



INDUSTRIAL ETHERNET

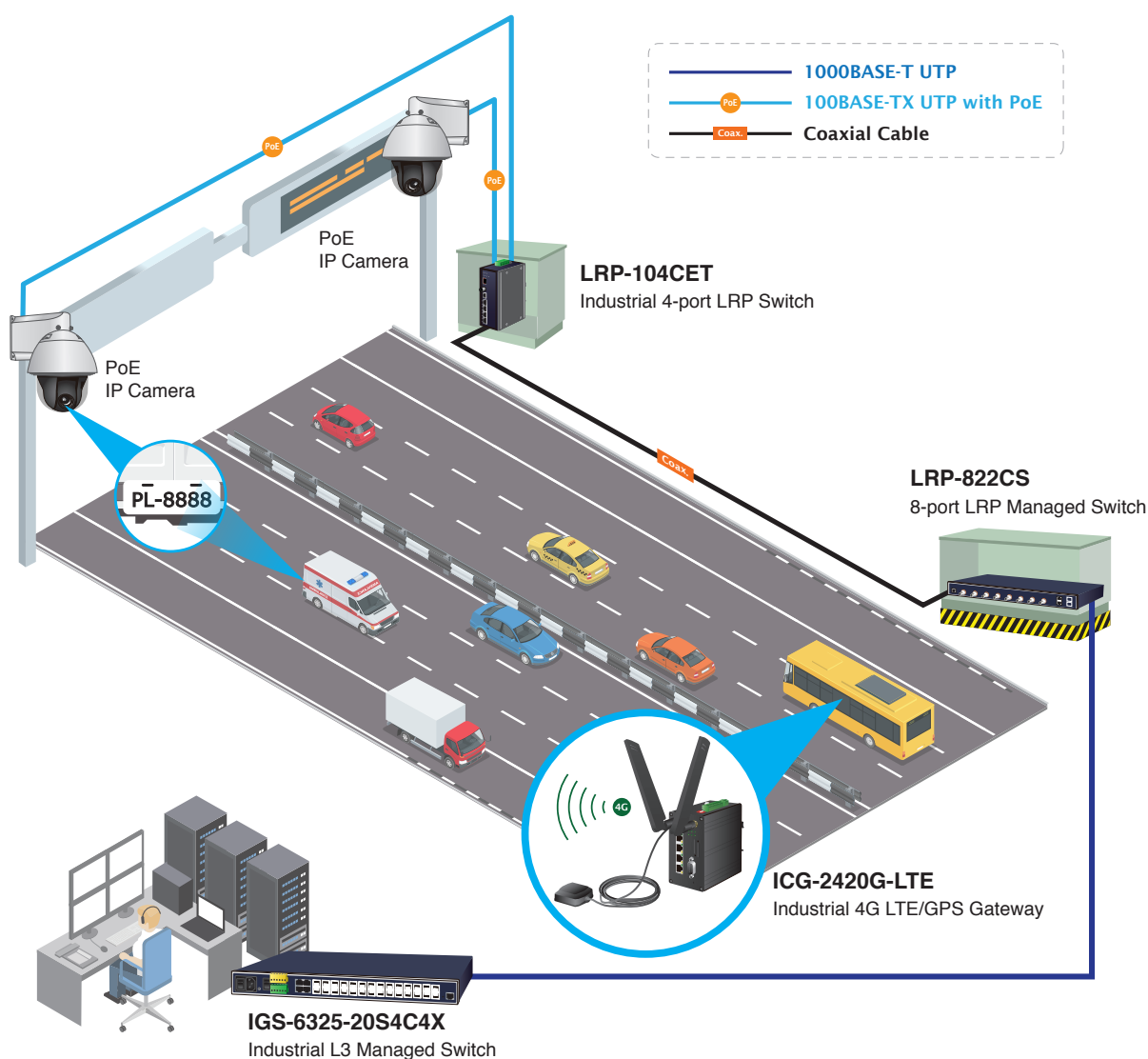
PoE Capability, High-performance Industrial
Automation and IIoT Solution

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.

