



Industrial Ethernet

High Reliability & Connectivity

19" Rackmount Managed Ethernet Switches

L2+ Ring

Model	IGSW-24040T	IGS-5225-16T4S	IGS-5225-20T4C2X	IGS-5225-24P4S
-------	-------------	----------------	------------------	----------------

Product Image



Modbus TCP

Modbus TCP

Modbus TCP

PoE Modbus TCP

Hardware	10/100/1000BASE-T	24	16	24	24
	10/100BASE-TX	-	-	-	-
	1000 mini-GBIC	4 (Combo)	4	4 (Combo)	4 (Combo)
	100BASE-FX	Compatible	Compatible	Compatible	Compatible
	10G SFP+ Slot	-	-	2 (1000X Compatible)	-
	Switch Fabric	48Gbps	40Gbps	68Gbps	48Gbps
	DI/DO	2DI/DO	2DI/DO	2DI/DO	2DI/DO
Power	Inputs	Dual 36~60V DC 100~240V AC	Dual 36~60V DC 100~240V AC	Dual 36~60V DC 100~240V AC	Dual 48~56V DC 100~240V AC
	Connector	6-pin terminal block, AC socket		6-pin terminal block, AC socket	
	Consumption	30 watts	15.2 watts	42.7 watts	500 watts
Mechanical	Dimensions (W x D x H)	440 x 200 x 44.5 mm	440 x 200 x 44.5 mm	440 x 200 x 44.5 mm	440 x 300 x 44.5 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	Rackmount	Rackmount	Rackmount	Rackmount
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	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
	PoE Budget	-	-	-	440 watts max.
	PSE Type	-	-	-	End-span
	Power Pin Assignment	-	-	-	1/2(+), 3/6(-)
Layer 3 Features	IP Interfaces	8 VLAN	8 VLAN	128 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	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	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 < 20ms	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	Console, Web, telnet, SSH and SSL		Console, 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	

Metro Fiber Switches

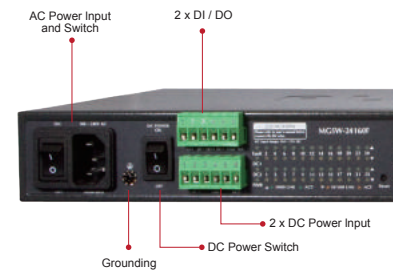
	13" Rackmount	19" Rackmount	
Model	MGSD-10080F	MGSW-24160F	MGSW-28240F

Product Image



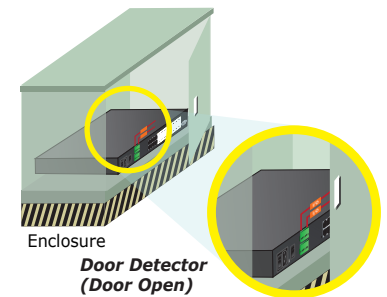
Hardware	10/100/1000BASE-T	2	8	4 (Combo)
	10/100BASE-TX	-	-	-
	1000 mini-GBIC	8	16	24
	100BASE-FX	Compatible	Compatible	Compatible
	10G SFP+ Slot	-	-	4 (1000X Compatible)
	Switch Fabric	20Gbps	48Gbps	128Gbps
	DI/DO	2DI/DO	2DI/DO	2DI/DO
Power	Inputs	Dual 36~72V DC 100~240V AC	Dual 36~60V DC 100~240V AC	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	32
	Routing Protocols	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		
	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 < 20ms	RSTP/MSTP	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	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



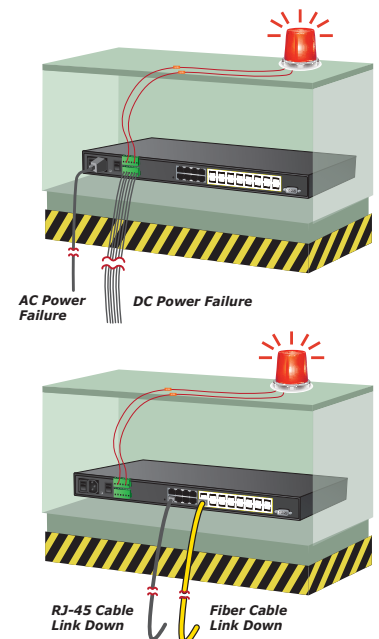
AC Power, DC Power, Digital I/O, and Network Access are all managed on the front panel.

Digital Input



Designed for intrusion and environment detection to protect the assets.

