSv1.2	Console Web, telnet, SSHv2 and TLSv1.2		Web, telnet, SSHv2 and TLSv1.2			Web, Telnet, SSHv2 and TLSv1.2	
	SNMP	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap
	Alarm	–	Power and port alarm		–	–	–	Power and port alarm	
	System Log	System Log and remote Syslog			System Log and remote Syslog			System Log and remote Syslog	

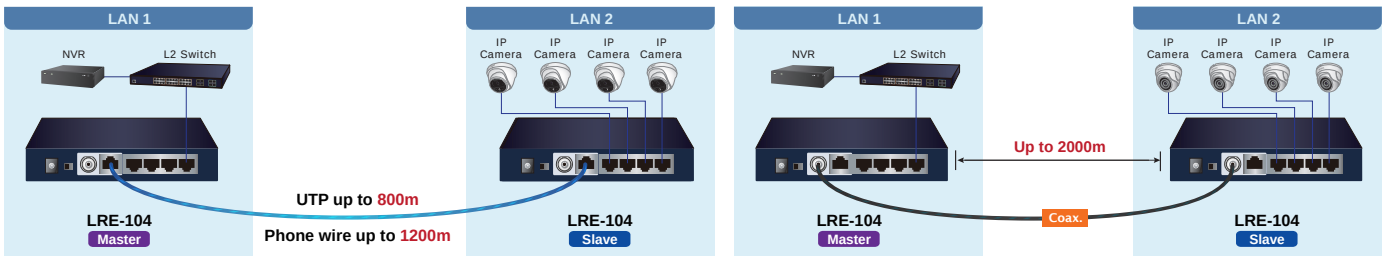
Flat-type Managed Ethernet Switches

		L2/L2+ Switches			L2/L4 PoE+ Switches			
Model		WGS-4215-8T	WGS-4215-8T2S	WGS-5225-8T2SV	WGS-4215-16P2S	WGS-4215-8HP2S	WGS-4215-8P2S	WGS-804HPT
Product Image								
Hardware	LCD	–	–	2.4" Color TFT touch screen	–	–	–	–
	10/100/1000BASE-T	8	8	8	16	8	8	8
	10/100BASE-TX	–	–	–	–	–	–	–
	1000/2500BASE-X	–	–	2	–	–	–	–
	1000BASE-X	–	2	–	2	2	2	–
	100BASE-FX	–	Compatible	Compatible	Compatible	Compatible	Compatible	–
	10G SFP+ Slot	–	–	–	–	–	–	–
	Switch Fabric	16Gbps	20Gbps	26Gbps	36Gbps	20Gbps	20Gbps	16Gbps
	DI/DO	–	–	–	–	–	–	–
Power	Inputs	12~48V DC or 24V AC			Dual 48~54V DC	48~54V DC	Dual 48~56V DC	
	Connector	3-pin terminal block, DC socket						
	Consumption	7 watts	7.9 watts	12 watts	240 watts	396 watts	210 watts	152 watts
Mechanical	Dimensions (W x D x H)	148 x 25 x 134 mm	178 x 25 x 134 mm	180 x 25 x 134 mm	245 x 25 x 134 mm	245 x 36 x 140 mm	178 x 25 x 134 mm	148 x 25 x 134 mm
	Enclosure	IP30 metal		IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable and magnetic wall mount						
Environment	Operating Temperature	-40~75 degrees C		-20~70 degrees C	-10~60 degrees C	-40~75 degrees C		
	Operating Humidity	5% to 95%RH (non-condensing)						
Regulatory	Emissions	FCC Class A, CE Class A						
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)						
PoE	PoE Standard	–	–	–	802.3at PoE+	802.3bt PoE++	802.3at	802.3at
	PoE Port	–	–	–	8	8	8	4
	PoE Budget	–	–	–	240 watts	360 watts	200 watts	144 watts
	PSE Type	–	–	–	End-span	End-span+Mid-span	End-span	End-span
	Power Pin Assignment	–	–	–	1/2(+), 3/6(-)	1/2(-), 3/6(+) 4/5(+),7/8(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)
Layer 3 Features	IP Interfaces	–	–	8 VLAN	–	–	–	–
	Routing Tables	–	–	32	–	–	–	–
	Routing Protocols	–	–	IPv6/IPv4 Static Routing	–	–	–	–
	Accelerated Hardware	–	–	–	–	–	–	–
Protocol	VLAN	IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/Protocol-based VLAN/Voice VLAN/GVRP						
	IGMP Snooping	v1/v2/v3/query		v1/v2/v3/query		v2/v3/query		
	Spanning Tree	802.1w/802.1s		802.1w/802.1s		802.1w/802.1s		
	Data Redundancy	ERPS Ring < 450ms		ERPS Ring < 10ms	ERPS Ring	ERPS Ring < 450ms		
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN						
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security						
	Traffic Control	In/out rate limit, storm control						
Management	Interface	Web, telnet, SSHv2 and TLSv1.2						
	SNMP	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap
	Alarm	–	–	–	–	–	–	–
	System Log	System Log and remote Syslog						