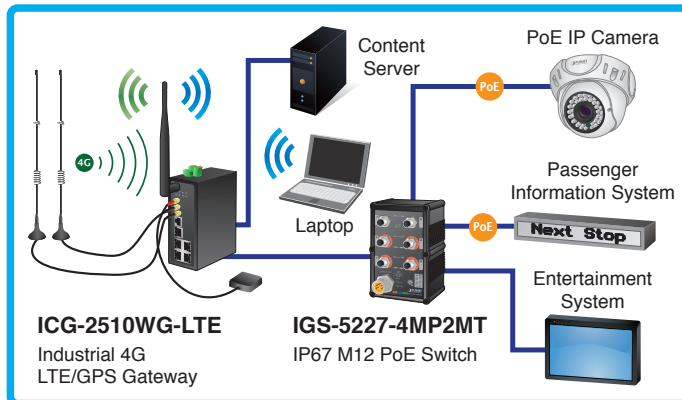


Railway Transmission System

EN50155 certified equipment to ensure transmission quality



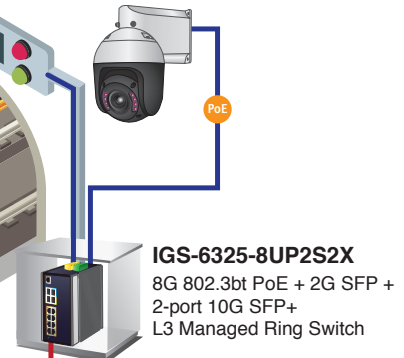
On the Train



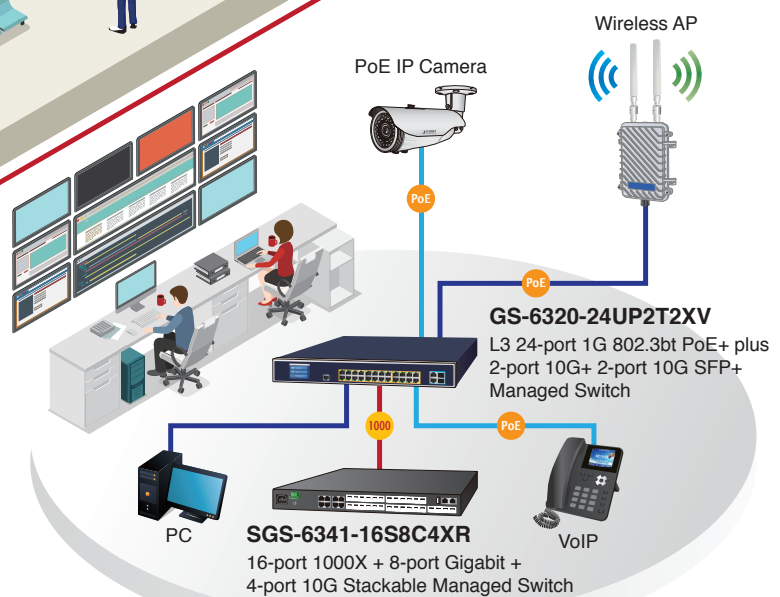
On the Platform



Trackside Control Cabinet



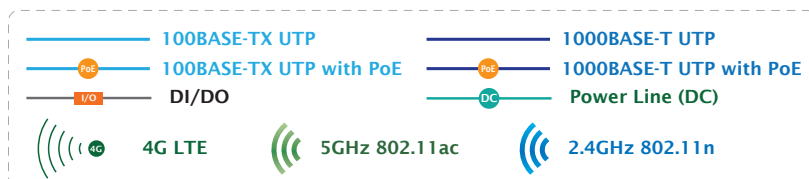
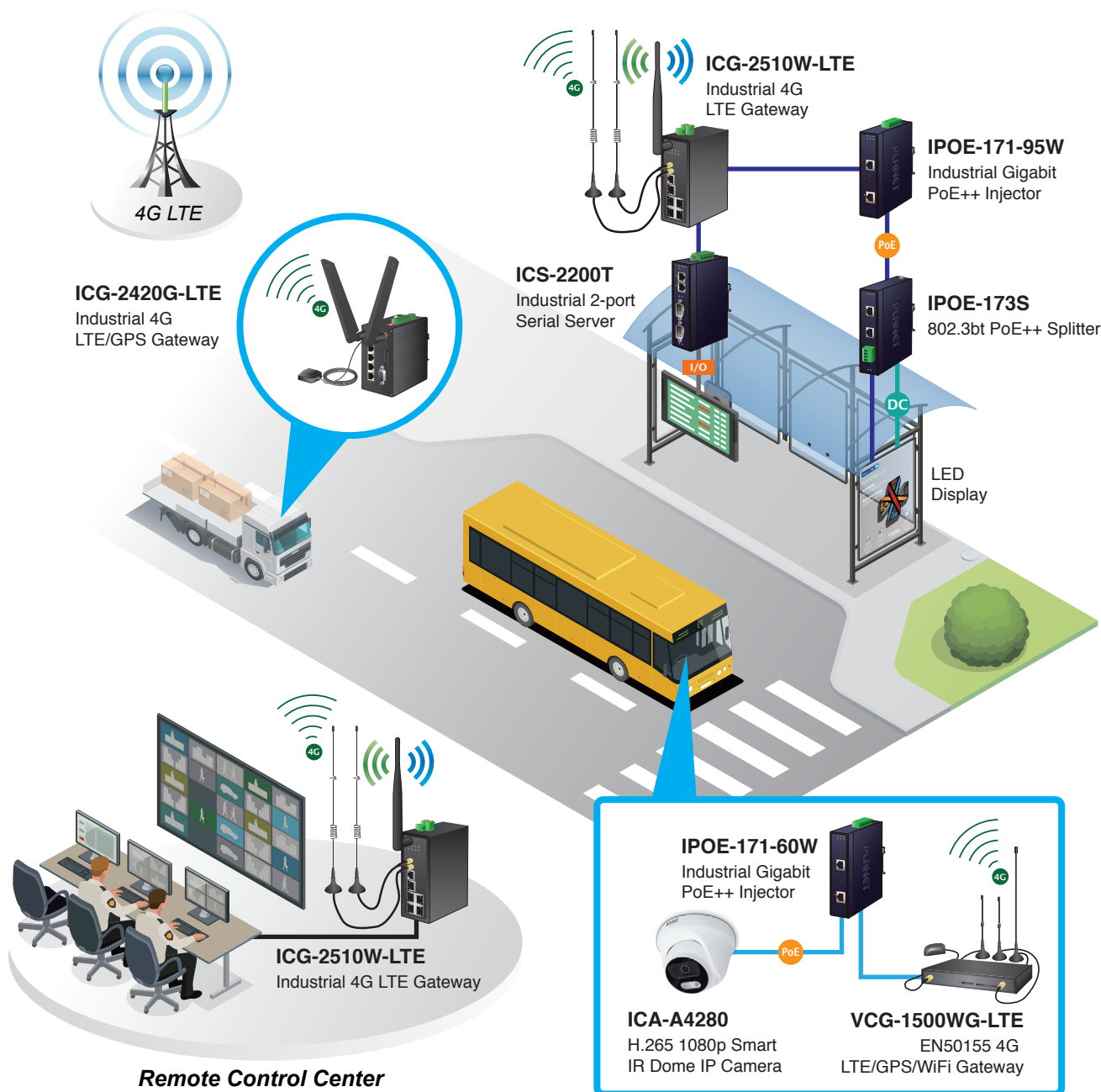
Remote Control Center



- 100BASE-TX UTP
- 100BASE-TX UTP with PoE
- 100BASE-T UTP
- 100BASE-T UTP with PoE
- 1000BASE-SX/LX Fiber Optic
- ⬇ 4G LTE
- ⬇ 5GHz 802.11ac
- ⬇ 2.4GHz 802.11n

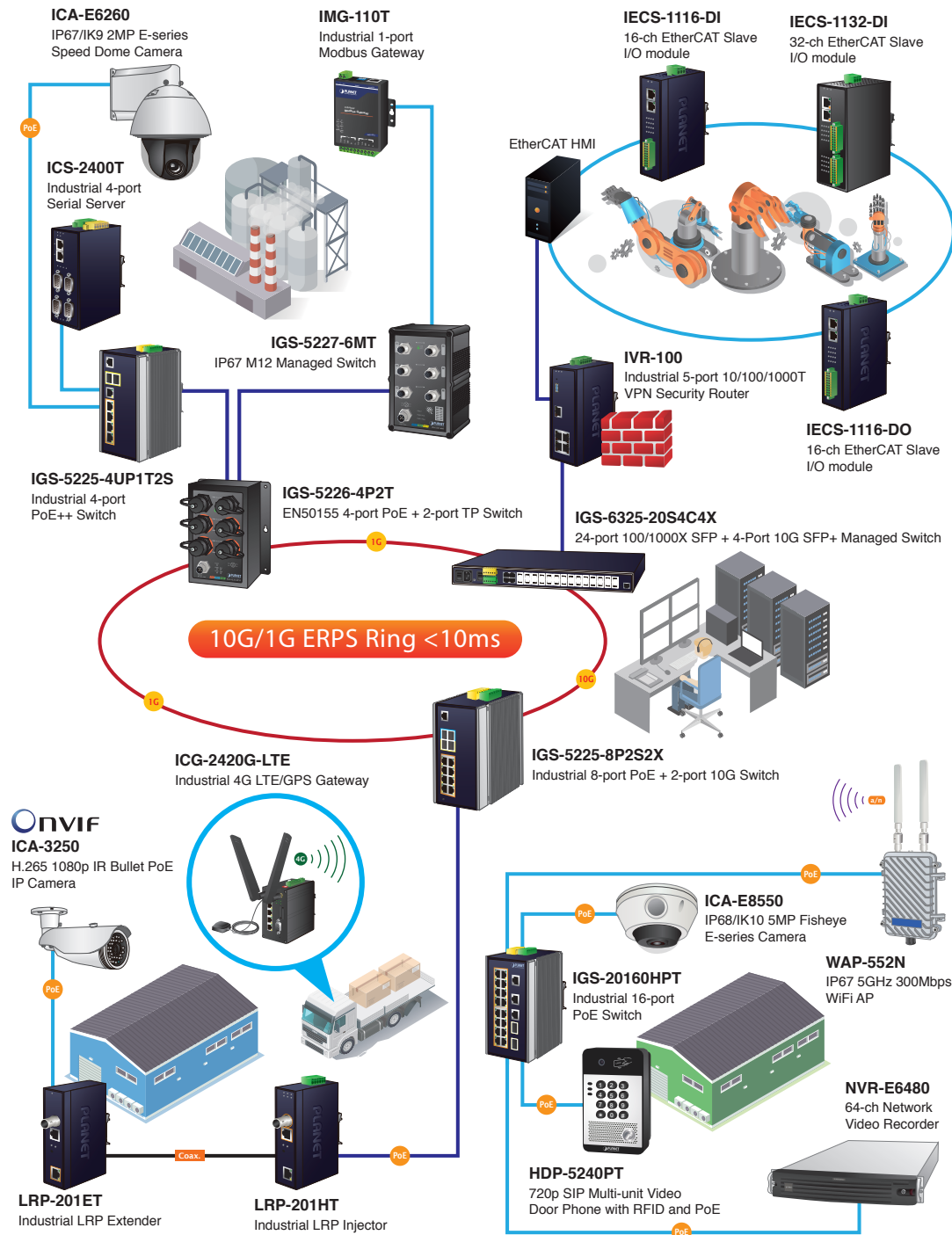
In-Vehicle Networking

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



100BASE-TX UTP

100BASE-TX UTP with PoE

Coaxial Cable

1000BASE-T UTP

10GBASE-SR/LR Fiber Optic



4G LTE



5GHz 802.11a/n

19" Rackmount Managed Ethernet Switches



L3					L2+ Ring		
Model		IGS-6325-20T4C4X	IGS-6325-20S4C4X	IGS-6325-24P4X	IGS-6325-24P4S	IGSW-24040T	IGS-5225-16T4S
Product Image							
		Modbus TCP	Modbus TCP	Modbus TCP PoE	Modbus TCP PoE	Modbus TCP	Modbus TCP
Hardware	10/100/1000BASE-T	24	4 (Combo)	24	24	24	16
	10/100BASE-TX	-	-	-	-	-	-
	1000 mini-GBIC	4 (Combo)	24	4	4	4 (Combo)	4
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP+ Slot	4 (1000X/2500X Compatible)			-	-	-
	Switch Fabric	128Gbps	128Gbps	128Gbps	48Gbps	48Gbps	40Gbps
	DI & DO	2 DI & 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		Dual 48~56V DC		Dual 36~60V DC 100~240V AC	
	Connector	6-pin terminal block, AC socket		6-pin terminal block, AC socket		6-pin terminal block, AC socket	
	Consumption	42.7 watts	45 watts	500 watts	500 watts	30 watts	15.2 watts
Mechanical	Dimensions (W x D x H)	440 x 200 x 44.5 mm		440 x 300 x 44.5 mm		440 x 200 x 44.5 mm	
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	Rackmount	Rackmount	Rackmount	Rackmount	Rackmount	Rackmount
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)		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	
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)					
PoE	PoE Standard	-	-	802.3af/802.3at		-	-
	PoE Port	-	-	24	24	-	-
	PoE Budget	-	-	400 watts	400 watts	-	-
	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	8 VLAN	8 VLAN
	Routing Tables	128	128	128	128	32	32
	Routing Protocols	OSPFv2, IPV6/IPv4 Static Routing		OSPFv2, 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/MVR					
	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				Console, Web, telnet, SSH and SSL	
	SNMP	v1, v2c, v3 and trap					
	Alarm	Power and port alarm					
	System Log	System Log and remote Syslog					