Digital Output



Designed for AC, DC, Link alteration

DIN-rail L2+ Managed Ethernet Switches

L2+ Ring							L2/L4	
Model	IGS-5225-8T2S2X	IGS-20040MT	IGS-12040MT	IGS-10020MT	IGS-10080MFT	IGS-5225-4T2S	IGS-801M	
Product Image								
	Modbus TCP		Modbus TCP		Modbus TCP		Modbus TCP	
Hardware	10/100/1000BASE-T	8	16	8	8	2	4	8
	10/100BASE-TX	-	-	-	-	-	-	-
	1000 mini-GBIC	2	4	4	2	8	2	-
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	-
	10G SFP+ Slot	2	-	-	-	-	-	-
	Switch Fabric	60Gbps	40Gbps	24Gbps	20Gbps	20Gbps	12Gbps	16Gbps
	DI/DO	2DI/DO	2DI/DO	2DI/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	
	Connector	6-pin terminal block		6-pin terminal block			6-pin terminal block	
	Consumption	20 watts	17 watts	12 watts	10 watts	13.92 watts	6.5 watts	10 watts
Mechanical	Dimensions (W x D x H)	72 x 107 x 152 mm			56 x 87.8 x 135 mm	72 x 107 x 152 mm	32 x 87 x 135 mm	32 x 87 x 135 mm
	Enclosure	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	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% 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	8 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN	-
	Routing Tables	32	32	32	32	32	32	-
	Routing Protocols	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						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	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	
	Data Redundancy	ERPS Ring < 20ms		ERPS Ring < 20ms				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, SSH and SSL			Web, telnet, SSH and SSL	Console, Web, telnet, SSH and SSL		Web, telnet, SSH and SSL
	SNMP	v1, v2c, v3 and trap						
	Alarm	Power and port alarm			Power alarm	Power alarm	Power alarm	Power alarm
	System Log	System Log and remote Syslog						

DIN-rail L2+ Power over Ethernet Managed Ethernet Switches

Ultra PoE		802.3at PoE+						802.3af
Model		IGS-5225-4UP1T2S	IGS-5225-8P2S2X	IGS-5225-8P4S	IGS-5225-8P2S	IGS-10020HPT	IGS-20160HPT	IGS-10020PT
Product Image								
								
Hardware	10/100/1000BASE-T	5	8	8	8	8	18	8
	10/100BASE-TX	-	-	-	-	-	-	-
	1000 mini-GBIC	2	2	4	2	2	2	2
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP Slot	-	2	-	-	-	-	-
	LRP Port	-	-	-	-	-	-	-
	Switch Fabric	14Gbps	60Gbps	24Gbps	20Gbps	20Gbps	40Gbps	20Gbps
	DI/DO	2DI/2DO	2DI/2DO	2DI/2DO	2DI/2DO	2DI/2DO	2DI/2DO	2DI/2DO
Power	Inputs	Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC	Dual 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	300 watts	300 watts	300 watts	306 watts	440 watts	161.9 watts
Mechanical	Dimensions (W x D x H)	72 x 107 x 152 mm	72 x 107 x 152 mm	72 x 107 x 152 mm	72 x 107 x 152 mm	72 x 107 x 152 mm	82 x 107 x 152 mm	72 x 107 x 152 mm
	Enclosure	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		
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	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	Ultra PoE (802.3at Compliant)	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af
	PoE Port	4	8	8	8	8	16	8
	PoE Budget	240 watts	270 watts max.	240 watts max.	240 watts max.	270 watts max.	320 watts max.	130 watts max.
	PSE Type	Mid-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(-)
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		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		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 < 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		In/out rate limit, storm control		In/out rate limit, storm control		
Management	Interface	Console, Web, telnet, SSH and SSL		Console, Web, telnet, SSH and SSL		Console, Web, telnet, SSH and SSL		
	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 and port alarm		
	System Log	System Log and remote Syslog		System Log and remote Syslog		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
	LRP Port	-	-	-	-	-
	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)	72 x 107 x 152 mm	72 x 107 x 152 mm	72 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