Industrial Long Reach PoE Injectors & Extenders

		Long Reach PoE Injectors			Long Reach PoE Extenders			
Model		LRP-101CH	LRP-101UH	LRP-111UH	LRP-101CE	LRP-101UE	LRP-111UE	LRE-104
Product Image								
Ethernet Interfaces	10/100BASE-TX	1 x RJ45 w/ PoE PD	1 x RJ45 w/ PoE PD	1 x RJ45 w/ PoE++ PD	1 x RJ45 w/ PoE PSE			4
	10/100/ 1000BASE-T	–	–	–	–	–	–	–
	1000BASE-SX/LX	–	–	–	–	–	–	–
	PoE Power	–	–	–	56V DC, 600mA max.	48~56V DC, 600mA max.	48-54V DC, 900mA max.	–
	Cabling	Cat. 5e or above	Cat. 5e or above	Cat. 5e or above	Cat. 5e or above	Cat. 5e or above	Cat. 5e or above	Cat. 5e or above
	Maximum Distance	100m		100m	100m		1000m	100m
Long Reach PoE Interfaces	Connectivity	1 x BNC female (PSE)	1 x RJ45 Copper (PSE)		1 x BNC female (PD)	1 x RJ45 Copper (PD)		1 x RJ45/RJ11 Copper 1x BNC female
	Cabling	Coaxial cable: 75ohm	Copper: 4-pair or 1-pair UTP	Copper: 4-pair UTP	Coaxial cable: 75ohm	Copper: 4-pair or 1-pair UTP	4-pair UPT	Copper: 4-pair ot 1-pair UTP Coaxial cable : 75ohm
	Maximum Distance	1000m	500m	800m	1000m	500m	800m	RJ45 Copper: 800m RJ11 Copper: 1200m BNC: 2000m
	Data Rate	200m: 93Mbps/93Mbps 1000m: 55Mbps/73Mbps	200m: 94Mbps/94Mbps 500m: 30Mbps/30Mbps	500m: 100/100Mbps 800m: 10/10Mbps	200m: 93Mbps/93Mbps 1000m: 55Mbps/73Mbps	200m: 94Mbps/94Mbps 500m: 30Mbps/30Mbps	500m: 100/100Mbps 800m: 10/10Mbps	200m:78/78Mbps(RJ45),,84/79Mbps (RJ11), 85/80Mbps(BNC) 800m:8/3Mbps(RJ45),,35/23Mbps (RJ11), 85/80Mbps(BNC)
	Power Output	48~56V DC, 36 watts max.	48~56V DC, 36 watts max.	48~54V DC, 95 watts max.	–	–	–	–
	Total Power Budget	36 watts max.	36 watts max.	95 watts max.	–	–	–	–
	Encryption	AES128-bit	AES128-bit	–	AES128-bit	AES128-bit	–	AES128-bit
PoE Ability	PoE Standard	Power over coaxial	Power over UTP	Power over UTP	802.3af/802.3at	802.3af/at	802.3bt/802.3at	–
	PoE Port	1 x BNC female (PSE)	1 x UTP	1 x UTP	1 x RJ45 (PSE)	1 x RJ45 (PSE)	1 x RJ45 (PSE)	–
	PoE Power Output	41~56V DC	41~56V DC	41~54V DC	56V DC, 600mA max.	48~56V DC, 600mA max.	48-54V DC, 900mA max.	–
Physical	Dimensions (W x D x H)	94 x 70 x 26mm	94 x 70 x 26mm	30 x 70 x 104mm	94 x 70 x 26mm	94 x 70 x 26mm	30 x 70 x 104 mm	154.6 x 86.0 x 26.3 mm
	Power Requirements	DC: 48~56V DC, PoE: 802.3at input		DC: 48~54V DC, PoE: 802.3bt input	37~56V DC PoC		37~54V DC Power over UTP	DC Jack: 12V
	Operating Temperature	-20~70 degrees C		-40~75 degrees C	-20~70 degrees C		-40~75 degrees C	0~50 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE
Compatible Models		LRP-101CE	LRP-101UE	LRP-111UE	LRP-101CH LRP-422CST LRP-1622CS LRP-822CS	LRP-101UH	LRP-111UH	–

Long Reach Ethernet



Unmanaged Fast Ethernet Switches

Fast Ethernet								
Model		ISW-500T-E	ISW-500T	ISW-800T	ISW-501T	ISW-801T	ISW-511*	ISW-511S15*
Product Image								
Hardware	10/100BASE-TX	5	5	8	5	8	4	4
	10/100/1000BASE-T	–	–	–	–	–	–	–
	100BASE-FX	–	–	–	–	–	1/Multi-mode/2km	1/Single mode/15km
	Switch Fabric	1Gbps	1Gbps	1.6Gbps	1Gbps	1.6Gbps	1Gbps	1Gbps
	MAC Table	1k	1k	1k	2k	2k	2k	2k
	Memory Buffer	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits
Protocol	Auto-negotiation	●	●	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●	●	●
Power	Inputs	12~55V DC, Dual power input	12~48V DC/24VAC, Dual power input		12~48VDC, Dual power input		12~48VDC, Dual power input	
	Connector	4-pin Removable Terminal Block	6-pin Removable Terminal Block		6-pin Removable Terminal Block		6-pin Removable Terminal Block	
	Consumption	1.1 watts	2 watts	2.5 watts	3.9 watts	5.1 watts	5.4 watts	5.4 watts
Mechanical	Dimensions (W x D x H)	30 x 76 x 100 mm	30 x 70 x 104 mm	41 x 70 x 115mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	
	Enclosure	IP40 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-Rail, Wall-mountable					DIN-Rail, Wall-mountable	
Environment	Operating Temperature	-40~75 degrees C					-10~60 degrees C *	
	Operating Humidity	5% to 95%RH (non-condensing)					5% to 95%RH (non-condensing)	
Regulatory	Emissions / Safety	FCC Class A, CE	FCC Class A, CE Class A, UL		FCC Class A, CE Class A		FCC Class A, CE Class A	
	Stability	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)					IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)	

Fast Ethernet									
Model		ISW-621*	ISW-621S15 *	ISW-621TF	IFGS-620TF	IFGS-1222TF	IFGS-1022TF	ISW-1600T	IFGS-1822TF
Product Image					One-key Ring	One-key Ring			
Hardware	10/100BASE-TX	4	4	4	4	8	8	16	16
	10/100/1000BASE-T	–	–	–	–	2	2	–	2
	100BASE-FX	2/Multi-mode/2km	2/Single mode/15km	2 SFP Slots	2 1000X SFP Slots	2 1000X SFP Slots	2 1000X SFP Slots	–	2 1000X SFP Slots
	Switch Fabric	1.2Gbps	1.2Gbps	1.2Gbps	4.8Gbps	9.6Gbps	5.6Gbps	3.2Gbps	3.6Gbps
	MAC Table	2k	2k	2k	4k	4k	16k	2k	2k
	Memory Buffer	448k bits	448k bits	448k bits			4Mbits	4Mbits	4Mbits
Protocol	Auto-negotiation	●	●	●	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●	●	●	●
Power	Inputs	12~48VDC, Dual power input			9~48 VDC/ 24 VAC, Dual power input		12~48VDC, Dual power input		
	Connector	6-pin Removable Terminal Block			6-pin Removable Terminal Block		6-pin Removable Terminal Block		
	Consumption	7.9 watts	7.9 watts	7.9 watts	3.4 watts	6 watts	7.2 watts	15 watts	15 watts
Mechanical	Dimensions (W x D x H)	32 x 87.8 x 135 mm			32 x 87.8 x 135 mm	50 x 86.4 x 135 mm	50 x 87 x 135 mm	65 x 107 x 152 mm	
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP40 metal	IP40 metal
	Mounting	DIN-Rail, Wall-mountable			DIN-Rail, Wall-mountable		DIN-Rail, Wall-mountable		
Environment	Operating Temperature	-10~60 degrees C *		-40~75 degrees C	-40~75 degrees C		-40~75 degrees C		
	Operating Humidity	5% to 95%RH (non-condensing)			5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)		
Regulatory	Emissions / Safety	FCC Class A, CE Class A			FCC Class A, CE Class A		FCC Class A, CE Class A	FCC Class A, CE, UL	FCC Class A, CE Class A
	Stability	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)							