Metro Fiber Switches

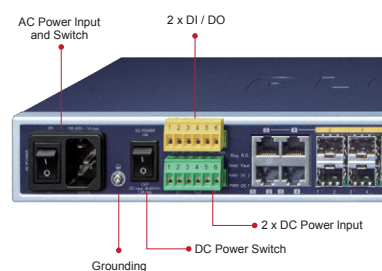
	13" Rackmount	19" Rackmount	
Model	MGSD-10080F	MGSW-24160F	MGSW-28240F

Product Image



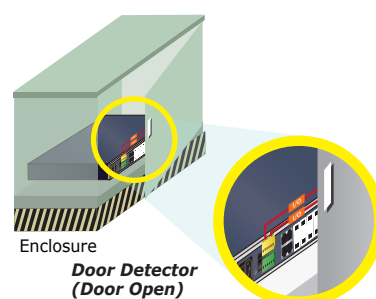
Hardware	10/100/1000BASE-T	2	8	4 (Combo)
	10/100BASE-TX	-	-	-
	1000 mini-GBIC	8	16	24
	100BASE-FX	Compatible	Compatible	Compatible
	10G SFP+ Slot	-	-	4 (1000X Compatible)
	Switch Fabric	20Gbps	48Gbps	128Gbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO
Power	Inputs	Dual 36~72V DC 100~240V AC	Dual 36~60V DC 100~240V AC	Dual 36~60V DC 100~240V AC
	Connector	6-pin terminal block, AC socket		
	Consumption	11.2 watts	45 watts	54 watts
Mechanical	Dimensions (W x D x H)	330 x 155 x 43.5 mm	440 x 200 x 44.5 mm	440 x 200 x 44.5 mm
	Enclosure	Metal chassis	Metal chassis	Metal chassis
	Mounting	Rackmount	Rackmount	Rackmount
Environment	Operating Temperature	-10~60 degrees C	-10~60 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	8 VLAN	128 VLAN
	Routing Tables	32	32	128
	Routing Protocols	IPv6/IPv4 Static Routing		OSPFv2, 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		
	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	RSTP/MSTP	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, SSH and SSL		
	SNMP	v1, v2c, v3 and trap		
	Alarm	Power and port alarm		
	System Log	System Log and remote Syslog		

Fully Front Panel Access Design



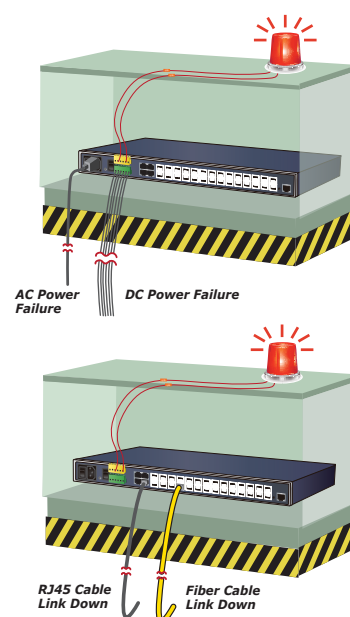
AC Power, DC Power, Digital I/O, and Network Access are all managed on the front panel.

Digital Input



Designed for intrusion and environment detection to protect the assets.

Digital Output



Designed for AC, DC, link alteration

DIN-rail L3/L2+ Managed Ethernet Switches

L3					L2+ Ring					L2/L4	
Model	IGS-5225-8T2S2X	IGS-6325-8T8S4X	IGS-6325-8T8S	IGS-20040MT	IGS-12040MT	IGS-10020MT	IGS-10080MFT	IGS-5225-4T2S	IGS-4215-16T2S	IGS-801M	
Product Image											
	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP		Modbus TCP			
Hardware	10/100/1000BASE-T	8	8	8	16	8	8	2	4	16	8
	10/100BASE-TX	-	-	-	-	-	-	-	-	-	-
	1000/2500BASE-X	2	8	8	4 x 1000	4 x 1000	2	2 x 2500 6 x 1000	2 x 1000	2 x 1000	-
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	-
	10G SFP+ Slot	2	4	-	-	-	-	-	-	-	-
	Switch Fabric	66Gbps	112Gbps	56Gbps	40Gbps	24Gbps	26Gbps	26Gbps	12Gbps	36Gbps	16Gbps
	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 12~48V DC or 24V AC			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	
	Connector	6-pin terminal block			6-pin terminal block					6-pin terminal block	
	Consumption	20 watts	30 watts(TBD)	25 watts(TBD)	17 watts	12 watts	10 watts	13.92 watts	6.5 watts	15 watts	10 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	72 x 107 x 152 mm	32 x 87 x 135 mm
	Enclosure	IP30 aluminum			IP30 aluminum				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% to 95%RH (non-condensing)	5%~70% 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	
	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	128 VLAN	128 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN	-	-
	Routing Tables	128	128	128	32	32	32	32	32	-	-
	Routing Protocols	OSPFv2, IPV6/IPv4 Static Routing			IPv6/IPv4 Static Routing					-	-
	Accelerated Hardware	●	●	●	-	-	-	-	-	-	-
Protocol	VLAN	Port-based VLAN/IEEE 802.0Q VLAN/Q-in-Q/Private VLAN/Mac-based VLAN/Protocol-based VLAN/Voice VLAN/MVR/GVRP								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 < 10ms			ERPS Ring < 10ms					RSTP/MSTP	
	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					Web, telnet, SSHv2 and TLSv1.2	Console, Web, telnet, SSH and TLSv1.2		Web, telnet, SSH and TLSv1.2	
	SNMP	v1, v2c, v3 and trap			v1, v2c, v3 and trap					v1, v2c, v3 and trap	
	Alarm	Power and port alarm			Power and port alarm		Power alarm			Power alarm	
	System Log	System Log and remote Syslog			System Log and remote Syslog					System Log and remote Syslog	

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

802.3bt PoE++					802.3at PoE+						
Model	IGS-5225-4UP1T2S		IGS-6325-8UP2S2X IGS-6325-8UP2S		IGS-6325-16P4S	IGS-5225-8P2S2X	IGS-5225-8P4S	IGS-5225-8P2T2S	IGS-10020HPT IGS-10020PT	IGS-20160HPT	IGS-5225-4P2S
Product Image											
	Modbus TCP 90W		Modbus TCP 90W		Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP	Modbus TCP
Hardware	10/100/1000BASE-T	5	8	16	8	8	8	8	8	18	4
	10/100BASE-TX	-	-	-	-	-	-	2	-	-	-
	1000/2500BASE-X	2 x 1000	2	4	2 x 1000	4 x 1000	2 x 1000	2	2	2	2 x 1000
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP Slot	-	2/-	-	2	-	-	-	-	-	-
	Switch Fabric	14Gbps	60/26Gbps	52Gbps	60Gbps	24Gbps	20Gbps	26Gbps	46Gbps	12Gbps	
	DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	2 DI & DO	-
Power	Inputs	Dual 48~56V DC			Dual 48~56V DC		Dual 48~56V DC		Dual 12~48V DC/ Dual 48~56V DC		Dual 48~56V DC
	Connector	6-pin terminal block			6-pin terminal block				6-pin terminal block		
	Consumption	280 watts	340/335 watts	440 watts	300 watts	300 watts	300 watts	306/161.9 watts	440 watts	140 watts	
Mechanical	Dimensions (W x D x H)	76 x 107 x 152 mm			82 x 107 x 152 mm	76 x 107 x 152 mm		76 x 107 x 152 mm		82 x 107 x 152 mm	56 x 87 x 135 mm
	Enclosure	IP30 aluminum			IP30 aluminum		IP30 aluminum		IP30 aluminum		IP40 metal
	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%~70% 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		
	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	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at
	PoE Port	4	8	16	8	8	8	8	8	16	4
	PoE Budget	240 watts	320 watts	320 watts max.	270 watts max.	240 watts max.	240 watts max.	270/240 watts max.	320 watts max.	120 watts max.	
	PSE Type	Mid-span + End-span			End-span	End-span	End-span	End-span	End-span	End-span	End-span
	Power Pin Assignment	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)			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	8 VLAN	128 VLAN	128 VLAN	128 VLAN	8 VLAN	8 VLAN	8 VLAN	128 VLAN	8 VLAN	
	Routing Tables	32	128	128	128	32	32	32	128	32	
	Routing Protocols	IPv6/IPv4 Static Routing	OSPFv2, 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/MVR/GVRP					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 L2/L4 Power over Ethernet Managed Switches