802.3af PoE					802.3at PoE+		Ultra PoE	
Model		ISW-504PT	ISW-514PT	ISW-514PTF	IVC-2004PT	IGS-504HPT	IGS-624HPT	IPOE-E174
Product Image								
		VDSL2				Redundant Fiber		PoE Extend
Hardware	10/100/1000BASE-T	-	-	-	-	5	4	5
	10/100BASE-TX	5	4	4	4	-	-	-
	1000BASE-SX/LX	-	-	-	-	-	2	-
	100BASE-FX	-	1/MM/2km	1	-	-	Compatible	-
	Fiber Connector Type	-	SC	SFP	-	-	SFP	-
	Switch Fabric	1Gbps	1Gbps	1Gbps	1Gbps	10Gbps	12Gbps	10Gbps
	MAC Table	1K	1K	1K	1K	1K	1K	8K
Mechanical	Dimensions (W x D x H)	56 x 87.8 x 135 mm		56 x 87.8 x 135 mm		92 x 105 x 152 mm		56 x 87.8 x 135 mm
	Enclosure	IP30 aluminum		IP30 aluminum		IP30 aluminum		IP30 metal
	Power Requirement	Dual 24V or 48V DC		Dual 24V or 48V DC		Dual 48V DC		End-span + Mid-span
	Mounting	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		
Environment	Operating Temperature	-40~75 degrees C		-40~75 degrees C		-40~75 degrees C		
PoE	PoE Standard	802.3af	802.3af	802.3af	802.3af	802.3af/802.3at		
	PoE Port	4	4	4	4	4	4	4
	PoE Budget	60 watts max.		60 watts max.		120 watts max.		50 watts max.
	PSE Type	End-span		End-span		End-span		
	Power Pin Assignment	1/2(+), 3/6(-)		1/2(+), 3/6(-)		1/2(+), 3/6(-)		

Industrial Power over Ethernet Injectors, Splitters, Extenders

PoE Injectors				PoE Splitters		Passive PoE Injector
Model	IPOE-171	IPOE-162	IPOE-171S	IPOE-162S	POE-165S	
Product Image						
						
PoE	Interface	1 x RJ45 data, 1 x RJ45 PoE out		1 x RJ45 data, 1 x RJ45 PoE in		1 x RJ45 PoE in 1 x RJ45 Passive PoE out
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
	PoE Standard	Ultra PoE PSE	802.3at PSE	Ultra PoE PD	802.3at PD	802.3at PD Passive PoE PSE
	PoE PSE Port	1 x RJ45	1 x RJ45	-	-	1 x RJ45
	PoE Budget	60 watts max.	30 watts max.	50 watts max.	25 watts max.	16.8 watt max.
	Output Voltage	56V DC	52V DC	12/24V DC	12/24V DC	12/19/24V DC
	Power Pin Assignment	Pair1: 1/2(+), 3/6(-) Pair2: 4/5(-), 7/8(+)	4/5(+), 7/8(-)	-	-	4/5(+), 7/8(-)
Mechanical	Dimensions (W x D x H)	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	94 x 70.3 x 26.2 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	Metal
	Power Requirement	Dual 24V/48V DC or 24V AC		Ultra PoE	802.3at PoE	802.3at PoE
	Mounting	DIN-rail, wall-mountable		DIN-rail, wall-mountable		
Regulatory	EMI/Safety	FCC Class A, CE		FCC Class A, CE		
Environment	Operating Temperature	-40~75 degrees C		-40~75 degrees C		

EN50155 Railway/Ethernet Switches & Extenders

802.3at PoE+				L2+ Ring		
Model	IGS-604HPT-M12	IGS-604HPT-RJ	IGS-5226-4P2T	IGS-5227-6MT	IGS-5227-6T	
Product Image						
						
	Modbus TCP	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 Waterproof RJ45	6 x M12, 8-pin A-coded connector	6 x Waterproof RJ45
	1000 mini-GBIC	-	-	-	-	-
	100BASE-FX	-	-	-	-	-
	Switch Fabric	12Gbps	12Gbps	12Gbps	12Gbps	12Gbps
	DI/DO	-	-	-	-	-
Power	Inputs	Dual 48~56V DC	Dual 48~56V DC	Dual 48~56V DC	Dual 12~48V DC	Dual 12~48V DC
	Connector	5-pin A-Coded M12 male connector			5-pin A-Coded M12 male connector	
	Consumption	160 watts	160 watts	160 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
	Enclosure	IP67 aluminum	IP67 aluminum	IP50 metal	IP67 aluminum	IP67 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	-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), EC60068-2-6 (Vibration)				
PoE	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	-	-
	PoE Port	4	4	4	-	-
	PoE Budget	144 watts	144 watts	144 watts	-	-
	PSE Type	End-span	End-span	End-span	-	-
	Power Pin Assignment	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
	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
	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
	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 < 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	Web, telnet, SSH and SSL	Web, telnet, SSH and SSL	Web, telnet, SSH and SSL
	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
	Alarm	Power and port alarm	Power alarm	Power alarm	Power and port alarm	Power and port alarm
	System Log	System Log and remote Syslog			System Log and remote Syslog	