* Wide Temperature models (-40~75 degrees C): ISW-511T, ISW-511TS15, ISW-621T, ISW-621TS15

Unmanaged Gigabit Ethernet Switches

		Gigabit						
Model		IGS-500T-E	IGS-500T	IGS-510TF	IGS-501T	IGS-801T	IGS-800T	IGS-820TF
Product Image								
Hardware	10/100/1000BASE-T	5	5	4	5	8	8	6
	10/100BASE-TX	–	–	–	–	–	–	–
	1000BASE-SX/LX	–	–	1 (100BASE-FX Compatible)	–	–	–	2
	Switch Fabric	10Gbps	10Gbps	10Gbps	10Gbps	16Gbps	16Gbps	16Gbps
	MAC Table	2k	2k	2k	2k	4k	4k	4k
	Memory Buffer	3Mbits	1Mbits	1Mbits	1Mbits	176k Bytes	4Mbits	4Mbits
Protocol	Auto-negotiation	●	●	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●	●	●
Power	Inputs	12~55VDC, Dual power input	12~48V DC/24V AC, Dual power input	9~48V DC/24V AC, Dual power input	12~48VDC, Dual power input	12~48VDC, Dual power input	9~48V DC/24V AC, Dual power input	9~48V DC/24V AC, Dual power input
	Connector	4-pin removeable terminal block	6-pin removeable terminal block	4-pin removeable terminal block	6-pin removeable terminal block	6-pin removeable terminal block	4-pin removeable terminal block	4-pin removeable terminal block
	Consumption	1.65 watts	5.28 watts	4.3 watts	5.28 watts	6.7 watts	288 watts	288 watts
Mechanical	Dimensions (W x D x H)	30 x 76 x 100 mm	30 x 70 x 104 mm	30 x 70 x 104 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	41 x 70 x 115 mm	41 x 70 x 115 mm
	Enclosure	IP40 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, Wall-mountable			DIN-rail, Wall-mountable		DIN-rail, Wall-mountable	
Environment	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)			5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)	
Regulatory	Emissions / Safety	FCC Class A, CE Class A	FCC Class A, CE Class A, UL	FCC Class A, CE Class A	FCC Class A, CE Class A, UL, cUL		FCC Class A, CE Class A	
	Stability	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)						

		Gigabit					PROFINET	
Model		IGS-620TF	IGS-1020TF	IGS-1600T	IGS-1820TF	IGS-1000-8T4X	IGS-800T-PN	IGS-820TF-PN
Product Image								
Hardware	10/100/1000BASE-T	4	8	16	16	8	8	6
	10/100BASE-TX	–	–	–	–	–	–	–
	1000BASE-SX/LX	2 (100BASE-FX Compatible)	2	–	2 (100BASE-FX Compatible)	Compatible	–	2
	10G SFP+ Slot	–	–	–	–	4	–	–
	Switch Fabric	12Gbps	20Gbps	32Gbps	36Gbps	96Gbps	16Gbps	16Gbps
	MAC Table	1k	8K	8K	8K	16K	4k	4k
	Memory Buffer	–	–	–	-	12Mbits	4Mbits	4Mbits
Protocol	Auto-negotiation	●	●	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●	●	●
Power	Inputs	12~48VDC, Dual power input		12~48VDC, Dual power input		9~48VDC, Dual power input or 24VAC	9~48V DC/24V AC, Dual power input	
	Connector	6-pin removeable terminal block		6-pin removeable terminal block			4-pin removeable terminal block	
	Consumption	12 watts	8.7 watts	16 watts	18 watts	15 watts	2.88 watts	4.8 watts
Mechanical	Dimensions (W x D x H)	32 x 87.8 x 135 mm	56 x 87.8 x 135 mm	65 x 107 x 152 mm	65 x 107 x 152 mm	76 x 135 x 152 mm	41 x 70 x 115 mm	
	Enclosure	IP30 metal						
	Mounting	DIN-rail, Wall-mountable						
Environment	Operating Temperature	-40~75 degrees C						
	Operating Humidity	5% to 95%RH (non-condensing)						
Regulatory	Emissions / Safety	FCC Class A, CE Class A		FCC Class A, CE Class A, UL	FCC Class A, CE Class A		FCC Class A, CE Class A	
	Stability	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)						

Industrial Media Converters

Fast Ethernet

Model		IFT-802T	IFT-802TS15	IFT-805AT
Product Image				
Copper	Copper Interface	1 x 10/100BASE-TX, RJ45, Auto-negotiation, Auto-MDI/MDI-X		
Fiber	Optical Interface	100BASE-FX	100BASE-FX	100BASE-FX
	Optical Connector	SC	SC	SFP
	Optical Mode	Multi-mode	Single mode	Vary on module
	Max. Distance	2km	15km	Vary on module
	Optic Wavelength	1310nm	1310nm	Vary on module
	Fiber-optic Cable	50/125μm or 62.5/125μm multi-mode	9/125μm single mode	Vary on module
Mechanical	Dimensions (W x D x H)	32 x 87.8 135 mm	32 x 87.8 135 mm	32 x 87.8 135 mm
	Weight	400g	400g	400g
	Enclosure	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable		DIN-rail, wall-mountable
Power	Inputs	Dual 12~48V DC	Dual 12~48V DC	Dual 12~48V DC
	Connector	6-pin removable terminal block		6-pin removable terminal block
	PoE	–	–	–
	Consumption	4.6 watts max.	4.6 watts max.	4.6 watts max.
Environment	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)		5% to 95%RH (non-condensing)
Regulatory	Emissions	FCC Class A, CE Class A		FCC Class A, CE Class A
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)		
Management		–	–	–