802.3at PoE+				802.3af PoE		
Model	IGS-4215-4P4T	IGS-4215-4P4T2S	IGS-4215-8P2T2S	ISW-504PS	ISW-514PS/ISW-514PSF	
Product Image						
Hardware	10/100/1000BASE-T	8	8	10	-	-
	10/100BASE-TX	-	-	-	5	5
	1000 mini-GBIC	-	2	2	-	-
	100BASE-FX	-	Compatible	Compatible	-	1
	Switch Fabric	16Gbps	20Gbps	24Gbps	1Gbps	1Gbps
	DI & DO	-	-	-	-	-
Power	Inputs	Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC	Dual 24 or 48V DC	Dual 24 or 48V DC
	Connector	6-pin terminal block	6-pin terminal block	6-pin terminal block	6-pin terminal block	6-pin terminal block
	Consumption	160 watts	170 watts	280 watts	70.56 watts	80.2 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	56 x 87.8 x 135 mm	56 x 87.8 x 135 mm
	Enclosure	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	DIN-rail, wall-mountable
Environment	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-10~60 degrees C	-10~60 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), EC60068-2-6 (Vibration)				
PoE	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af	802.3af
	PoE Port	4	4	8	4	4
	PoE Budget	144 watts	144 watts	240 watts	60 watts max.	60 watts max.
	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(-)	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/GVRP			Port-based VLAN/IEEE 802.1Q VLAN	
	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	RSTP/MSTP	RSTP/MSTP	RSTP/MSTP	-	-
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN			Port-based/802.1P/IP DSCP	
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security			-	-
	Traffic Control	In/out rate limit, storm control			In/out rate limit	In/out rate limit
Management	Interface	Console, Web, telnet, SSH and SSL			Web	Web
	SNMP	v1, v2c, v3 and trap	v1, v2c, v3 and trap	v1, v2c, v3 and trap	-	-
	Alarm	Power alarm	Power alarm	Power and port alarm	-	-
	System Log	System Log and remote Syslog			-	-

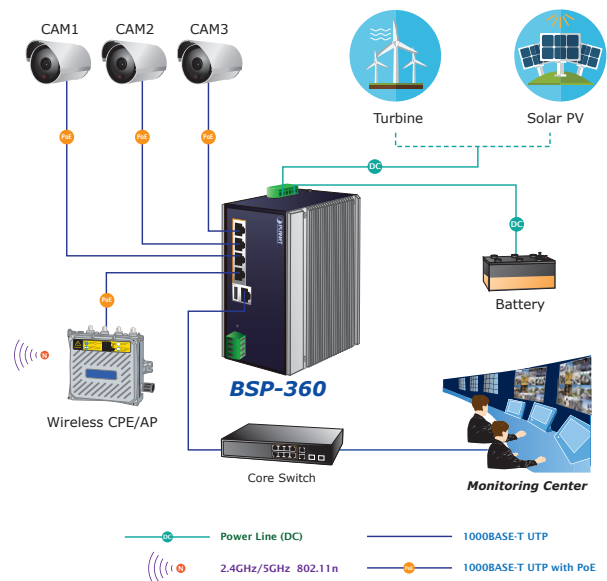
Industrial Power over Ethernet Unmanaged Switches

802.3at PoE+							802.3bt PoE++		
Model	ISW-504PT	ISW-514PTF	IGS-504HPT	IGS-614HPT	IGS-624HPT	IFGS-1022HPT	IPOE-E174	IGS-824UPT	
Product Image									
Redundant Fiber						PoE Extension			
Hardware	10/100/1000BASE-T	-	-	5	5	4	2	5	6
	10/100BASE-TX	5	4	-	-	-	8	-	-
	1000BASE-SX/LX	-	-	-	1	2	2	-	2
	100BASE-FX	-	1	-	Compatible	Compatible	-	-	Compatible
	Fiber Connector Type	-	SFP	-	SFP	SFP	SFP	-	SFP
	Switch Fabric	1Gbps	1Gbps	10Gbps	12Gbps	12Gbps	5.6Gbps	10Gbps	16Gbps
	MAC Table	1K	1K	4K	4K	4K	16K	8K	8K
Mechanical	Dimensions (W x D x H)	50 x 87.8 x 135 mm		50 x 87 x 135 mm		72 x 105 x 152 mm		32 x 87.8 x 135 mm	50 x 87 x 135 mm
	Enclosure	IP40 metal		IP40 metal		IP30 aluminum		IP30 metal	
	Power Requirement	Dual 12~48V DC		Dual 12~56V DC		48~56V DC		End-span + Mid-span	48~56V DC
	Mounting	DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable		DIN-rail, wall-mountable	
Regulatory	EMI/Safety	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	
PoE	PoE Standard	802.3at	802.3at	802.3at		802.3at		802.3af/802.3at	802.3bt
	PoE Port	4	4	4	4	4	8	4	4
	PoE Budget	60 watt max. @ 12V DC 120 watts max. @ 24~48V DC		60 watt max. @ 12V DC 120 watts max. @ 24~48V DC		240 watts max.		50 watts max.	240 watts max.
	PSE Type	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(+) 4/5(+), 7/8(-)

Renewable Energy PoE Switch

Model	BSP-360
Product Image	
LAN	10/100/1000
PoE	802.3at
PoE Budget	per port 30 watts (max.)
PSE Type	end-span
PoE Power Pin	1/2(+), 3/6 (-)
PoE Power Voltage	52V DC
Management	Web/SNMP
System Voltage/ Battery Requirement	24V DC
Power IN	Solar or turbines 24~45V DC
Max. Charge Current	6A
Features	* 24V DC, 1A output load * Low voltage protection and alert * PoE schedule and management * USB Backup

Renewable Energy Off-Grid PoE+ Network System Application



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.

EN50155 Railway/Ethernet Switches & Extenders

802.3at PoE+						L2+ Ring		
Model		IGS-5227-4MP2MT	IGS-604HPT-M12	IGS-604HPT-RJ	IGS-5226-4P2T	IGS-5227-6MT-X	IGS-5227-6MT	IGS-5227-6T
Product Image								
		Modbus TCP		Modbus TCP		Modbus TCP	Modbus TCP	
Hardware	10/100/1000BASE-T	6 x M12, 8-pin A-coded connector		6 x Waterproof RJ45		6 x M12, 8-pin X-coded connector	6 x M12, 8-pin A-coded connector	6 x Waterproof RJ45
	1000 mini-GBIC	-	-	-	-	-	-	-
	100BASE-FX	-	-	-	-	-	-	-
	Switch Fabric	12Gbps	12Gbps	12Gbps	12Gbps	12Gbps	12Gbps	12Gbps
	DI & DO	-	-	-	-	-	-	-
Power	Inputs	Dual 24~48V DC	Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC	Dual 9~48V DC	Dual 9~48V DC	Dual 9~48V DC
	Connector	5-pin M23 male connector	5-pin A-Coded M12 male connector			5-pin A-Coded M12 male connector		
	Consumption	160 watts	160 watts	160 watts	160 watts	10 watts	10 watts	10 watts
Mechanical	Dimensions (W x D x H)	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	163 x 103 x 53 mm	163 x 103 x 53 mm
	Enclosure	IP67 aluminum	IP67 aluminum	IP67 aluminum	IP50 metal	IP67 aluminum	IP67 aluminum	IP67 aluminum
	Mounting	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)		
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)		
PoE	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	-	-	-
	PoE Port	4	4	4	4	-	-	-
	PoE Budget	144 watts	144 watts	144 watts	144 watts	-	-	-
	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(-)	-	-	-
Layer 3 Features	IP Interfaces	8 VLAN	8 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	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	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 < 20ms	ERPS Ring < 20ms	ERPS Ring < 20ms	ERPS Ring < 20ms	ERPS Ring < 20ms	ERPS Ring < 20ms	ERPS Ring < 20ms
	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, SSH and SSL				Web, telnet, SSH and SSL		
	SNMP	v1, v2c, v3 and trap				v1, v2c, v3 and trap		
	Alarm	Power and port alarm		Power 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-804PT-M12	ISW-808PT-M12 ISW-800PT-M12A	IPOE-E302	
Product Image					
	PoE			95W	
Hardware	Interface	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	-	4-port 802.3af PoE PSE	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	990g	1,150g	320g
	Enclosure	IP67 aluminum	IP67 aluminum	IP67 aluminum	IP67 aluminum
	Mounting	DIN-rail, wall-mountable	DIN-rail, wall-mountable	DIN-rail, wall-mountable	Wall-mountable
Power	Inputs	Dual 12~48V DC	Dual 48V 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	65 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)
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-810	WGS-803	WGS-804HP	WGS-818HP	WGS-814HP	
Product Image						
Hardware	10/100/1000BASE-T	8	8	8	8	8
	10/100BASE-TX	-	-	-	-	-
	1000 mini-GBIC	-	-	-	-	-
	100BASE-FX	-	-	-	-	-
	Fiber Connector Type	-	-	-	-	-
	Switch Fabric	16Gbps	16Gbps	16Gbps	16Gbps	16Gbps
Power	Inputs	12V DC	12~48V DC or 24V AC	Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC
	Connector	DC Socket	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 25 x 134 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable and magnetic wall mount		DIN-rail, wall-mountable and magnetic wall mount		
Environment	Operating Temperature	-20~60 degrees C	-10~60 degrees C	-10~60 degrees C	-20~60 degrees C	-20~60 degrees C
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
PoE	PoE Standard	-	-	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at
	PoE Port	-	-	4	8	4
	PoE Budget	-	-	120 watts	120 watts	60 watts
	PSE Type	-	-	End-span	End-span	End-span
	Power Pin Assignment	-	-	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)

