



Industrial Ethernet

High Reliability, Connectivity, PoE Capability

19" Rackmount Managed Ethernet Switches



	L3			L2+ Ring			
Model	IGS-6325-20T4C4X	IGS-6325-24P4X	IGS-6325-24P4S	IGSW-24040T	IGS-5225-16T4S	IGS-5225-20T4C2X	IGS-5225-24P4S

Product Image



Modbus TCP

Modbus TCP

Modbus TCP

Modbus TCP PoE

Hardware	10/100/1000BASE-T	24	24	24	24	16	24	24
	10/100BASE-TX	-	-	-	-	-	-	-
	1000 mini-GBIC	4 (Combo)	4	4	4 (Combo)	4	4 (Combo)	4 (Combo)
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
	10G SFP+ Slot	4 (1000X Compatible)	4 (1000X Compatible)	-	-	-	2 (1000X Compatible)	-
	Switch Fabric	128Gbps	128Gbps	48Gbps	48Gbps	40Gbps	68Gbps	48Gbps
	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 36~60V DC 100~240V AC	Dual 48~56V DC		Dual 36~60V DC 100~240V AC		Dual 48~56V DC	
	Connector	6-pin terminal block, AC socket			6-pin terminal block, AC socket			6-pin terminal block
	Consumption	42.7 watts	500 watts	500 watts	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 300 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	IP30 metal	IP30 metal	IP30 metal
	Mounting	Rackmount	Rackmount	Rackmount	Rackmount	Rackmount	Rackmount	Rackmount
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		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	-	24	24	-	-	-	24
	PoE Budget	-	400 watts	400 watts	-	-	-	440 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(-)
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	8 VLAN	8 VLAN	128 VLAN	8 VLAN
	Routing Tables	128	128	128	32	32	32	32
	Routing Protocols	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			
	Spanning Tree	802.1w/802.1s			802.1w/802.1s			
	Data Redundancy	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			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

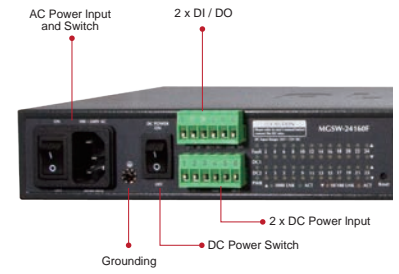
	13" Rackmount	19" Rackmount	
Model	MGSD-10080F	MGSW-24160F	MGSW-28240F

Product Image



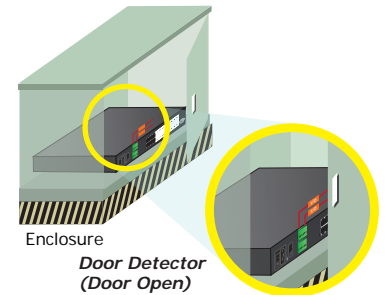
Hardware	10/100/1000BASE-T	2	8	4 (Combo)
	10/100BASE-TX	-	-	-
	1000 mini-GBIC	8	16	24
	100BASE-FX	Compatible	Compatible	Compatible
	10G SFP+ Slot	-	-	4 (1000X Compatible)
	Switch Fabric	20Gbps	48Gbps	128Gbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO
Power	Inputs	Dual 36~72V DC 100~240V AC	Dual 36~60V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



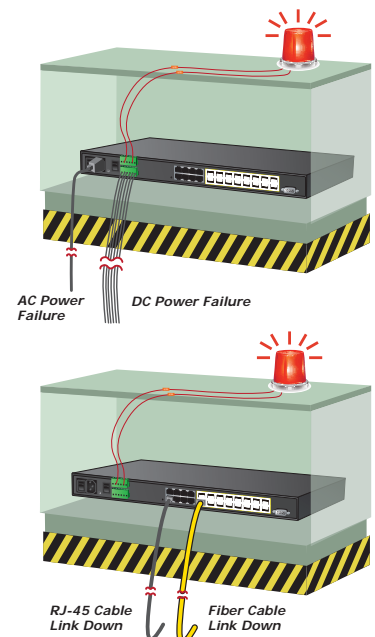
AC Power, DC Power, Digital I/O, and Network Access are all managed on the front panel.