M12 Switches				RJ45 Extender
Model	ISW-800T-M12		ISW-804PT-M12	IPOE-E202
Product Image				
			PoE	PoE
Hardware	Interface	8 x M12, 4-pin D-coded connector		3 x IP63 waterproof RJ45
	Data Rate	10/100Mbps	10/100Mbps	10/100/1000Mbps
	Power over Ethernet	-	4-port 802.3af PoE PSE	1-port 802.3at PoE PD 2-port 802.3af/at PoE PSE
	Switch Fabric	1.6Gbps	1.6Gbps	6Gbps
Mechanical	Dimensions (W x D x H)	103 x 53 x 163 mm	103 x 53 x 163 mm	199.6 x 81 x 40 mm
	Weight	976g	990g	320g
	Enclosure	IP67 aluminum	IP67 aluminum	IP63 aluminum
	Mounting	DIN-rail, wall-mountable	DIN-rail, wall-mountable	Wall-mountable
Power	Inputs	Dual 12~48V DC	Dual 48V DC	50~57V DC PoE
	Connector	5-pin A-coded M12 male connector	5-pin A-coded M12 male connector	RJ45
	Consumption	4 watts	65 watts	30 watts
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	FCC Class A, CE Class A
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)		

EN50155 Ethernet Network Solution for Railway Applications



IP68 Fisheye IP Camera

► **IP63 Extender**

► **IP67 Managed Switches**

Flat-type Managed Ethernet Switches

L2/L4 Switches			L2/L4 PoE+ Switches		
Model		WGS-4215-8T	WGS-4215-8T2S	WGS-4215-8P2S	WGS-804HPT
Product Image					
					
Hardware	10/100/1000BASE-T	8	8	8	8
	10/100BASE-TX	-	-	-	-
	1000 mini-GBIC	-	2	2	-
	100BASE-FX	-	Compatible	Compatible	-
	10G SFP+ Slot	-	-	-	-
	Switch Fabric	16Gbps	20Gbps	20Gbps	16Gbps
	DI/DO	-	-	-	-
Power	Inputs	12~48V DC or 24V AC		Dual 48~56V DC	
	Connector	3-pin terminal block, DC socket		3-pin terminal block, DC socket	
	Consumption	7 watts	7.9 watts	200 watts	152 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	148 x 25 x 134 mm
	Enclosure	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		-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	-	-	802.3af/802.3at
PoE Port		-	-	8	4
PoE Budget		-	-	200 watts	144 watts
PSE Type		-	-	End-sapn	End-sapn
Power Pin Assignment		-	-	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	v2/v3/query	v2/v3/query	v2/v3/query
	Spanning Tree	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s	802.1w/802.1s
	Data Redundancy	RSTP/MSTP	RSTP/MSTP	RSTP/MSTP	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 Unmanaged Ethernet Switches

	Switch	PoE+ Switch
Model	WGS-803	WGS-804HP

Product Image



Hardware	10/100/1000BASE-T	8	8
	10/100BASE-TX	-	-
	1000 mini-GBIC	-	-
	100BASE-FX	-	-
	Fiber Connector Type	-	-
	Switch Fabric	16Gbps	16Gbps
	MAC Table	-	-
Power	Inputs	12~48V DC or 24V AC	Dual 48~56V DC
	Connector	3-pin terminal block, DC socket	
Mechanical	Dimensions (W x D x H)	148 x 25 x 134 mm	
	Enclosure	IP30 metal	
	Mounting	DIN-rail, wall-mountable and magnetic wall mount	
Environment	Operating Temperature	-10~60 degrees C	
Regulatory	Emissions	FCC Class A, CE Class A	
PoE	PoE Standard	-	802.3af/802.3at
	PoE Port	-	4
	PoE Budget	-	120 watts
	PSE Type	-	End-span
	Power Pin Assignment	-	1/2(+), 3/6(-)

Flat-type Wireless LAN

	Access Point
Model	WDAP-W7200AC

Product Image



Wireless	Standard	IEEE802.11a/b/g/n/ac
	Max. Data Rate	300+867Mbps
	MIMO Technology	2T2R
	Antenna	2.4G: 5dBi 5G: 5dBi
	Power Consumption	1.5W (typical)
LAN	10/100BASE-TX	1 x RJ45, auto-negotiation, auto-MDI/MDI-X
	100BASE-FX	-
	Power over Ethernet	1-port 802.3at PoE PD
Mechanical	Dimensions (W x D x H)	148 x 41 x 140 mm
	Weight	470g
	Enclosure	IP30 metal
	Mounting	DIN-rail, wall-mountable and magnetic wall mount
Power	Inputs	IEEE 802.3af/at PoE 48~56V DC input
	Connector	RJ45
	Consumption	20 watts max.
	Operating Temperature	-10~60 degrees C
Regulatory	Emissions	FCC Class A, CE Class A