Flat-type Managed Ethernet Switches

L2/L4 Switches				L2/L4 PoE+ Switches				
Model	WGS-4215-8T	WGS-4215-8T2S	WGS-5225-8T2SV	WGS-5225-8UP2SV	WGS-5225-8P2SV	WGS-5225-8P2S	WGS-4215-16P2S	
Product Image								
Hardware	LCD	-	-	2.4" Color TFT touch screen			-	-
	10/100/1000BASE-T	8	8	8	8	8	8	16
	10/100BASE-TX	-	-	-	-	-	-	-
	1000/2500BASE-X	-	2 x 1000	2	2	2	2	2 x 1000
	100BASE-FX	-	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP+ Slot	-	-	-	-	-	-	-
	Switch Fabric	16Gbps	20Gbps	26Gbps	26Gbps	26Gbps	26Gbps	36Gbps
	DI/DO	-	-	-	-	-	-	-
Power	Inputs	12~48V DC or 24V AC			Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC
	Connector	3-pin terminal block, DC socket			3-pin terminal block, DC socket			
	Consumption	7 watts	7.9 watts	12 watts	340 watts	215 watts	210 watts	240 watts
Mechanical	Dimensions (W x D x H)	148 x 25 x 134 mm	178 x 25 x 134 mm		178 x 25 x 134 mm			245 x 25 x 134 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable and magnetic wall mount			DIN-rail, wall-mountable and magnetic wall mount			
Environment	Operating Temperature	-40~75 degrees C		-20~70 degrees C	-20~70 degrees C		-40~75 degrees C	-10~60 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	-	-	-	802.3bt PoE++	802.3at PoE+	802.3at PoE+	802.3at
	PoE Port	-	-	-	8	8	8	8
	PoE Budget	-	-	-	320 watts	200 watts	200 watts	240 watts
	PSE Type	-	-	-	End-sapn+Mid-sapn	End-sapn	End-sapn	End-sapn
	Power Pin Assignment	-	-	-	1/2(-), 3/6(+) 4/5(+), 7/8(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)
Layer 3 Features	IP Interfaces	-	-	8 VLAN	8 VLAN	8 VLAN	8 VLAN	-
	Routing Tables	-	-	32	32	32	32	-
	Routing Protocols	-	-	IPv6/IPv4 Static Routing	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	v2/v3/query	v2/v3/query	V1/v2/v3/query	V1/v2/v3/query	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	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s
	Data Redundancy	RSTP/MSTP	RSTP/MSTP	ERPS Ring < 10ms	ERPS Ring < 10ms	ERPS Ring < 10ms	ERPS Ring < 10ms	RSTP/MSTP
	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, SSH and SSL						
	SNMP	v1, v2c, v3 and trap						
	Alarm	-	-	-	-	-	-	-
	System Log	System Log and remote Syslog						

Flat-type Managed Ethernet Switches

L2/L4 PoE+ Switches				
Model	WGS-4215-8HP2S	WGS-4215-8P2S	WGS-804HPT	

Product Image



Hardware	LCD	-	-	-
	10/100/1000BASE-T	8	8	8
	10/100BASE-TX	-	-	-
	1000 mini-GBIC	2	2	-
	100BASE-FX	Compatible	Compatible	-
	10G SFP+ Slot	-	-	-
	Switch Fabric	20Gbps	20Gbps	16Gbps
	DI/DO	-	-	-
Power	Inputs	Dual 48~56V DC		
	Connector	3-pin terminal block, DC socket		
	Consumption	350 watts	210 watts	152 watts
Mechanical	Dimensions (W x D x H)	178 x 25 x 134 mm	178 x 25 x 134 mm	148 x 25 x 134 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable and magnetic wall mount		
Environment	Operating Temperature	-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	802.3bt/802.3at	802.3at	802.3at
	PoE Port	4 x 802.3bt 4 x 802.3at	8	4
	PoE Budget	320 watts	200 watts	144 watts
	PSE Type	End-sapn+Mid-sapn	End-sapn	End-sapn
	Power Pin Assignment	1/2(-), 3/6(+) 4/5(+),7/8(-)	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/GVRP		
	IGMP Snooping	v2/v3/query		
	Spanning Tree	802.1w/802.1s		
	Data Redundancy	RSTP/MSTP		
	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, SSH and SSL		
	SNMP	v1, v2c, v3 and trap		
	Alarm	-	-	-
	System Log	System Log and remote Syslog		

Flat-type Gigabit Routers

Touch LCD		Managed PoE+	Managed
Model	WGR-500-4PV	WGR-500-4P	WGR-500

Product Image



Hardware	LCD	2.4" Color TFT Touch Screen	-	-
	10/100/1000BASE-T	5 (4 LAN, 1 WAN)		
Power	Inputs	Dual 48~56V DC		Dual 9~48V DC
	Connector	3-pin terminal block, DC socket		2-pin terminal block, DC socket
Mechanical	Dimensions (W x D x H)	180 x 25 x 140 mm		148 x 24 x 134 mm
	Enclosure	IP30 metal		
	Mounting	DIN-rail, wall-mountable and magnetic wall mount		
Environment	Operating Temperature	-10~60 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+		-
	PoE Port	4	4	-
	PoE Budget	120 watts	120 watts	-
	PSE Type	End-span	End-span	-
	Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)	-
Protocol	VLAN	IEEE 802.1Q VLAN		
Management	Interface	Web	Web	Web
	SNMP	v1, v2c	v1, v2c	v1, v2c
	System Log	System log and remote Syslog		