Gigabit PoE

Model		IGTP-815AT	IGTP-805AT	IGUP-805AT	IGUP-1205AT	IGUP-2205AT	IGTP-2205AT
Product Image							
Copper	Copper Interface	1 x 10/100/1000BASE-T, RJ45, Auto-negotiation, Auto-MDI/MDI-x		1 x 10/100/1000BASE-T, RJ45, Auto-negotiation, Auto-MDI/MDI-x		2 x 10/100/1000BASE-T, RJ45, Auto-negotiation, Auto-MDI/MDI-x	
Fiber	Optical Interface	100/1000BASE-X	1000BASE-X	100/1000BASE-X	100/1000BASE-X	100/1000BASE-X	
	Optical Connector	1 x SFP	SFP	1 x SFP	2 x SFP	2 x SFP	2 x SFP
	Optical Mode	Vary on module		Vary on module		Vary on module	
	Max. Distance	Vary on module		Vary on module		Vary on module	
	Optic Wavelength	Vary on module		Vary on module		Vary on module	
	Fiber-optic Cable	Vary on module		Vary on module		Vary on module	
Mechanical	Dimensions (W x D x H)	30 x 70 x 104 mm	32 x 87.8 x 135 mm	32 x 87 x 135 mm	55 x 85 x 135 mm	55 x 85 x 135 mm	30 x 70 x 104 mm
	Weight	251g	500g	484g	612g	665g	300g
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail kit and wall-mount ear	DIN-rail, wall-mountable	DIN-rail kit and wall-mount ear	DIN-rail kit and wall-mount ear	DIN-rail kit and wall-mount ear	DIN-rail kit and wall-mount ear
Power	Inputs	DC 48~54V	DC 12~48V	DC 12~54V	Dual 12~54V DC	Dual 12~54V DC	DC 48~54V
	Connector	2-pin removable terminal block	6-pin removable terminal block	6-pin removable terminal block	6-pin removable terminal block	6-pin removable terminal block	4-pin removable terminal block
	PoE	36 watts max.	30 watts max.	90 watts max.	90 watts max.	180 watts max.	60 watts max.
	Consumption	43.12W	33W	DC 12V: 82W DC 48V: 98W	DC 12V: 82W DC 48V: 98W	DC 12V: 82W DC 48V: 98W	76W
Environment	Operating Temperature	-40~75 degrees C					
	Operating Humidity	5%~90% RH (non-condensing)					
Regulatory	Emissions	FCC Class A, CE Class A					
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)					
Management		–	–	–	–	–	–

Industrial Media Converters

		Gigabit					Managed	
Model		IGT-815AT	IGT-805AT	IGT-1205AT	IGT-2205AT	IGT-2205AT-E	IGT-900-1T1S	IGT-900-2T2S
Product Image								
Copper	Copper Interface	1 x 10/100/1000BASE-T, RJ45			2 x 10/100/1000BASE-T, RJ45		1 x 10/100/1000BASE-T	2 x 10/100/1000BASE-T
Fiber	Optical Interface	100/1000BASE-X	100/1000BASE-X	2 x 100/1000/2500BASE-X		2 x 100/1000BASE-X	1 x 100/1000/2500BASE-X	2 x 100/1000/2500BASE-X
	Optical Connector	1 x SFP	SFP	SFP	SFP	SFP	SFP	SFP
	Optical Mode	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module
	Max. Distance	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module
	Optic Wavelength	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module
	Fiber-optic Cable	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module	Vary on module
Mechanical	Dimensions (W x D x H)	30 x 70 x 104 mm	32 x 87.8 135 mm	32 x 87.8 135 mm	32 x 87.8 135 mm	26 x 85 x 85 mm	32 x 87 x 135mm	32 x 87 x 135mm
	Weight	251g	458g	400g	400g	294g	405g	405g
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP40 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail kit and wall-mount ear	DIN-rail, wall-mountable			DIN-rail, wall-mountable		
Power	Inputs	DC 9~48V AC 24V	Dual 12~48V DC	Dual 12~48V DC	Dual 12~48V DC	Dual 12~58V DC	Dual 9~48V DC	Dual 9~48V DC
	Connector	2-pin Removable termonal Block	6-pin removable terminal block			4-pin removable terminal block	6-pin removable terminal block	
	PoE	–	–	–	–	–	–	–
	Consumption	2 watts max.	3.3 watts max.	7.5 watts max.	8.5 watts max.	3.5 watts	7.7 watts max.	7.7 watts max.
Environment	Operating Temperature	-40~75 degrees C				-40~75 degrees C		
	Operating Humidity	5% to 95%RH (non-condensing)				5% to 95%RH (non-condensing)		
Regulatory	Emissions	FCC Class A, CE Class A				FCC Class A, CE Class A		
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)				IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)		
Management		–	–	–	–	–	WEB, SNMPv1,v2c,v3, RMON, 802.1Q VLAN, QinQ, Port Backup, LFP, ERPS	

Industrial 10Gigabit Media Converters

		Managed				10G PoE		Unmanaged	
Model		IXT-900-2X1T	IXT-900-2X	IXT-900-1X1T	IXT-900-2X1PD	IXT-900-2X1UP	IXT-900-1X1UP	IXT-705AT	IXT-815AT
Product Image									
Copper	Ports	1	–	1	1 (PoE PD)	1	1	1	–
	Interface Capability	100/1G/2.5G/5G/10GBASE-T RJ45				100/1G/2.5G/5G/10GBASE-T RJ45			–
Fiber	Ports	2	2	2	1	2	1	1	2
	Interface Capability	100/1G/2.5G/10GBASE-X SFP+				100/1G/2.5G/10GBASE-X SFP+		10GBASE-X	100/1G/2.5G/10GBASE-X SFP+
	Optical Mode	Vary on module				Vary on module		Vary on module	Vary on module
	Optical Wavelength	Vary on module				Vary on module		Vary on module	Vary on module
	Fiber-optic Cable	Vary on module				Vary on module		Vary on module	Vary on module
Mechanical	Dimensions (W x D x H)	50 x 87 x 135 mm				50 x 87 x 135 mm		32 x 87 x 135mm	30 x 70 x 104 mm
	Weight	576g	609g	604g	578g	576g	578g	400g	254g
	Enclosure	IP40 metal				IP40 metal		IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable				DIN-rail, wall-mountable		DIN-rail, wall-mountable	DIN-rail, wall-mountable
Power	Inputs	Dual 9 ~ 48V DC, or 24V AC				Dual 12 ~ 54V DC		Dual 12 ~ 48V DC	Dual 9 ~ 48V DC, or 24V AC
	Connector	6-pin removable terminal block				6-pin removable terminal block			4-pin removable terminal block
	PoE	–	–	–	–	95 watts 802.3bt PoE++		–	–
	Consumption	5.6 watts	11.5 watts	9.5 watts	10.7 watts	110 watts	109 watts	9 watts	8.46 watts
Environment	Operating Temperature	-40~75 degrees C							
	Operating Humidity	5% to 95%RH (non-condensing)							
Regulatory	Emissions	FCC Class A, CE							
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)							
Management	Interface	Web, Telnet, SNMPv1/v2c/v3, RMON, SSHv2, TLSv1.2, PLANET CloudNMS, PLANET NMS Central Management						–	–
	Features	802.1Q VLAN, LLDP, QoS, Bandwidth control, ERPS Ring, LFP, Access Security				802.1Q VLAN, LLDP, QoS, Bandwidth control, ERPS Ring, LFP, Access Security, PD alive check, PoE schedule		–	–