Flat-type Ethernet Switch Features



Dual Power Input



Flat Design



DIN-rail Installation



Power over Ethernet



Fiber Connection



Magnetic Installation



Front Access



Wireless Connection

Industrial Long Reach PoE Injectors & Extenders

Long Reach PoE Injectors				Long Reach PoE Extenders	
Model	LRP-101CH	LRP-101UH	LRP-422CST	LRP-101CE	LRP-101UE
Product Image					
					
Ethernet Interfaces	10/100BASE-TX	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.
	Cabling	Cat5e or above	Cat5e or above	Cat5e or above	Cat5e or above
	Maximum Distance	100m	100m	100m	100m
Long Reach PoE Interfaces	Connectivity	1 x BNC female (PSE)	1 x RJ45 Copper (PSE)	4 x BNC female (PSE)	1 x BNC female (PD)
	Cabling	Coaxial cable: 75ohm	Copper: 4-pair or 1-pair UTP	Coaxial cable: 75ohm	Coaxial cable: 75ohm
	Maximum Distance	1000m	500m	1000m	500m
	Data Rate	200m: 93Mbps/93Mbps 1000m: 55Mbps/73Mbps	200m: 94Mbps/94Mbps 500m: 30Mbps/30Mbps	200m: 93Mbps/93Mbps 1000m: 52Mbps/50Mbps	200m: 93Mbps/93Mbps 1000m: 55Mbps/73Mbps
	Power Output	48~56V DC, 36 watts max.			-
	Total Power Budget	36 watts max.	36 watts max.	144 watts max.	-
	Encryption	AES128-bit	AES128-bit	AES128-bit	AES128-bit
PoE Ability	PoE Standard	Power over coaxial	Power over UTP	Power over coaxial	802.3af/802.3at
	PoE Port	1 x BNC female (PSE)	1 x UTP	4 x BNC female (PSE)	1 x RJ45 (PSE)
	PoE Power Output	41~56V DC	41~56V DC	41~56V DC	56V DC, 600mA 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		107 x 72 x 152 mm	94 x 70 x 26mm
	Power Requirements	DC: 48~56V DC, PoE: 802.3at input		Dual 48~56V DC	37~56V DC PoC
	Operating Temperature	-20~70 degrees C		-40~75 degrees C	-20~70 degrees C
Regulator	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

Long Reach PoE Extender

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	Cat5e 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	-
	Encryption	AES128-bit
PoE Ability	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	-
	Scheduled Power Recycling	-
Protocols	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
Regulator	EMI/Safety	FCC Class A, CE

Long Reach PoE Solution

Most Cost-effective Extension via Existing Cable

TAIWAN EXCELLENCE 2016

Power+Data

TAIWAN EXCELLENCE 2016

PoE IP Camera

PoE IP Camera

Escalator

Counter

LRP-101CE

LRP-101CE

PoE WiFi AP

Corridor

Parking Lot

LRP-101CE

LRP-101CE

LRP-101CE

LRP-422CST

NVR

Control Center

100BASE-TX UTP

100BASE-TX UTP with PoE

Coaxial Cable with Data + Power

Unmanaged Fast Ethernet Switches

Fast Ethernet								
Model	ISW-501T	ISW-801T	ISW-511*	ISW-511S15 *	ISW-621*	ISW-621S15 *	ISW-621TF	
Product Image								
Hardware	10/100BASE-TX	5	8	4	4	4	4	4
	10/100/1000BASE-T	-	-	-	-	-	-	-
	100BASE-FX	-	-	1/Multi-mode/2km	1/Single mode/15km	2/Multi-mode/2km	2/Single mode/15km	2 SFP Slots
	Switch Fabric	1Gbps	1.6Gbps	1Gbps	1Gbps	1.2Gbps	1.2Gbps	1.2Gbps
	MAC Table	2k	2k	2k	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	12~48VDC, Dual power input						
	Connector	6-pin Removable Terminal Block						
	Consumption	3.9 watts	5.1 watts	5.4 watts	5.4 watts	7.9 watts	7.9 watts	7.9 watts
Mechanical	Dimensions (W x D x H)	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal
	Mounting	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)						
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)						