Unique Flat-type Design with Touch LCD

Front Access

Flat Design

PoE Usage

DIN-rail Installation

Fiber Connection

Magnetic Installation

Industrial Long Reach PoE Switches, Injectors & Extenders

		Long Reach PoE Injectors		Switches		Long Reach PoE Extenders		
Model		LRP-101CH	LRP-101UH	LRP-201HT	LRP-422CST	LRP-101CE	LRP-101UE	LRP-201ET
Product Image								
Ethernet Interfaces	10/100BASE-TX	1 x RJ45 w/ PoE PD		1 x RJ45 w/ PoE PD	-	1 x RJ45 w/ PoE PSE		
	10/100/1000BASE-T	-	-	-	2	-	-	-
	1000BASE-SX/LX	-	-	-	2 (100BASE-FX Compatible)	-	-	-
	PoE Power	-	-	-	-	56V DC, 600mA max.	48~56V DC, 600mA max.	53V DC, 1200mA 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	100m	100m	100m	100m
Long Reach PoE Interfaces	Connectivity	1 x BNC female (PSE)	1 x RJ45 Copper (PSE)	1 x BNC female (PSE) 1 x RJ45 copper (PSE)	4 x BNC female (PSE)	1 x BNC female (PD)	1 x RJ45 Copper (PD)	1 x BNC female (PD) 1 x RJ45 copper (PD)
	Cabling	Coaxial cable: 75ohm	Copper: 4-pair or 1-pair UTP	Coaxial cable: 75 ohm Copper: Cat. 5e/6 UTP or 2-pair twisted-pair cable	Coaxial cable: 75ohm		Copper: 4-pair or 1-pair UTP	Coaxial cable: 75 ohm Copper: Cat. 5e/6 UTP or 2-pair twisted-pair cable
	Maximum Distance	1000m	500m	600m	1000m	1000m	500m	600m
	Data Rate	200m: 93Mbps/93Mbps 1000m: 55Mbps/73Mbps	200m: 94Mbps/94Mbps 500m: 30Mbps/30Mbps	Coaxial 200m: 480/530 Mbps Coaxial 600m: 100/121 Mbps UTP 200m: 279/295 Mbps UTP 400m: 56/85 Mbps	200m: 93Mbps/93Mbps 1000m: 52Mbps/50Mbps	200m: 93Mbps/93Mbps 1000m: 55Mbps/73Mbps	200m: 94Mbps/94Mbps 500m: 30Mbps/30Mbps	Coaxial 200m: 480/530 Mbps Coaxial 600m: 100/121 Mbps UTP 200m: 279/295 Mbps UTP 400m: 56/85 Mbps
	Power Output	48~56V DC, 36 watts max.		44~54V DC, 72 watts max.	48~56V DC, 36 watts max.	-	-	-
	Total Power Budget	36 watts max.	36 watts max.	72 watts max.	144 watts max.	-	-	-
	Encryption	AES128-bit	AES128-bit	AES 128-bit	AES128-bit	AES128-bit	AES128-bit	AES 128-bit
PoE Ability	PoE Standard	Power over coaxial	Power over UTP	Power over coaxial/ UTP/telephone wire	Power over coaxial	802.3af/802.3at	802.3af/at	802.3at/bt
	PoE Port	1 x BNC female (PSE)	1 x UTP	1 x BNC female (PSE) 1 x RJ45 copper (PSE)	4 x BNC female (PSE)	1 x RJ45 (PSE)	1 x RJ45 (PSE)	1 x BNC female (PSE) 1 x RJ45 copper (PSE)
	PoE Power Output	41~56V DC	41~56V DC	44~54V DC	41~56V DC	56V DC, 600mA max.	48~56V DC, 600mA max.	53V DC, 1200mA max.
Intelligent Power Control	Over Temperature Protection	-	-	-	●	-	-	-
	PD Alive Check	-	-	-	●	-	-	-
	PoE Schedule	-	-	-	●	-	-	-
	Power Limit	-	-	-	●	-	-	-
	Scheduled Power Recycling	-	-	-	●	-	-	-
Protocols	VLAN	-	-	-	802.1Q, Q-in-Q, Voice VLAN, Private VLAN	-	-	-
	Spanning Tree	-	-	-	802.1D/802.1w/802.1s	-	-	-
	IGMP Snooping	-	-	-	v1, v2, v3	-	-	-
Management	Interface	-	-	-	Console, Telnet, HTTP	-	-	-
	SNMP	-	-	-	v1, v2c, v3, trap	-	-	-
	SSH/SSL	-	-	-	● / ●	-	-	-
Physical	Dimensions (W x D x H)	94 x 70 x 26mm		135 x 87.8 x 32mm	107 x 72 x 152 mm	94 x 70 x 26mm		135 x 87.8 x 32mm
	Power Requirements	DC: 48~56V DC, PoE: 802.3at input		DC : 48~54V, PoE: 802.3at/bt input	Dual 48~56V DC	37~56V DC PoC	37~56V DC PoC	40~54V DC PoC/PoE
	Operating Temperature	-20~70 degrees C		-20~70 degrees C	-40~75 degrees C	-20~70 degrees C		-20~70 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-104CET	LRP-101UE LRP-104CET	LRP-201ET	LRP-101CE	LRP-101CH LRP-422CST LRP-1622CS LRP-822CS	LRP-101UH	LRP-201HT

Long Reach PoE Extenders

Model

LRP-104CET

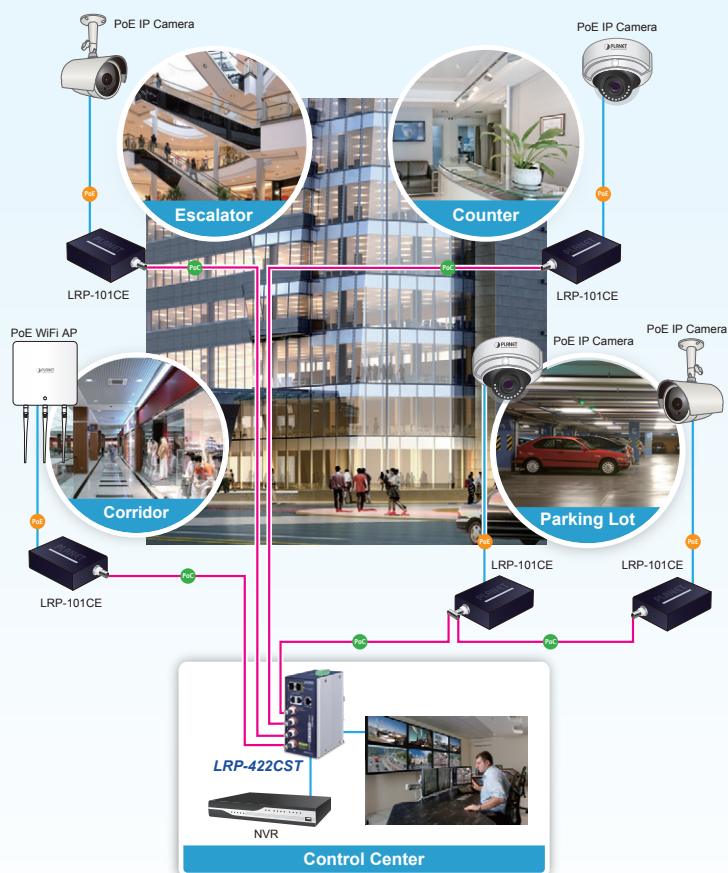
Product Image



Ethernet Interfaces	10/100BASE-TX	4 x RJ45 w/ PoE PSE
	10/100/1000BASE-T	-
	1000BASE-SX/LX	-
	PoE Power	56V DC, 600mA max.
	Cabling	Cat. 5e or above
	Maximum Distance	100m
Long Reach PoE Interfaces	Connectivity	1 x BNC female (PD)
	Cabling	Coaxial cable: 75ohm
	Maximum Distance	1000m
	Data Rate	200m: 93Mbps/93Mbps 1000m: 52Mbps/50Mbps
	Power Output	-
	Total Power Budget	-
PoE Ability	Encryption	AES128-bit
	PoE Standard	802.3af/at
	PoE Port	4 x RJ45 (PSE)
	PoE Power Output	56V DC, 600mA max.
Intelligent Power Control	Over Temperature Protection	-
	PD Alive Check	-
	PoE Schedule	-
	Power Limit	-
Protocols	Scheduled Power Recycling	-
	VLAN	-
	Spanning Tree	-
	IGMP Snooping	-
Management	Interface	-
	SNMP	-
	SSH/SSL	-
Physical	Dimensions (W x D x H)	107 x 72 x 152 mm
	Power Requirements	37~56V DC PoC/ Dual 48~56V DC
	Operating Temperature	-40~75 degrees C
Regulatory	EMI/Safety	FCC Class A, CE
Compatible Models		LRP-101CH LRP-101UH

Long Reach PoE Solution

Most Cost-effective Extension via Existing Cable



100BASE-TX UTP
100BASE-TX UTP with PoE
Coaxial Cable with Data + Power

Unmanaged Fast Ethernet Switches

Fast Ethernet												
Model		ISW-500T	ISW-800T	ISW-501T	ISW-801T	ISW-511*	ISW-511S15 *	ISW-621*	ISW-621S15 *	ISW-621TF	ISW-1600T	IFGS-1822TF
Product Image												
Hardware	10/100BASE-TX	5	8	5	8	4	4	4	4	4	16	16
	10/100/1000BASE-T	-	-	-	-	-	-	-	-	-	-	2
	100BASE-FX	-	-	-	-	1/Multi-mode/2km	1/Single-mode/15km	2/Multi-mode/2km	2/Single-mode/15km	2 SFP Slots	-	2 1000X SFP Slots
	Switch Fabric	1Gbps	1.6Gbps	1Gbps	1.6Gbps	1Gbps	1Gbps	1.2Gbps	1.2Gbps	1.2Gbps	3.2Gbps	3.6Gbps
	MAC Table	1k	1k	2k	2k	2k	2k	2k	2k	2k	2k	2k
	Memory Buffer	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits		
Protocol	Auto-negotiation	●	●	●	●	●	●	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●	●	●	●	●	●	●
Power	Inputs	12~48V DC/24VAC, Dual power input			12~48VDC, 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	2 watts	2.5 watts	3.9 watts	5.1 watts	5.4 watts	5.4 watts	7.9 watts	7.9 watts	7.9 watts	15 watts	15 watts
Mechanical	Dimensions (W x D x H)	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			65 x 107 x 152 mm	
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP40 metal	
	Mounting	DIN-Rail, Wall-mountable				DIN-Rail, Wall-mountable						
Environment	Operating Temperature	-40~75 degrees C				-10~60 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		
	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	IGS-510TF	IGS-501T	IGS-801T	IGS-620TF	IGS-1020TF	IGS-1600T	IGS-1820TF
Product Image									
Hardware	10/100/1000BASE-T	5	4	5	8	4	8	16	16
	10/100BASE-TX	-	-	-	-	-	-	-	-
	1000BASE-SX/LX	-	1 (100BASE-FX Compatible)	-	-	2 (100BASE-FX Compatible)	2	-	2 (100BASE-FX Compatible)
	Switch Fabric	10Gbps	10Gbps	10Gbps	16Gbps	12Gbps	20Gbps	32Gbps	36Gbps
	MAC Table	2k	2k	2k	8k	1k	8K	8K	8K
	Memory Buffer	1Mbits	1Mbits	1Mbits	176k Bytes	-	-	-	-
Protocol	Auto-negotiation	●	●	●	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●	●	●	●
Power	Inputs	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		
	Connector	6-pin removeable terminal block	4-pin removeable terminal block	6-pin removeable terminal block			6-pin removeable terminal block		
	Consumption	5.28 watts	4.3 watts	5.28 watts	6.7 watts	12 watts	8.7 watts	16 watts	18 watts
Mechanical	Dimensions (W x D x H)	30 x 10 x 104 mm		32 x 87.8 x 135 mm			56 x 87.8 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	-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, cUL		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				10G
Model	IFT-802T	IFT-802TS15	IFT-805AT	IXT-705AT