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-20040MT	IGS-12040MT	IGS-10020MT	IGS-10080MFT	IGS-5225-4T2S	IGS-4215-16T2S	IGS-801M








Modbus TCP Modbus TCP Modbus TCP Modbus TCP Modbus TCP

Hardware	10/100/1000BASE-T	8	16	8	8	2	4	16	8
	10/100BASE-TX	-	-	-	-	-	-	-	-
	1000 mini-GBIC	2	4	4	2	8	2	2	-
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	-
	10G SFP+ Slot	2	-	-	-	-	-	-	-
	Switch Fabric	60Gbps	40Gbps	24Gbps	20Gbps	20Gbps	12Gbps	36Gbps	16Gbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	-	-	-	-	-
Power	Inputs	Dual 12~48V DC or 24V AC		Dual 12~72V DC or 24V AC	Dual 12~48V DC or 24V AC		Dual 12~48V DC or 24V AC		
	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	15 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	72 x 107 x 152 mm	32 x 87 x 135 mm
	Enclosure	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 aluminum	IP30 metal	IP40 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	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 802.1Q 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 < 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							
Management	Traffic Control	In/out rate limit, storm control							
	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	
System Log	System Log and remote Syslog								







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

		Ultra PoE			802.3at PoE+						
Model		IGS-5225-4UP1T2S	IGS-6325-16P4S	IGS-5225-8P2S2X	IGS-5225-8P4S	IGS-5225-8P2T2S	IGS-10020HPT	IGS-10020PT	IGS-20160HPT	IGS-5225-4P2S	
Product Image											
											
Hardware	10/100/1000BASE-T	5	16	8	8	8	8	8	18	4	
	10/100BASE-TX	-	-	-	-	2	-	-	-	-	
	1000 mini-GBIC	2	4	2	4	2	2	2	2	2	
	100BASE-FX	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	
	10G SFP Slot	-	-	2	-	-	-	-	-	-	
	Switch Fabric	14Gbps	40Gbps	60Gbps	24Gbps	20Gbps	20Gbps	20Gbps	40Gbps	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	-	
Power	Inputs	Dual 48~56V DC			Dual 48~56V DC			Dual 12~48V DC		Dual 48~56V DC	
	Connector	6-pin terminal block			6-pin terminal block			6-pin terminal block			
	Consumption	280 watts	440 watts	300 watts	300 watts	300 watts	306 watts	161.9 watts	440 watts	140 watts	
Mechanical	Dimensions (W x D x H)	72 x 107 x 152 mm	82 x 107 x 152 mm	72 x 107 x 152 mm			72 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			
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)									
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	Ultra PoE (802.3at Compliant)	802.3af/802.3at				802.3af/802.3at				
	PoE Port	4	16	8	8	8	8	8	16	4	
	PoE Budget	240 watts	320 watts max.	270 watts max.	240 watts max.	240 watts max.	270 watts max.	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	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(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)
Layer 3 Features	IP Interfaces	8 VLAN	128 VLAN	128 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN	
	Routing Tables	32	128	128	32	32	32	32	32	32	
	Routing Protocols	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			802.1Q VLAN/Q-in-Q/Private VLAN/MAC-based VLAN/Protocol-based VLAN/Voice VLAN/MVR						
	IGMP Snooping	v1/v2/v3/query									
	Spanning Tree	802.1w/802.1s									
	Data Redundancy	ERPS Ring < 10ms									
	QoS	Port-based/802.1P/IP DSCP Policy-based/Voice VLAN									
	Security	802.1x, Static MAC, MAC filter, Port Security and IP Security									
	Traffic Control	In/out rate limit, storm control									
Management	Interface	Console, Web, telnet, SSH and SSL									
	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)	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			-	-