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

Unmanaged Gigabit Ethernet Switches

Gigabit				
Model	IGS-501T	IGS-801T	IGS-620TF	IGS-1020TF
Product Image				
Hardware	10/100/1000BASE-T	5	8	8
	10/100BASE-TX	-	-	-
	1000BASE-SX/LX	-	-	2 (100BASE-FX Compatible)
	Switch Fabric	10Gbps	16Gbps	12Gbps
	MAC Table	8k	8k	1k
	Memory Buffer	176k Bytes	176k Bytes	-
Protocol	Auto-negotiation	●	●	●
	802.3x Flow Control	●	●	●
Power	Inputs	12~48VDC, Dual power input		12~48VDC, Dual power input
	Connector	6-pin removeable terminal block		6-pin removeable terminal block
	Consumption	11.9 watts	6.7 watts	12 watts
Mechanical	Dimensions (W x D x H)	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm	32 x 87.8 x 135 mm
	Enclosure	IP30 metal	IP30 metal	IP30 metal
	Mounting	DIN-rail, Wall-mountable		DIN-rail, Wall-mountable
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 / Safety	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

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	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	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)		
Regulatory	Emissions	FCC Class A, CE Class A		
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)		
Management		-	-	-

Gigabit

Model		IGT-805AT	IGT-1205AT	IGT-902T	IGT-902TS	IGT-905A	IGTP-805AT
Product Image							
		PoE30 Watts					
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	1000BASE-LX	1000BASE-LX	100/1000BASE-X	1000BASE-X
	Optical Connector	SFP	SFP	SC	SC	SFP	SFP
	Optical Mode	Vary on module		Multi-mode	Single mode	Vary on module	
	Max. Distance	Vary on module		200m~550m	10km	Vary on module	
	Optic Wavelength	Vary on module		850nm	1310nm	Vary on module	
	Fiber-optic Cable	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)	32 x 87.8 135 mm			32 x 87.8 135 mm		
	Weight	458g	400g	405g	405g	405g	500g
	Enclosure	IP30 metal			IP30 metal		
	Mounting	DIN-rail, wall-mountable			DIN-rail, wall-mountable		
Power	Inputs	Dual 12~48V DC			Dual 12~48V DC		
	Connector	6-pin removable terminal block			6-pin removable terminal block		
	PoE	-	-	-	-	-	IEEE 802.3af/at PoE Injector
	Consumption	3.3 watts max.	7.5 watts max.	7.7 watts max.	7.7 watts max.	7.7 watts max.	33 watts max.
Environment	Operating Temperature	-40~75 degrees C		-30~75 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)					
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 Ethernet Extenders

		DIN-rail		Wall-mount	
Model		IVC-2002	IVC-2004PT	VC-201A	VC-202A
Product Image					
		 			
Copper	Copper Interface	4 x 10/100BASE-TX RJ45	4 x 10/100BASE-TX 802.3af PoE Injector	1 x 10/100BASE-TX RJ45	
Extended Port	Coaxial	1 BNC, female connector		-	1 BNC, female connector
	UTP	1 RJ11, female connector		1 RJ11, female connector	-
	Max. Performance (Download/Upload)	- Coaxial Cable: Up to 100/65Mbps@300m - UTP: Up to 100/60Mbps@300m		Up to 100/65Mbps@300m	
	Max. Distance	- Coaxial Cable: Up to 2.4km - UTP: Up to 1.4km		Up to 1.6km	Up to 3km
Mechanical	Cabling	- Coaxial Cable: 50ohm, RG58A/U, RG58/U75ohm, RG6 - Twisted-pair telephone wires (AWG24 or better)		Twisted-pair telephone wires (AWG24 or better)	Coaxial Cable: 50ohm, RG58A/U, RG58/U75ohm, RG6
	Dimensions (W x D x H)	32 x 87.8 135 mm	56 x 87.8 x 135 mm	70 x 97 x 26 mm	
	Weight	495g	631g	400g	405g
	Enclosure	IP30 metal	IP30 aluminum	metal	metal
Power	Mounting	DIN-rail, wall-mountable		Wall-mountable, chassis installation	
	Inputs	Dual 12~48V DC	Dual 48V DC	5V DC	5V DC
	Connector	6-pin removable terminal block		DC Jack	DC Jack
	Consumption	5.64 watts max.	66.4 watts max.	5.64 watts max.	6.3 watts max.
Environment	Operating Temperature	-40~75 degrees C		0~50 degrees C	
	Operating Humidity	5% to 95%RH (Non-condensing)		10% 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)		-	-
Functionality		Master/Slave mode select, selectable BNC and RJ11 mode, selectable target band plan, selectable target SNR mode		CO/CPE mode select, selectable fast and interleaved mode, selectable target band plan, selectable target SNR mode	