Product Image



Copper	Copper Interface	1 x 10/100BASE-TX, RJ45, Auto-negotiation, Auto-MDI/MDI-X			1 x 10/1000/2500/5000/10G N BASE-T RJ45
Fiber	Optical Interface	100BASE-FX	100BASE-FX	100BASE-FX	10G BASE-FX
	Optical Connector	SC	SC	SFP	SFP+
	Optical Mode	Multi-mode	Single mode	Vary on module	Vary on module
	Max. Distance	2km	15km	Vary on module	Vary on module
	Optic Wavelength	1310nm	1310nm	Vary on module	Vary on module
	Fiber-optic Cable	50/125μm or 62.5/125μm multi-mode	9/125μm single mode	Vary on module	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	32 x 87.8 135 mm
	Weight	400g	400g	400g	400g
	Enclosure	IP30 metal	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	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.	9 watts max.
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)
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

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 1000BASE-SX/LX/BX SFP Compatible with 100BASE-FX SFP	
	Optical Mode	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
	Optic Wavelength	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
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
	Weight	251g	500g	484g	612g	665g
	Enclosure	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
Power	Inputs	DC 48~56V	DC 48~56V	DC 12~56V	Dual 12~56V DC	Dual 12~56V DC
	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
	PoE	36 watts max.	30 watts max.	90 watts max.	90 watts max.	180 watts max.
	Consumption	43.12W	33W	DC 12V: 82W DC 48V: 98W	DC 12V: 82W DC 48V: 98W	DC 12V: 82W DC 48V: 98W
Environment	Operating Temperature	-40~75 degrees C			-40~75 degrees C	
	Operating Humidity	5%~90% RH (non-condensing)			5%~90% 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							
Model	IGT-815AT	IGT-805AT	IGT-1205AT	IGT-902T	IGT-902TS	IGT-905A	
Product Image							
Copper	Copper Interface	1 x 10/100/1000BASE-T, RJ45, Auto-negotiation, Auto-MDI/MDI-X					
Fiber	Optical Interface	100/1000BASE-X	100/1000BASE-X	100/1000BASE-X	1000BASE-LX	1000BASE-LX	100/1000BASE-X
	Optical Connector	1 x SFP	SFP	SFP	SC	SC	SFP
	Optical Mode	Vary on module	Vary on module	Vary on module	Multi-mode	Single mode	Vary on module
	Max. Distance	Vary on module	Vary on module	Vary on module	200m~550m	10km	Vary on module
	Optic Wavelength	Vary on module	Vary on module	Vary on module	850nm	1310nm	Vary on module
	Fiber-optic Cable	Vary on module	Vary on module	Vary on module	50/125µm or 62.5/125µm multi-mode	9/125µm single mode	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	32 x 87.8 135 mm	32 x 87.8 135 mm
	Weight	251g	458g	400g	405g	405g	405g
	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, wall-mountable		
Power	Inputs	DC 9~48V AC 24V	Dual 12~48V DC		Dual 12~48V DC		
	Connector	2-pin Removable terminal Block	6-pin removable terminal block		6-pin removable terminal block		
	PoE	-	-	-	-	-	-
	Consumption	2 watts max.	3.3 watts max.	7.5 watts max.	7.7 watts max.	7.7 watts max.	7.7 watts max.
Environment	Operating Temperature	-40~75 degrees C			-30~75 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		-	-	-	Web, SNMPv1, v2c, RMON, 802.3ah OAM/TS-1000 OAM, in/out bandwidth control, 802.1QVLAN, Q-inQ, TOS/DSCP/802.1p QoS, TCP/UDP packet filter		

Industrial Serial over Ethernet Converters

Industrial Serial over Ethernet Converters							
Model		ICS-2100	ICS-2105A	ICS-2200T	ICS-2400T	ICS-2100T/ICS-2105AT	ICS-2102T/ICS-2102TS
Product Image							
Serial Port	Interface	RS232/RS422/RS485		2 x RS232/RS422/RS485	4 x RS232/RS422/RS485	1 x RS232/422/485	1 x RS232/422/485
	Connector	RS232: DB9, RS422/RS485: 4-pin terminal block		DB9	DB9	1 x DB9 for RS232 1 x 4-pin terminal block for RS422/485	
	Baud Rate (Data Rate)	100bps to 921Kbps		100bps to 921Kbps		50bps to 921Kbps	
	Data Bits	5, 6, 7, 8		5, 6, 7, 8		5,6,7,8	5,6,7,8
	Stop Bits	1, 2	1, 2	1, 2	1, 2	1,1.5,2	1,1.5,2
	Flow Control	None, RTS/CTS, Xon/Xoff		None, RTS/CTS, Xon/Xoff		None, RTS/CTS, Xon/Xoff	
Fast Ethernet Port	Standard	10/100BASE-TX	100BASE-FX	10/100BASE-TX		ICS-2100/ICS-2100T: 10/100BASE-TX ICS-2105A/ICS-2105AT: 100BASE-FX	100BASE-FX
	Connector	RJ45	SFP/ Vary on module	2 x RJ45	2 x RJ45	ICS-2100T: RJ45 ICS-2105AT: SFP	Duplex SC
	Optical Wavelength	-	Vary on module	-	-	ICS-2105AT: Vary on module	1310nm
	Max. Distance	100m	Vary on module	100m	100m	ICS-2100/ICS-2100T: 100m ICS-2105A/ICS-2105AT: May vary on module	ICS-2102T: 2km ICS-2102TS: 30km
	Protection	Built-in 1.5KV magnetic isolation				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	
	Power Consumption	10.1 watts	10.1 watts	10.1 watts	10.1 watts	5 watts max.	5 watts max.
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
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP40 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, wall-mountable		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	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	
	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	

Industrial PoE+ Injectors, Splitters, Converters

802.3at PoE+ Injectors				802.3bt PoE++ Injector				
Model	IPOE-162	IPOE-260/ IPOE-260-12V	IPOE-171-60W	IPOE-171-95W	IPOE-270/ IPOE-270-12V	IPOE-470/ IPOE-470-12V	IPOE-175	
Product Image								
Hardware	RJ45 Data Input Port	1 x RJ45	2 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	2 x RJ45	4 x RJ45	1 x RJ45
	Data Rate	10/100/1000Mbps		10/100/1000Mbps		10/100/1000Mbps		10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	802.3at	Ultra PoE (802.3at Compliant)		802.3bt Type-4 Backward compatible with 802.3at		802.3bt Type-3
	PSE Type	Mid-span	Mid-span	Both 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(+)		
	PoE Port	1	2	1	1	2	4	1
	PoE Power Output	56V DC	48~56V DC/54V DC	52~56V DC	54V DC	48~56V DC/54V DC		55V DC
	PoE Ability	30 watts	60 watts budget	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		41 x 70 x 115mm	56 x 87 x 135mm	150 x 72 x 44mm
	Power Supply	External	External	External	External	External	External	External
	Power Requirements	Dual 24~48V DC, 24V AC	Dual 48~56V DC/ Dual 12~56V DC	Dual 48~56V DC	Dual 12~48V DC	Dual 48~56V DC/ Dual 12~56V 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

Ultra PoE / 802.3at PoE+ Splitters				
Model	IPOE-162S	IPOE-173S	IPOE-175S	
Product Image				
Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45	1 x RJ45
	Data Output Port	1 x RJ45	1 x RJ45	1 x RJ45
	DC Output Voltage	12V/24V DC, max. 2A	10/100/1000Mbps	10/100/1000Mbps
	DIP Switch	Adjustable 12V/24V DC	12V/24V DC, max. 5A	12V DC, max. 5A
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	802.3bt Type-4 PD	802.3bt Type-3 PD
	PD Type	Both Mid-span and End-span		
	PoE Power Input	52~56V DC	52~56V DC	52~56V DC
Physical	Dimensions (W x D x H)	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
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