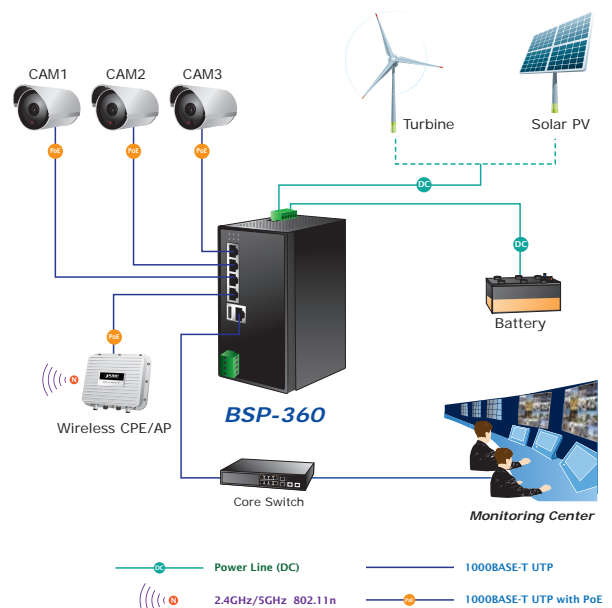
Industrial Power over Ethernet Unmanaged Switches

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

Renewable Energy PoE Switches








Model	BSP-360	BSP-400	
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	6A	15A	
Features	<ul style="list-style-type: none"> * 24V DC, 1A output load * Low voltage protection and alert * PoE schedule and management * USB Backup 	<ul style="list-style-type: none"> * 24V DC, 2A output load * Low voltage protection 	





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		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		

		M12 Switches		RJ45 Extenders	
Model		ISW-800T-M12	ISW-804PT-M12	IPOE-E172	IPOE-E202
Product Image					
		PoE		95W	PoE
Hardware	Interface	8 x M12, 4-pin D-coded connector		3 x IP63 waterproof RJ45	3 x IP63 waterproof RJ45
	Data Rate	10/100Mbps	10/100Mbps	10/100/1000Mbps	10/100/1000Mbps
	Power over Ethernet	-	4-port 802.3af PoE PSE	1-port 802.3bt PoE PD 2-port 802.3bt/at PoE PSE	
	Switch Fabric	1.6Gbps	1.6Gbps	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	199.6 x 81 x 40 mm
	Weight	976g	990g	320g	320g
	Enclosure	IP67 aluminum	IP67 aluminum	IP63 aluminum	IP63 aluminum
	Mounting	DIN-rail, wall-mountable	DIN-rail, wall-mountable	Wall-mountable	Wall-mountable
Power	Inputs	Dual 12-48V DC	Dual 48V DC	50-57V DC PoE	50-57V DC PoE
	Connector	5-pin A-coded M12 male connector		RJ45	RJ45
	Consumption	4 watts	65 watts	60-95 watts	30 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)			

EN50155 Ethernet Network Solution for ITS Applications



IP68 Fisheye IP Camera

▶ IP63 PoE Extender

▶ IP67 PoE Managed Switches

Flat-type Managed Ethernet Switches

	L2/L4 Switches				L2/L4 PoE+ Switches				
Model	WGS-4215-8T	WGS-4215-8T2S	WGS-5225-8T2SV	WGS-5225-8P2SV	WGS-5225-8P2S	IGS-4215-16P2S	WGS-4215-8P2S	WGS-804HPT	