Industrial Serial over Ethernet Converters

Industrial Serial over Ethernet Converters					
Model		ICS-2100	ICS-2102	ICS-2102S15	ICS-2105A
Product Image					
Serial Port	Interface	RS232/RS422/RS485	RS232/RS422/RS485	RS232/RS422/RS485	RS232/RS422/RS485
	Connector	RS232: DB9, RS422/RS485: 4-pin terminal block			
	Baud Rate (Data Rate)	100bps to 921Kbps	100bps to 921Kbps	100bps to 921Kbps	100bps 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
	Flow Contorol	None, RTS/CTS, Xon/Xoff	None, RTS/CTS, Xon/Xoff	None, RTS/CTS, Xon/Xoff	None, RTS/CTS, Xon/Xoff
Fast Ethernet Port	Standard	10/100BASE-TX	100BASE-FX	100BASE-FX	100BASE-FX
	Connector	RJ45	SC/Multi-mode	SC/Single-mode	SFP/Vary on module
	Optical Wavelength	-	1300nm	1310nm	Vary on module
	Max. Distance	100m	2km	15km	Vary on module
	Protection	Built-in 1.5KV magentic isolation		Built-in 1.5KV magentic isolation	
Power	Power Supply	Dual 12~48V DC, 6-pin removable terminal block		Dual 12~48V DC, 6-pin removable terminal block	
	Power Consumption	10.1 watts	10.1 watts	10.1 watts	10.1 watts
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
	Enclosure	IP30 metal	IP30 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	-10~60 degrees C	-10~60 degrees C	-10~60 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 Class A, CE Class A	
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)			
Management	Interface	Web management, VCOM		Web management, VCOM	
	Operation Mode	Virtual COM port, TCP server, UDP server, UDP client, pair connection			

Industrial PoE+ Injectors / Splitters

Ultra PoE / 802.3at PoE+ Injectors

Model		IPOE-162	IPOE-171
Product Image			
Hardware	RJ45 Data Input Port	1 x RJ45	1 x RJ45
	RJ45 Data + Power Output Port	1 x RJ45	1 x RJ45
	Data Rate	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	Ultra PoE (802.3at Compliant)
	PSE Type	Mid-span	Both Mid-span and End-span
	Power Pin Assignment	4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)
	PoE Port	1	1
	PoE Power Output	56V DC	52~56V DC
	PoE Ability	30 watts	60 watts
Physical	Dimensions (W x D x H)	32 x 87 x 135mm	32 x 87 x 135mm
	Power Supply	External	External
	Power Requirements	Dual 24~48V DC, 24V AC	Dual 48~56V DC
	Operating Temperature	-40~75 degrees C	-40~75 degrees C
Regulator	EMI/Safety	FCC Class A, CE	FCC Class A, CE

Ultra PoE / 802.3at PoE+ Splitters

Model		IPOE-162S	IPOE-171S
Product Image			
Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45
	Data Output Port	1 x RJ45	1 x RJ45
	DC Output Voltage	12V/24V DC, max. 2A	12V/24V DC, max. 2.25A
	DIP Switch	Adjustable 12V/24V DC	Adjustable 12V/24V DC
	Data Rate	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	Ultra PoE (802.3at Compliant)
	PD Type	Both Mid-span and End-span	Both Mid-span and End-span
	PoE Power Input	52~56V DC	52~56V DC
Physical	Dimensions (W x D x H)	32 x 87 x 135mm	32 x 87 x 135mm
	Operating Temperature	-40~75 degrees C	-40~75 degrees C
Regulator	EMI/Safety	FCC Class A, CE	FCC Class A, CE