PoE Extender		PoE Tester
Model	IPOE-E174	POE TESTER+

Product Image			
Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45
	Data Output Port	4 x RJ45	-
	DC Output Voltage	PoE 44~57V DC	-
	DIP Switch	-	-
	Data Rate	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3bt Type-4 PD	802.3af/802.3at/802.3bt
	PD Type	Both Mid-span and End-span	
	PoE Power Input	44~56V DC	36~57V DC
Physical	Dimensions (W x D x H)	56 x 87.8 x 135mm	70 x 23 x 22mm
	Operating Temperature	-40~75 degrees C	-10~60 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	CE compliance

Industrial Ethernet Extenders

DIN-rail		
Model	IVC-234GT	
Product Image		
Copper	Copper Interface	4 x 10/100/1000BASE-T
	Coaxial	1 BNC, female connector
	UTP	1 RJ11, female connector
	Max. Performance (Download/ Upload)	- Coaxial Cable: Up to 200/95Mbps@200m - UTP: Up to 200/100Mbps@200m
	Max. Distance	- Coaxial Cable: Up to 1.2km - UTP: Up to 1.2km
Extended Port	Cabling	- Coaxial Cable: 50ohm, RG58A/U, RG58/U75ohm, RG6 - Twisted-pair telephone wires (AWG24 or better)
	Dimensions (W x D x H)	32 x 87.8 x 135 mm
	Weight	631g
	Enclosure	IP30 metal
Mechanical	Mounting	DIN-rail, wall-mountable
	Inputs	Dual 12~48V DC
	Connector	6-pin removable terminal block
Power	Consumption	6.64 watts max.
	Operating Temperature	-40~75 degrees C
Environment	Operating Humidity	5% to 95%RH (non-condensing)
	Emissions	FCC Class A, CE Class A
Regulatory	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)
	Functionality	Master/Slave mode select, selectable BNC and RJ11 mode, selectable target band plan, selectable target SNR mode

Industrial Gateways

Industrial Modbus Gateways		
Model	IMG-120T	IMG-110T

Product Image



Hardware	RJ45 Port	1 x 10/100Base-TX, auto MDI/MDIX
	Serial Port	5-contact Terminal Block RS422/RS485 x 2
	Baud Rate	300bps to 115200bps
	Parity Type	Odd, Even, None, Space, Mark
	Signals	RS422 : Tx+, Tx-, GND, Rx+, Rx-, RS485: Data A (+), GND, Data B (-)
	Operation Mode	Modbus RTU/ASC II Master & Slave
	Surge Protection	1KV
	Multi-master and Multi-drop	Master mode: 32 TCP slaves Slave mode: 16 TCP masters
Power	Power Input Connector	2-contact Terminal Block (DC 9-48V)
	Power Consumption	1.61 Watts (max.)
Regulatory	Emissions	FCC Part 15 Class B, CE
	Stability	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)
Mechanical	Dimensions (W x D x H)	69 x 22 x 100 mm
	Enclosure	IP40 metal
	Mounting	Wallmount-type
Management	Management Interface	Remote IP-based Web/Telnet
	Utility	Modbus Gateway Utility/ Discovery Utility
Environment	Operating Temperature	-40~75 degrees C
	Operating Humidity	5~95% (non-condensing)

Vehicle Cellular Gateway	
Model	VCG-1500WG-LTE

Product Image



Hardware	10/100BASE-TX	4
	WAN	1
	Wi-Fi	802.11n, 2.4GHz
	GPS	-
	SIM Card Slot	1
	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)
	US Model	FDD LTE B2/B4/B12 (1900/AWS1700/700) WCDMA B2/B4/B5 (1900/AWS1700/850)
	LTE	20MHz bandwidth: 100Mbps (DL), 50Mbps (UL)
Power	Inputs	6-32V DC
	Connector	Standard 4-pin vehicle power jack
	Consumption	3 watts
Mechanical	Dimensions (W x D x H)	168 x 104 x 25 mm
	Enclosure	IP30 metal
Environment	Operating Temperature	-25~65 degrees C
	Operating Humidity	95% (non-condensing)
Regulatory	Emissions	FCC Part 15 Class A, CE
	Stability	Static Route, VPN, DDNS, IP Filter, QoS
Management	Interface	Console, Web, telnet
	Software Utility	CMS
	Log	Syslog Log

Industrial Cellular Gateways				
Model	ICG-2420-LTE	ICG-2420G-LTE	ICG-2510W-LTE	ICG-2510WG-LTE

Product Image



Hardware	LAN	3 10/100BASE-TX		5 10/100/1000BASE-T	
	WAN	1	1	1	1
	WLAN	-	-	2.4G/5G	2.4G/5G
	DI & DO	2 DI & 1 DO	2 DI & 1 DO	2 DI & 1 DO	2 DI & 1 DO
	GPS	-	●	-	●
	COM Port	2*RS232/1*485	2*RS232/1*485	1*RS232/RS485	1*RS232/RS485
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)			
	US Model	FDD LTE B2/B4/B12 (1900/AWS1700/700) WCDMA B2/B4/B5 (1900/AWS1700/850)		FDD LTE B2/B4/B12 (1900/AWS1700/700) WCDMA B2/B4/B5 (1900/AWS1700/850)	
	LTE	20MHz bandwidth: 150Mbps (DL), 50Mbps (UL)		20MHz bandwidth: 100Mbps (DL), 50Mbps (UL)	
Power	Inputs	10~32V DC		9~36V DC	
	Connector	3-pin terminal block		6 pin 3.5mm terminal block	
	Consumption	7 watts		7 watts	
Mechanical	Dimensions (W x D x H)	60 x 106 x 110 mm		115.7 x 133 x 45	
	Enclosure	IP40 aluminum		IP30 metal	
	Mounting	DIN rail kit		DIN rail	
Environment	Operating Temperature	-20 ~ 70 degrees C		-35~75degrees	
	Operating Humidity	5 ~ 95% (non-condensing)		95%(non-condensing)	
Regulatory	Emissions	FCC Part 15 Class A, CE		FCC Part 15 Class A, CE	
	Stability	Static Route, Open VPN, DDNS, TR069, IP Filter, SMTP		Static Route, Open VPN, DDNS, TR069, IP Filter, SMTP	
Management	Interface	Console, Web, telnet and SSHv2		Console, Web, telnet	
	SNMP	v1, v2c, v3 and trap		v1, v2c, v3 and trap	
	System Log	System Log and Remote Syslog		System Log and Remote Syslog	

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	-40~75 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

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.	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 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.	-40~75 degrees C		-40~75 degrees C		-40~75 degrees C		-40~75 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.	-40~45 degrees C	-40~45 degrees C	-40~45 degrees C	-40~45 degrees C	-40~45 degrees 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	
Product Image									
Power Output	Budget	40 watts	60 watts	75 watts	75 watts	120 watts	240 watts	480 watts	
	DC Voltage	24V, 1.7A	24V, 2.5A	24V, 3.2A	48V, 1.6A	48V, 2.5A	48V, 5A	48V, 10A	
Power Input	Voltage	100-240V AC, 50/60Hz, 1.1A	100-240V AC, 50/60Hz, 1.8A	100-240V AC, 50/60Hz, 2.0A	100-240V 50/60Hz, 1.45A	100-240V 50/60Hz, 2.25A	100-240V 50/60Hz, 2.5A	100-240V 50/60Hz, 4.8A	
Mechanical	Dimensions (W x H x D)	40 x 90 x 100 mm	40 x 90 x 100 mm	55 x 125 x 100 mm	32 x 125 x 102 mm	65 x 125 x 100 mm	63 x 125 x 113 mm	85.5 x 125.2 x 128.5 mm	
	Weight	0.3kg	0.33kg	0.6kg	0.51kg	0.6kg	1kg	1.5kg	
	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	
Environment	Operating Temperature	-20~70 degrees C			-20~70 degrees C			-20~70 degrees C	
	Storage Temperature	-40~85 degrees C			-40~85 degrees C			-40~85 degrees C	
	Operating Humidity	20~90%	20~90%	20~90%	20~95%	20~95%	20~95%	20~95%	
	Storage Humidity	10~95% (non-condensing)			10~95% (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					

Industrial EtherCAT Slave I/O Modules

EtherCAT Slave			
Model		IECS-1116-DI	IECS-1116-DO
Product Image			
Hardware	10/100/1000BASE-T	2 one IN, one OUT	2 one IN, one OUT
	DI	16 Dry (Source), Wet (Sink/Source)	-
	DO	-	16 Open Collector (Sink) 700mA/Channel
Power	Inputs	9V~48VDC	9V~48VDC
	Connector	3-pin terminal block	3-pin terminal block
Mechanical	Dimensions (W x D x H)	135 x 86 x 32 mm	135 x 86 x 32 mm
	Mounting	DIN-rail, wall-mountable	DIN-rail, wall-mountable
Environment	Operating Temperature	-40~75 degrees C	-40~75 degrees C
	Operating Humidity	10~95% (non-condensing)	10~95% (non-condensing)
Protocol		EtherCAT	EtherCAT