Industrial PoE Injectors, Splitters, Converters

		802.3at PoE+ Injectors		802.3bt PoE++ Injector					
	Model	IPOE-162	IPOE-260/ IPOE-260-12V	IPOE-176	IPOE-171-60W	IPOE-171-95W	IPOE-270/ IPOE-270-12V	IPOE-470/ IPOE-470-12V	IPOE-175
	Product Image								IP67
Hardware	RJ45 Data Input Port	1 x RJ45	2 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	2 x RJ45	4 x RJ45	1 x RJ45
	RJ45 Data + Power Output Port	1 x RJ45	2 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	2 x RJ45	4 x RJ45	1 x RJ45
	Data Rate	10/100/1000Mbps		10G/5G/2.5G/1G/ 100Mbps	10/100/1000Mbps		10/100/1000Mbps		10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	802.3at	802.3bt Type-4	802.3bt Type-3	802.3bt Type-4	802.3bt Type-4		802.3bt Type-3
	PSE Type	Mid-span	Mid-span	Mid-span and End-span	Mid-span and End-span		End-span + Mid-span		
	Power Pin Assignment	4/5(+), 7/8(-)	4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)		1/2(-), 3/6(+), 4/5(-), 7/8(+)		
	PoE Port	1	2	1	1	1	2	4	1
	PoE Power Output	56V DC	48~56V DC/54V DC	52~56V DC	52~56V DC	54V DC	48~54V DC/54V DC		55V DC
	PoE Ability	30 watts	60 watts budget	95 watts	60 watts	95 watts	180 watts budget	240 watts budget	60 watts
Physical	Dimensions (W x D x H)	32 x 87 x 135mm	30 x 70 x 104mm	32 x 87 x 135mm	32 x 87 x 135mm		41 x 70 x 115mm	56 x 87 x 135mm	150 x 72 x 44mm
	Power Supply	External	External	External	External	External	External	External	External
	Power Requirements	Dual 24~48V DC, 24V AC	Dual 48~56V DC/ Dual 12~56V DC	Dual 48~54V DC	Dual 48~56V DC	Dual 12~48V DC	Dual 48~54V DC/ Dual 12~54V DC		Dual 24~56V DC
	Operating Temperature	-40~75 degrees C		-40~75 degrees C			-40~75 degrees C		
Regulatory	EMI/Safety	FCC Class A, CE		FCC Class A, CE			FCC Class A, CE		

Industrial PoE Injectors, Splitters, Converters

		802.3at PoE+/802.3bt PoE++ Splitters			
	Model	IPOE-162S	IPOE-173S	IPOE-176S	IPOE-175S
	Product Image				IP67
Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	Data Output Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	DC Output Voltage	12V/24V DC, max. 2A	12V/19V/24V, max. 5A	12V/19V/24V, max. 5A	12V DC, max. 5A
	DIP Switch	Adjustable 12V/24V DC	Adjustable 12V/19V/24V	Adjustable 12V/19V/24V	–
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000/2.5G/5G/10G	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	802.3bt Type-4 PD	802.3bt Type-4 PD	802.3bt Type-3 PD
	PD Type	Both Mid-span and End-span	Both Mid-span and End-span	Mid-span and End-span	Both Mid-span and End-span
	PoE Power Input	52~56V DC	52~56V DC	48~54V DC	52~56V DC
Physical	Dimensions (W x D x H)	32 x 87 x 135mm	32 x 87 x 135mm	32 x 87 x 135mm	150 x 72 x 44mm
	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

		PoE Extender			PoE Tester
	Model	IPOE-E302	IPOE-E174	WGS-E304PT	POE TESTER+
	Product Image				
Hardware	Data + Power Input Port	1 x RJ45 PD	1 x RJ45 PD	1 x RJ45 PD	1 x RJ45
	Data Output Port	2 x RJ45 PSE	4 x RJ45 PSE	4 x RJ45 PSE	–
	DC Output Voltage	PoE 44~57V DC	PoE 44~57V DC	PoE 44~55V DC	–
	DIP Switch	–	–	Standard / VLAN / Extend	–
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3bt Type-4 PD	802.3bt Type-4 PD	802.3bt Type-4 PD	802.3af/802.3at/802.3bt
	PD Type	Both Mid-span and End-span		Both Mid-span and End-span	
	PoE Power Input	51~56V DC	44~56V DC	50~57 VDC	36~57V DC
Physical	Dimensions (W x D x H)	150 x 72 x 44mm	56 x 87.8 x 135mm	148 x 24.2 x 134 mm	70 x 23 x 22mm
	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-10~60 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	CE compliance

Industrial Serial over Ethernet Converters

Industrial Serial over Ethernet Converters							
Model		ICS-2200T	ICS-2400T	ICS-2100T/ ICS-2105AT	ICS-2102T/ ICS-2102TS	ICS-3100T/ICS-3105AT	ICS-3200T
Product Image							
Serial Port	Interface	2 x RS232/RS422/RS485	4 x RS232/RS422/RS485	1 x RS232/422/485			2 x RS232/422/485
	Connector	DB9	DB9	1 x DB9 for RS232 1 x 4-pin terminal block for RS422/485			DB9
	Baud Rate (Data Rate)	50bps to 921Kbps		50bps to 921kbps			50bps to 921kbps
	Data Bits	5, 6, 7, 8	5, 6, 7, 8	5, 6, 7, 8	5, 6, 7, 8	5, 6, 7, 8	5, 6, 7, 8
	Stop Bits	1, 2	1, 2	1,1.5,2	1,1.5,2	1,1.5,2	1,1.5,2
	Flow Contorol	None, RTS/CTS, Xon/Xoff		None, RTS/CTS, Xon/Xoff		None, RTS/CTS, Xon/Xoff	
Fast Ethernet Port	Standard	10/100BASE-TX	10/100BASE-TX	ICS-2100T: 10/100BASE-TX ICS-2105AT: 100BASE-FX	100BASE-FX	ICS-3100T: 10/100BASE-TX ICS-3105AT: 100BASE-FX	10/100BASE-TX
	Connector	2 x RJ45	2 x RJ45	ICS-2100T: RJ45 ICS-2105AT: SFP	Duplex SC	ICS-3100T: RJ45 ICS-3105AT: SFP	2 x RJ45
	Optical Wavelength	–	–	ICS-2105AT: Vary on module	1310nm	ICS-3105AT: Vary on module	–
	Max. Distance	100m	100m	ICS-2100T: 100m ICS-2105AT: May vary on module	ICS-2102T: 2km ICS-2102TS: 30km	ICS-3100T: 100m ICS-3105AT: May vary on module	100m
	Protection	Built-in 1.5KV magnetic isolation		6KV ESD	6KV ESD	6KV ESD	6KV ESD
Power	Power Supply	Dual 12~48V DC, 6-pin removable terminal block		Dual 9~48V DC or 24V AC, 6-pin removable terminal block		Dual 9~48V DC or 24V AC, 6-pin removable terminal block	
	Power Consumption	10.1 watts	10.1 watts	5 watts max.	5 watts max.	3 watts	4.5 watts
Mechanical	Dimensions (W x D x H)	32 x 87.8 x 135 mm	56 x 87 x 135 mm	32 x 87 x 135 mm	32 x 87 x 135 mm	32 x 87 x 135 mm	32 x 87 x 135 mm
	Enclosure	IP30 metal	IP40 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable	
Environment	Operating Temperature	-40~75 degrees C		-40~75 degrees C		-40~75 degrees C	
	Operating Humidity	10% to 90%RH (non-condensing)		10% to 90%RH (non-condensing)		10% to 90%RH (non-condensing)	
Regulatory	Emissions	FCC Class A, CE Class A		FCC, CE		FCC, CE	
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)					
Management	Interface	Web management, VCOM		IPv4/IPv6 Web, telnet and SNMP management		IPv4/IPv6 Web, telnet and SNMP management	
	Operation Mode	Virtual COM port, TCP server, UDP server, UDP client, pair connection		Virtual COM port, TCP server, UDP server, UDP client, pair connection, RFC2217, Telnet server, Modbus converter		Virtual COM port, TCP server, UDP server, UDP client, pair connection, RFC2217, Telnet server, Modbus converter, MQTT	