Hardware	LCD	-	-	2.4" Color TFT touch screen		-	-	-	-	
	10/100/1000BASE-T	8	8	8	8	8	16	8	8	
	10/100BASE-TX	-	-	-	-	-	-	-	-	
	1000 mini-GBIC	-	2	2	2	2	2	2	-	
	100BASE-FX	-	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	-	
	10G SFP+ Slot	-	-	-	-	-	-	-	-	
	Switch Fabric	16Gbps	20Gbps	20Gbps	20Gbps	20Gbps	36Gbps	20Gbps	16Gbps	
	DI/DO	-	-	-	-	-	-	-	-	
Power	Inputs	12~48V DC or 24V AC			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	215 watts	210 watts	240 watts	210 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		245 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	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		-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)					
Regulatory	Emissions	FCC Class A, CE Class A			FCC Class A, CE Class A					
	Stability	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Shock), EC60068-2-6 (Vibration)								
PoE	PoE Standard	-	-	-	802.3at PoE+		802.3af/802.3at			
	PoE Port	-	-	-	8	8	8	8	4	
	PoE Budget	-	-	-	200 watts	200 watts	240 watts	200 watts	144 watts	
	PSE Type	-	-	-	End-sapn	End-sapn	End-sapn	End-sapn	End-sapn	
	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	-	-	8 VLAN	8 VLAN	8 VLAN	-	-	-	
	Routing Tables	-	-	32	32	32	-	-	-	
	Routing Protocols	-	-	IPv6/IPv4 Static Routing			-	-	-	
	Accelerated Hardware	-	-	-	-	-	-	-	-	
Protocol	VLAN	IEEE 802.1Q VLAN/Q-in-Q/Private VLAN/Protocol-based VLAN/Voice VLAN/GVRP								
	IGMP Snooping	v2/v3/query	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	RSTP/MSTP	RSTP/MSTP	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 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	-	-
Power	Switch Fabric	16Gbps	16Gbps
	Inputs	12~48V DC or 24V AC	Dual 48~56V DC
Mechanical	Connector	3-pin terminal block, DC socket	
	Dimensions (W x D x H)	148 x 25 x 134 mm	
	Enclosure	IP30 metal	
Environment	Mounting	DIN-rail, wall-mountable and magnetic wall mount	
	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 Gigabit Router

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

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	
	Connector	3-pin terminal block, DC socket	
Mechanical	Dimensions (W x D x H)	180 x 25 x 140 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+	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
	SNMP	v1, v2c	v1, v2c
	System Log	System log and remote Syslog	

Flat-type Ethernet Switch Features



Dual Power Input



Flat Design



DIN-rail Installation



PoE Usage



Fiber Connection



Magnetic Installation



Front Access



Wireless Connection

Industrial Long Reach PoE Switch, 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	Cat5e or above	Cat5e or above	Cat5e or above	Cat5e or above	Cat5e or above	Cat5e or above	Cat5e 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
	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