PoE Converter

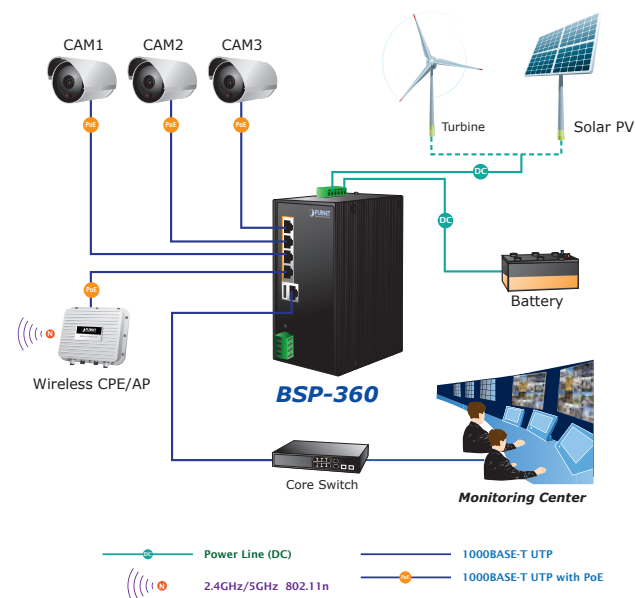
PoE Extender

PoE Tester

Model		POE-165S	IPOE-E174	POE-TESTER
Product Image				
Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45	1 x RJ45
	Data Output Port	1 x RJ45	4 x RJ45	-
	DC Output Voltage	Passive PoE 12/19/24V DC, max. 700mA	PoE 44~57V DC	-
	DIP Switch	Adjustable 12/19/24V DC	-	-
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	Ultra PoE (802.3at Compliant)	802.3af/802.3at/Ultra PoE
	PD Type	Mid-span	Both Mid-span and End-span	Mid-span and End-span
	PoE Power Input	48~56V DC	44~56V DC	36~57V DC
Physical	Dimensions (W x D x H)	97 x 70 x 26mm	56 x 87.8 x 135mm	70 x 23 x 22mm
	Operating Temperature	-40~75 degrees C	-40~75 degrees C	-10~60 degrees C
Regulator	EMI/Safety	FCC Class A, CE	FCC Class A, CE	CE compliance

Renewable Energy PoE Switches

Model		BSP-360	BSP-300
Product Image			
			
LAN	10/100/1000	5	3
PoE	802.3at	4	2
PoE Budget	per port 30 watts (max.)		
PSE Type		end-span	end-span
PoE Power Pin		1/2(+), 3/6 (-)	1/2(+), 3/6 (-)
PoE Power Voltage		52V DC	52V DC
Management		Web/SNMP	RS232
System Voltage/ Battery Requirement		24V DC	24V DC
Power IN	Solar or turbines 24~45V DC		
Max. Charge Current		15A	15A
Max. Output Current		15A	15A
Features	* 24V DC, 1A output load * Low voltage protection and alert * PoE schedule and management * USB Backup		
		* 24V DC, 2A output load	* Low voltage 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.

Industrial Gigabit SFP Modules

Model	MGB-TSX	MGB-TLX	MGB-TL30	MGB-TL70	MFB-TFX	MFB-TF20
Product Image						
PHY Type	1000BASE-SX	1000BASE-LX	1000BASE-LX	1000BASE-LX	100BASE-FX	100BASE-FX
Fiber Type	Multi-mode	Single mode	Single mode	Single mode	Multi-mode	Single mode
Connector	LC	LC	LC	LC	LC	LC
Wavelength	850nm	1310nm	1310nm	1550nm	1310nm	1310nm
Maximum Distance	220m & 550m	10km	30km	70km	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

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

Model	MFB-TFA20	MFB-TFB20	MFB-TFA40	MFB-TFB40
Product Image				
Speed (Mbps)	100	100	100	100
Connector Interface	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)
Fiber Mode	Single mode	Single mode	Single mode	Single mode
Distance	20km	20km	40km	40km
Wavelength (TX)	1310nm	1550nm	1310nm	1550nm
Wavelength (RX)	1550nm	1310nm	1550nm	1310nm
Operating Temp.	-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
Product Image				
Speed (Mbps)	1000	1000	1000	1000
Connector Interface	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)
Fiber Mode	Single mode	Single mode	Single mode	Single mode
Distance	10km	10km	20km	20km
Wavelength (TX)	1310nm	1550nm	1310nm	1550nm
Wavelength (RX)	1550nm	1310nm	1550nm	1310nm
Operating Temp.	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C

Model	MGB-TLA40	MGB-TLB40	MGB-TLA60	MGB-TLB60
Product Image				
Speed (Mbps)	1000	1000	1000	1000
Connector Interface	WDM (LC)	WDM (LC)	WDM (LC)	WDM (LC)
Fiber Mode	Single mode	Single mode	Single mode	Single mode
Distance	40km	40km	60km	60km
Wavelength (TX)	1310nm	1550nm	1310nm	1550nm
Wavelength (RX)	1550nm	1310nm	1550nm	1310nm
Operating Temp.	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 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 degree C			-20~70 degree C	
	Storage Temperature	-40~85 degrees C		-40~85 degree C			-40~85 degree 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					



PLANET Technology Corporation

11F., No. 96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C)
Tel: 886-2-2219-9518 Fax: 886-2-2219-9528 E-mail: sales@planet.com.tw

PLANET reserves the right to change specifications without prior notice. All brand names and trademarks are property of their respective owners.
© PLANET Technology Corporation DM-IE0117