Industrial Gateways

Industrial Modbus Gateway						
Model		IMG-2100T/IMG-2105AT	IMG-2200T	IMG-2400T	IMG-3100T/IMG-3105AT	ICS-3200T
Product Image						
Serial Port	Interface	1 x RS232/422/485	2 x RS232/422/485	4 x RS232/422/485	1 x RS232/422/485	2 x RS232/422/485
	Connector	1 x DB9 for RS232 1 x 4-pin terminal block for RS422/485	2 x DB9	4 x DB9	1 x DB9 for RS232 1 x 4-pin terminal block for RS422/485	2 x DB9
	Baud Rate	50bps to 921kbps			50bps to 921kbps	
	Priority Type	None, Odd, Even, Space, Mark			None, Odd, Even, Space, Mark	
	Isolation	–	2KV	2KV	–	2KV
	Multi-master and Multi-drop	Master mode: 32 TCP slaves Slave mode: 32 TCP masters			Master mode: 32 TCP slaves Slave mode: 32 TCP masters	
	Operation Mode	Modbus RTU Master/Modbus RTU Slave/ Modbus ASCII Master/Modbus ASCII Slave			Modbus RTU Master/Modbus RTU Slave/ Modbus ASCII Master/Modbus ASCII Slave/MQTT	
LAN Port	Standard	IMG-2100T/IMG-2200T/IMG-2400T: 10/100BASE-TX IMG-2105AT/IMG-2102T/IMG-2102TS: 100BASE-FX			IMG-3100T: 10/100BASE-TX IMG-3105AT: 100BASE-FX	10/100BASE-TX
	Connector	IMG-2100T: RJ45 IMG-2105AT: SFP	2 x RJ45		IMG-3100T: 1 x RJ45 IMG-3105AT: 1 x SFP	2 x RJ45
	Max. Distance	IMG-2100T: 100m IMG-2105AT: May vary on module	100m		IMG-3100T: 100m IMG-3105AT: May vary on module	100m
	Protection	6KV ESD	6KV ESD		6KV ESD	
Power	Power Input	Dual DC9-48V or AC 24V	Dual DC 12-48V		Dual DC 9-48V or AC 24V	
	Power Interface	Removable terminal block			6-pin Removable terminal block	
	Power Consumption	5 watts max.	5.4 watts max.	6.5 watts max.	3 watts	4.5 watts
Mechanical	Dimensions (W x D x H)	32 x 87 x 135 mm	32 x 87 x 135 mm	56 x 87 x 135 mm	32 x 87 x 135 mm	32 x 87 x 135 mm
	Enclosure	IP30 metal	IP30 metal	IP40 metal	IP30 metal	IP30 metal
	Installation	Wall-mountable, DIN-rail mounting				
Environment	Operating Temperature	-40~75 degrees C				
Regulatory	Emissions	FCC, CE				
	Stability	IEC60068-2-32 (free fall), IEC60068-2-27 (shock), IEC60068-2-6 (vibration)				
Management	Interface	IPv4 Web, telnet and SNMP management				
	Utility	MBVCOM utility, PLANET Smart Discovery			MQTT	

Vehicle Cellular Gateway

Model		VCG-1500WG-LTE	VCG-2406WP-NR
Product Image			
Hardware	LAN	4	3 x 10/100/1000T 8-pin X-coded M12 2-Port 802.3at PoE+
	WAN	1	1 x 10/100/1000T 8-pin X-coded M12
	Wi-Fi	802.11n, 2.4GHz	2.4GHz & 5GHz 802.11ax 1800Mbps
	GPS	–	GNSS positioning
	SIM Card Slot	1	2 x nano
	TF Card Slot	2	–
Multi Band Support	EU Model	FDD LTE B1/B3/B5/B7/B8/B20 (2100/1800/850/2600/900/800) TDD LTE B38/B40/B41(2600/2300/2500) WCDMA B1/B5/B8(2100/850/900) GSM/EDGE B3/B8 (1800/900)	5G NR n1/n2/n3/n5/n7/n8/n12/n20/n25n28/ n38/n40/n41/n48/n66/n71/n77/n78/n79
	US Model	FDD LTE B2/B4/B12(1900/AWS1700/700) WCDMA B2/B4/B5(1900/AWS1700/850)	Sub-6G: 2.4Gbps (DL)/500Mbps (UL)
	LTE	20MHz bandwidth: 100Mbps (DL), 50Mbps (UL)	B1/B2/B3/B4/B5/B7/B8/B12/B13/ B14/B17/B18/ B19/B20/B25/B26/ B28/B29/B30/ B32/B46/B66/B71
Power	Inputs	6-32V DC	9~54V DC
	Connector	Standard 4-pin vehicle power jack	5-pin K-coded M12
	Consumption	3 watts	81 watts
Mechanical	Dimensions (W x D x H)	168 x 104 x 25 mm	245 × 140.5 × 60 mm
	Enclosure	IP30 metal	IP50 aluminum
	Mounting	Mounting brackets for vehicles	Desktop, Wall-mount
Environment	Operating Temperature	-25~65 degrees C	-40~75 degrees C
	Operating Humidity	5~95% (non-condensing)	5~95% (non-condensing)
Regulatory	Emissions	FCC Part 15 Class A, CE	FCC Part 15 Class A, CE
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)	
Management	Interface	Console, Web, telnet	Web browser, TLS, SNMP v1,v2c,v3, PLANET Smart Discovery utility, NMS Controller, CloudNMS supported
	Software Utility	CMS	SD-WAN, Dual WAN, HA, Static Route, DDNS, IP Fliter, System Log and Remote Syslog
	Log	Syslog Log	Syslog, SNMP Trap, e-mail