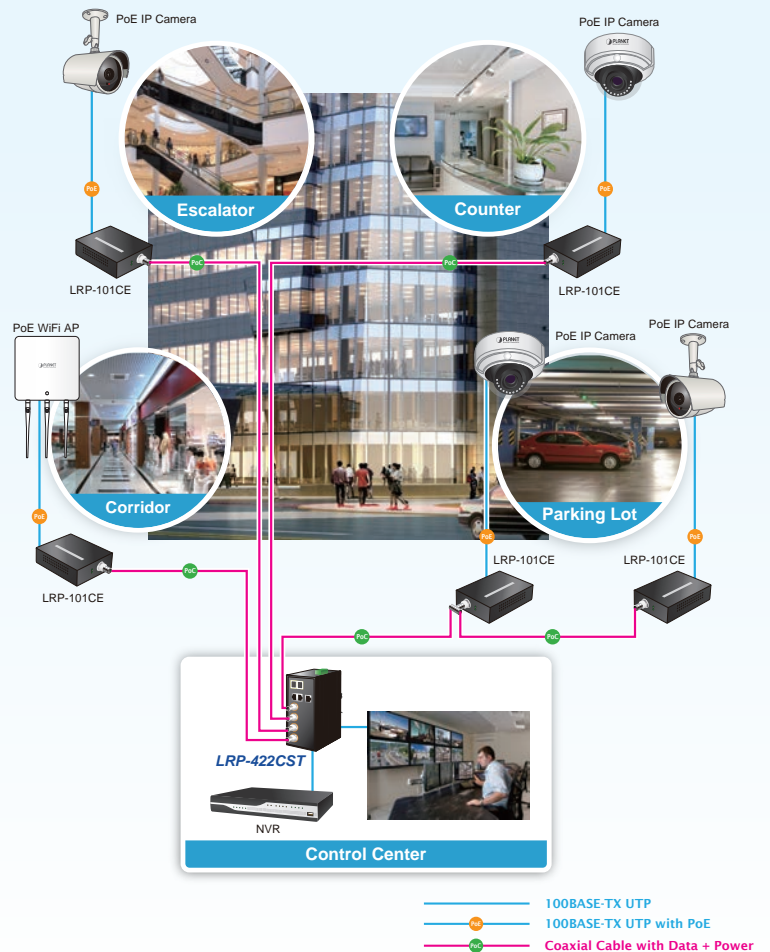


Ethernet Interfaces	10/100BASE-TX	4 x RJ45 w/ PoE PSE
	10/100/1000BASE-T	-
	1000BASE-SX/LX	-
	PoE Power	56V DC, 600mA max.
	Cabling	Cat5e or above
	Maximum Distance	100m
Long Reach PoE Interfaces	Connectivity	1 x BNC female (PD)
	Cabling	Coaxial cable: 75ohm
	Maximum Distance	1000m
	Data Rate	200m: 93Mbps/93Mbps 1000m: 52Mbps/50Mbps
	Power Output	-
	Total Power Budget	-
	Encryption	AES128-bit
	PoE Ability	PoE Standard
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	-
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

TAIWAN EXCELLENCE 2016










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	
	1000BASE-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	
Protocol	Memory Buffer	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	448k bits	
	Auto-negotiation	●	●	●	●	●	●	●	●	●	●	●	
Power	802.3x Flow Control	●	●	●	●	●	●	●	●	●	●	●	
	Inputs	12~48V DC/24VAC, Dual power input			12~48VDC, Dual power input								
	Connector	6-pin Removable Terminal Block											
Mechanical	Consumption	2 watts	2.5 watts	3.9 watts	5.1 watts	5.4 watts	5.4 watts	7.9 watts			15 watts		
	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									IP40 metal		
Environment	Mounting	DIN-Rail, Wall-mountable											
	Operating Temperature	-40~75 degrees C				-10~60 degrees C *				-40~75 degrees C			
Regulatory	Operating Humidity	5% to 95%RH (Non-condensing)											
	Emissions / Safety	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-501T	IGS-801T	IGS-620TF	IGS-1020TF	IGS-1600T	IGS-1820TF		
Product Image									
Hardware	10/100/1000BASE-T	5	5	8	4	8	16	16	
	10/100BASE-TX	-	-	-	-	-	-	-	
	1000BASE-SX/LX	-	-	-	2 (100BASE-FX Compatible)	2	-	2 (100BASE-FX Compatible)	
	Switch Fabric	10Gbps	10Gbps	16Gbps	12Gbps	20Gbps	32Gbps	36Gbps	
	MAC Table	2k	2k	8k	1k	8K	8K	8K	
Protocol	Memory Buffer	1Mbits	1Mbits	176k Bytes	-	-	-	-	
	Auto-negotiation	●	●	●	●	●	●	●	
Power	802.3x Flow Control	●	●	●	●	●	●	●	
	Inputs	12~48V DC/24V AC, Dual power input		12~48VDC, Dual power input					
	Connector	6-pin removable terminal block							
Mechanical	Consumption	5.28 watts	5.28 watts	6.7 watts	12 watts	8.7 watts	16 watts	18 watts	
	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	IP40 metal	IP40 metal	
Environment	Mounting	DIN-rail, Wall-mountable							
	Operating Temperature	-40~75 degrees C							
Regulatory	Operating Humidity	5% to 95%RH (non-condensing)							
	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					
Model		IGT-805AT	IGT-1205AT	IGT-902T	IGT-902TS	IGT-905A	IGTP-805AT
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	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-234GT	VC-201A	VC-202A
Product Image					
Copper	Copper Interface	4 x 10/100BASE-TX RJ45		4 x 10/100/1000BASE-T	
	Coaxial	1 BNC, female connector		-	1 BNC, female connector
	UTP	1 RJ11, female connector		1 RJ11, female connector	-
	Max. Performance (Download/Upload)	<ul style="list-style-type: none"> Coaxial Cable: Up to 100/65Mbps@300m UTP: Up to 100/60Mbps@300m 	<ul style="list-style-type: none"> Coaxial Cable: Up to 200/95Mbps@200m UTP: Up to 200/100Mbps@200m 	Up to 100/65Mbps@300m	
	Max. Distance	<ul style="list-style-type: none"> Coaxial Cable: Up to 2.4km UTP: Up to 1.4km 	<ul style="list-style-type: none"> Coaxial Cable: Up to 1.2km UTP: Up to 1.2km 	Up to 1.6km	Up to 3km
Extended Port	Cabling	<ul style="list-style-type: none"> 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	32 x 87.8 135 mm	70 x 97 x 26 mm	70 x 97 x 26 mm
	Weight	495g	631g	400g	405g
	Enclosure	IP30 metal	IP30 metal	metal	metal
	Mounting	DIN-rail, wall-mountable		Wall-mountable, chassis installation	
Power	Inputs	Dual 12-48V DC	Dual 12-48V DC	5V DC	5V DC
	Connector	6-pin removable terminal block		DC Jack	DC Jack
	Consumption	5.64 watts max.	6.64 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-2105A	ICS-2200T	ICS-2400T
Product Image					
Serial Port	Interface	RS232/RS422/RS485	RS232/RS422/RS485	2 x RS232/RS422/RS485	4 x RS232/RS422/RS485
	Connector	RS232: DB9, RS422/RS485: 4-pin terminal block		DB9	DB9
	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 Control	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	10/100BASE-TX	10/100BASE-TX
	Connector	RJ45	SFP/Vary on module	2 x RJ45	2 x RJ45
	Optical Wavelength	-	Vary on module	-	-
	Max. Distance	100m	Vary on module	100m	100m
	Protection	Built-in 1.5KV magnetic isolation		Built-in 1.5KV magnetic isolation	
Power	Power Supply	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	56 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	-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 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, Converters...

802.3at PoE+ Injectors		802.3bt Ultra PoE Injector	
Model	IPOE-162	IPOE-171-60W	IPOE-171-95W



Hardware	RJ45 Data Input Port	1 x RJ45	1 x RJ45	1 x RJ45
	RJ45 Data + Power Output Port	1 x RJ45	1 x RJ45	1 x RJ45
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	Ultra PoE (802.3at Compliant)	Ultra PoE (802.3at Compliant)
	PSE Type	Mid-span	Both Mid-span and End-span	Both Mid-span and End-span
	Power Pin Assignment	4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)
	PoE Port	1	1	1
	PoE Power Output	56V DC	52~56V DC	54V DC
	PoE Ability	30 watts	60 watts	95 watts
Physical	Dimensions (W x D x H)	32 x 87 x 135mm	32 x 87 x 135mm	32 x 87 x 135mm
	Power Supply	External	External	External
	Power Requirements	Dual 24~48V DC, 24V AC	Dual 48~56V DC	Dual 12~48V 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

Ultra PoE / 802.3at PoE+ Splitters		
Model	IPOE-162S	IPOE-171S



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
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE



PoE Converter	PoE Extender	PoE Tester	
Model	POE-165S	IPOE-E174	POE-TESTER









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	-	-
PoE Spec.	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
	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
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	CE compliance