Industrial Cellular Gateways

Model		ICG-2515-NR/ ICG-2515F-NR	ICG-2515W-NR/ ICG-2515FW-NR
Product Image			
Hardware	LAN	4 10/100/1000BASE-T	4 10/100/1000BASE-T
	WAN	1 10/100/1000BASE-T (ICG-2515-NR/ICG-2515W-NR) 1 1000BASE-X SFP (ICG-2515F-NR/ICG-2515FW-NR)	
	WLAN	–	2.4GHz & 5GHz 802.11ax 1800Mbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO
	GPS	GNSS positioning	GNSS positioning
	COM Port	1*RS485	1*RS485
Multi Band Support	5G NR	n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/ n38/n40/n41/n48/n66/n71/n77/n78/n79	
	4G LTE	B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/ B19/B20/B25/B26/B28/B29/B30/ B32/B46/B66/B71	
	Data Transmission Throughput	Sub-6G: 2.4Gbps (DL) / 500Mbps (UL) LTE: 1Gbps (DL) / 200Mbps (UL)	
Power	Inputs	9~54V DC	9~54V DC
	Connector	6 pin terminal block	6 pin terminal block
	Consumption	6 watts	10 watts
Mechanical	Dimensions (W x D x H)	50 x 135 x 135 mm	50 x 135 x 135 mm
	Enclosure	IP30 metal	IP30 metal
	Mounting	DIN-rail and wall-mountable	
Environment	Operating Temperature	-40~75 degrees C	
	Operating Humidity	5~90% (non-condensing)	
Regulatory	Emissions	FCC Class A, CE class A	
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)	
Management	Interface	Web browser, TLS, SNMP v1,v2c,v3, PLANET Smart Discovery utility, NMS Controller, CloudNMS supported	
	Features	SD-WAN, Dual WAN, HA, Static Route, DDNS, IP Fliter, System Log and Remote Syslog	
	VPN	OpenVPN, IPSec/GRE/L2TP/PPTP VPN	

Industrial Cellular Gateways

Model		ICG-2210W-NR	ICG-2510W-LTE	ICG-2510WG-LTE	FWA-2100-NR
Product Image					
Hardware	LAN	1 x 10/100 /1000 RJ45 LAN Port	5 10/100/1000BASE-T		1 x 10/100 /1000 RJ45 LAN Port, 802.3at PoE+ PD
	WAN	1 x 10/100 /1000 RJ45 WAN/LAN Port	1		–
	WLAN	802.11ac 2.4GHz and 5GHz	2.4G/5G		802.11n 2.4GHz
	DI & DO	802.11ac 2.4GHz and 5GHz	2 DI & 1 DO		–
	GPS	–	–	●	–
	COM Port	–	1*RS232/RS485		–
Multi Band Support	5G NR	EU Model • Sub-6: n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n75, n76, n77, n78, n79 US Model • Sub-6: n2, n5, n7, n12, n14, n25, n30, n48, n41, n70, n66, n71, n77, n78	–		EU Model • Sub-6: n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n75, n76, n77, n78, n79 US Model • Sub-6: n2, n5, n7, n12, n14, n25, n30, n48, n41, n70, n66, n71, n77, n78
	4G LTE	EU Model • LTE FDD: B1, B3, B5, B7, B8, B20, B28, B32 • LTE TDD: B38, B40, B41, B42, B43 US Model • LTE FDD: B2, B4, B5, B7, B12, B13, B29, B30, B66, B71 • LTE TDD: B41, B46(LAA), B48	EU Model: B1/B3/B5/B7/B8/B20/B38/B40/B41 US Model: B2/B4/B5/B12		EU Model • LTE FDD: B1, B3, B5, B7, B8, B20, B28, B32 • LTE TDD: B38, B40, B41, B42, B43 US Model • LTE FDD: B2, B4, B5, B7, B12, B13, B29, B30, B66, B71 • LTE TDD: B41, B46(LAA), B48
	Data Transmission Throughput	3.5Gbps (DL)/900Mbps (UL) for NR 1.6Gbps (DL)/200Mbps (UL) for LTE	1.4/3/5/10/15/20MHz bandwidth: 150Mbps (DL), 50Mbps (UL)		3.5Gbps (DL)/900Mbps (UL) for NR 1.6Gbps (DL)/200Mbps (UL) for LTE
Power	Inputs	9-36 VDC (12VDC 1.5A)	9~36V DC		9-36 VDC (12VDC 1.5A) & 802.3af/at PoE
	Connector	2pin terminal	6 pin 3.5mm terminal block		PoE/ DC Adapter
	Consumption	14.4 watts	7 watts		18 watts
Mechanical	Dimensions (W x D x H)	106 x 76 x 23.5 mm	115.7 x 133 x 45		150x100x240mm
	Enclosure	IP30	IP30 metal		IP68
	Mounting	Din-rail and wall mount	DIN rail		Wall mount
Environment	Operating Temperature	-40~75 degrees C	-35~75 degrees C		-20~+60 degrees C
	Operating Humidity	5% to 95%RH (non-condensing)	5~95% (non-condensing)		5% to 95%RH (non-condensing)
Regulatory	Emissions	CE	FCC Part 15 Class A, CE		CE
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)			
Management	Interface	Web, Telnet, SSHv2, SNMP v1,v2c,v3, PLANET SmartDiscovery	Console, Web, telnet, SSHv2, SNMPv1,v2c		Web, Telnet, SSHv2, SNMP v1,v2c,v3, PLANET SmartDiscovery, CloudNMS App
	Features	Static Route, DDNS, IP Fliter, System Log and Remote Syslog	Static Route, DDNS, TR069, IP Filter, SMTP		Static Route, DDNS, IP Fliter, System Log and Remote Syslog
	VPN	OpenVPN, IPSec/GRE/L2TP/PPTP VPN	OpenVPN, IPSec/GRE/L2TP/PPTP VPN		OpenVPN, IPSec/GRE/L2TP/PPTP VPN

Industrial Gigabit SFP Modules

Model	MGB-TSX	MGB-TLX	MGB-TSX2	MGB-TL40	MGB-TL80	MFB-TFX	MFB-TF20
Product Image							
PHY Type	1000BASE-SX	1000BASE-LX	1000BASE-SX	1000BASE-LX	1000BASE-LX	100BASE-FX	100BASE-FX
Fiber Type	Multi-mode	Single mode	Multi-mode	Single mode	Single mode	Multi-mode	Single mode
Connector	LC	LC	LC	LC	LC	LC	LC
Wavelength	850nm	1310nm	1310nm	1310nm	1550nm	1310nm	1310nm
Maximum Distance	220m & 550m	20km	2km	40km	80km	2km	20km
Operating Temperature	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C