Industrial Gateway







Industrial Modbus Gateway			Vehicle Cellular Gateway			
Model	IMG-120T	IMG-110T	Model	VCG-1500WG-LTE		
Product Image			Product Image			
Hardware	RJ45 Port	1 x 10/100Base-TX, auto MDI/MDIX	Hardware	10/100BASE-TX	4	
	Serial Port	5-contact Terminal Block RS422/RS485 x 2		WAN	1	
	Baud Rate	300bps to 115200bps		Wi-Fi	802.11n, 2.4GHz	
	Parity Type	Odd, Even, None, Space, Mark		GPS	-	
	Signals	RS422 : Tx+, Tx-, GND, Rx+, Rx- RS485: Data A (+), GND, Data B (-)		SIM Card Slot	1	
	Operation Mode	Modbus RTU/ASC II Master & Slave		TF Card Slot	2	
	Surge Protection	1KV		Multi Band Supports	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)
	Multi-master and Multi-drop	Master mode: 32 TCP slaves Slave mode: 16 TCP masters			US Model	FDD LTE B2/B4/B12 (1900/AWS1700/700) WCDMA B2/B4/B5 (1900/AWS1700/850)
Power	Power Input Connector: 2-contact Terminal Block (DC 9-48V) Power Consumption: 1.61 Watts (max.)	LTE	20MHz bandwidth: 100Mbps (DL), 50Mbps (UL)			
Regulatory	Emissions	FCC Part 15 Class B, CE	Power	Inputs	6-32V DC	
	Stability	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)		Connector	Standard 4-pin vehicle power jack	
Mechanical	Dimensions (W x D x H)	69 x 22 x 100 mm	Mechanical	Consumption	3 watts	
	Enclosure	IP40 metal case		Dimensions (W x D x H)	168 x 104 x 25 mm	
	Mounting	Wallmount-type		Enclosure	IP30 metal case	
Management	Management Interface	Remote IP-based Web/Telnet	Environment	Mounting	Mounting brackets for vehicles	
	Utility	Modbus Gateway Utility/ Discovery Utility		Operating Temperature	-25~65 degrees C	
Environment	Operating Temperature	-40~75 degrees C	Regulatory	Operating Humidity	95% (non-condensing)	
	Operating Humidity	5~95% (non-condensing)		Emissions	FCC Part 15 Class A, CE	
			Management	Stability	Static Route, VPN, DDNS, IP Filter, QoS	
				Interface	Console, Web, telnet	
				Software Utility	CMS	
				Log	Syslog Log	

Industrial Cellular Gateway				
Model	ICG-2420-LTE		ICG-2420G-LTE	
Product Image				
Hardware	10/100BASE-TX	3	3	
	WAN	1	1	
	DI & DO	2 DI & 1 DO	2 DI & 1 DO	
	GPS	-	128dB Antenna for GPS-2m	
	COM Port	2*RS232/1*485	2*RS232/1*485	
Multi Band Supports	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: 150Mbps (DL), 50Mbps (UL)		
Power	Inputs	10~32V DC	10~32V DC	
	Connector	3-pin terminal block	3-pin terminal block	
	Consumption	7 watts	7 watts	
Mechanical	Dimensions (W x D x H)	60 x 106 x 110 mm	60 x 106 x 110 mm	
	Enclosure	IP40 aluminum case	IP40 aluminum case	
	Mounting	DIN rail kit	DIN rail kit	
Environment	Operating Temperature	-20 ~ 70 degrees C	-20 ~ 70 degrees C	
	Operating Humidity	5 ~ 95% (non-condensing)	5 ~ 95% (non-condensing)	
Regulatory	Emissions	FCC Part 15 Class A, CE	FCC Part 15 Class A, CE	
	Stability	Static Route, Open VPN, DDNS, TR069, IP Filter, SMTP		
Management	Interface	Console, Web, telnet and SSHv2	Console, Web, telnet and SSHv2	
	SNMP	v1, v2c, v3 and trap	v1, v2c, v3 and trap	
	Alarm	SMS, Port, WAN, VPN and Reboot Alarm	SMS, Port, WAN, VPN and Reboot Alarm	
	System Log	System Log and Remote Syslog	System Log and Remote Syslog	

Industrial Gigabit SFP Modules

Model	MGB-TSX	MGB-TLX	MGB-TL40	MGB-TL80	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	20km	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








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	Multimode	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			
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			

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 AC, 50/60Hz, 1.45A	100-240V AC, 50/60Hz, 2.25A	100-240V AC, 50/60Hz, 2.5A	100-240V AC, 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 Module



EtherCAT Slave

Model

IECS-1116-DI

IECS-1116-DO

Product Image



		IECS-1116-DI	IECS-1116-DO
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