Fast Ethernet Transceivers (100BASE-BX, Single Fiber Bi-directional SFP)

Model	MFB-TSA	MFB-TSB	MFB-TFA20	MFB-TFB20	MFB-TFA40	MFB-TFB40
Product Image						
Speed (Mbps)	100	100	100	100	100	100
Connector Interface	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)
Fiber Mode	Multi mode	Multi mode	Single mode	Single mode	Single mode	Single mode
Distance	2km	2km	20km	20km	40km	40km
Wavelength (TX)	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm
Wavelength (RX)	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm
Operating Temp.	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C

Gigabit Ethernet Transceivers (1000BASE-BX, Single Fiber Bi-directional SFP)

Model	MGB-TLA10	MGB-TLB10	MGB-TLA20	MGB-TLB20	MGB-TLA40	MGB-TLB40	MGB-TLA60	MGB-TLB60
Product Image								
Speed (Mbps)	1000	1000	1000	1000	1000	1000	1000	1000
Connector Interface	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)
Fiber Mode	Single mode		Single mode		Single mode		Single mode	
Distance	10km	10km	20km	20km	40km	40km	60km	60km
Wavelength (TX)	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm
Wavelength (RX)	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm
Operating Temp.	-40~85 degrees C		-40~85 degrees C		-40~85 degrees C		-40~85 degrees C	

Model	MGB-2GTSR	MGB-2GTLR2	MGB-2GTLR20	MGB-2GTLA20	MGB-2GTLB20
Product Image					
Speed (Mbps)	2500	2500	2500	2500	2500
Connector Interface	LC	LC	LC	WDM (LC)	WDM (LC)
Fiber Mode	Multi mode	Single mode	Single mode	Single mode	Single mode
Distance	300m	2km	20km	20km	20km
Wavelength (TX)	850nm	1310nm	1310nm	1310nm	1550nm
Wavelength (RX)	850nm	1310nm	1310nm	1550nm	1310nm
Operating Temp.	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C	-40~85 degrees C

10Gbps SFP+ (10G Ethernet/10GBASE)

	MTB-TSR	MTB-TLR	MTB-TLR20	MTB-TLR40	MTB-TLR60	MTB-TLA20	MTB-TLB20	MTB-TLA40	MTB-TLB40	MTB-TLA60	MTB-TLB60
Product Image											
Speed (Mbps)	10G	10G	10G	10G	10G	10G	10G	10G	10G	10G	10G
Connector Interface	Dual LC/UPC	LC	LC	LC	LC	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)
Fiber Mode	Multi-mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode
Distance	300m	10km	20km	40km	60km	20km	20km	40km	40km	60km	60km
Wavelength (nm)	850nm	1310nm	1310nm	1310nm	1550nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm
Operating Temp.	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C	-40~85°C

DIN-rail Power Supplies

Model		PWR-40-24	PWR-60-24	PWR-75-24	PWR-75-48	PWR-120-48	PWR-240-48	PWR-480-48	PWR-960-48
Product Image									
Power Output	Budget	40 watts	60 watts	75 watts	75 watts	120 watts	240 watts	480 watts	960 watts
	DC Voltage	24V, 1.7A	24V, 2.5A	24V, 3.2A	48V, 1.6A	48V, 2.5A	48V, 5A	48V, 10A	48V, 20A
Power Input	Voltage	100-240V AC, 50/60Hz, 1.1A	100-240V AC, 50/60Hz, 1.8A	85 ~ 264VAC, 50/60Hz 127 ~ 370VDC		85 ~ 264VAC, 50/60Hz 127 ~ 370VDC			
Mechanical	Dimensions (W x H x D)	40 x 90 x 100 mm		30 x 125 x 126 mm		30 x 125 x 116 mm	40 x 125 x 116 mm	48 x 125 x 125 mm	110 x 125 x 150 mm
	Weight	0.3kg	0.33kg	400g		420g	610g	890g	2.47kg
	Installation	DIN-rail TS-35/7.5 or 15		DIN-rail TS/35/7.5 or 15		DIN-rail TS/35/7.5 or 15	DIN-rail TS/35/7.5 or 15		
Environment	Operating Temperature	-20~70 degrees C		-40~70 degrees C (**)		-40~70 degrees C (**)			
	Storage Temperature	-40~85 degrees C		-40~85 degrees C		-40~85 degrees C			
	Operating Humidity	20~90%	20~90%	20~95%		20~95%			
	Storage Humidity	10~95% (non-condensing)		10~90% (non-condensing)		10~95% (non-condensing)			
Safety & Function		UL508, ul60950-1, TUV EN60950-1 approved, NEC class2/LPS compliant	UL508, UL60950-1, TUV EN6095-1 approved			UL508, UL60950-1, TUV EN6095-1 approved			UL508, UV BS EN/EN62368-1, BSMI CNS14336-1, AS/NZS62368.1, EAC TP TC 004 approved (meeting EN60204-1)

** Please refer to output load derating curve from product specification.

Industrial EtherCAT Slave I/O Modules

EtherCAT Slave							
Model		IECS-1116-DI	IECS-1116-DO	IECJ-300	IECJ-400	IECJ-410FT	IECC-210-KIT
Product Image							
Haedware	100BACE-E-TX RJ45	2, one IN, one OUT		3, one IN, two OUT	4, one IN, three OUT	3, one IN, two OUT	1 210T: one in 210R: one out
	100BASE-FX SFP	–	–	–	–	1, one out	1 210T: one out 210R: one in
	DI	16 Dry (Source), Wet (Sink/Source)		–	–	–	–
	DO	–	16 Open Collector (Sink), 700mA/Channel	–	–	–	–
Power	Inputs	9V~48V DC	9V~48V DC	9V~48V DC	9V~48V DC	9V~48V DC	9V~48V DC
	Connector	3-pin terminal block		4-pin terminal block	4-pin terminal block	4-pin terminal block	4-pin terminal block
Mechanical	Dimensions (W x D x H)	32 x 87 x 135mm		33 x 70 x 104mm	32 x 87 x 135mm	32 x 87 x 135mm	33 x 70 x 104mm
	Mounting	DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable	
Enviroment	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
	Operating Humidity	5~95% (non-condensing)		5~95% (non-condensing)		5~95% (non-condensing)	
Protocal		EtherCAT	EtherCAT	EtherCAT	EtherCAT	EtherCAT	EtherCAT

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