

Industrial EtherCAT Solution

Powering the Digital Transformation with EtherCAT

PLANET's IECS-1116-DI and IECS-1116-DO are EtherCAT slave I/O modules, accompanied by the IECC-210-KIT Media Converter and IECJ-300, IECJ-400 and IECJ-410FT EtherCAT junction slaves. Ideal for modern industrial applications, these devices support the EtherCAT protocol.

The IECS Series offers high-density digital I/O channels with 3750V DC isolation. The IECC Series serves as a copper-to-optical fiber media converter, while the IECJ Series provides multi EtherCAT junction ports. Compact and DIN-rail mountable, they simplify cabinet installation, and pluggable terminal blocks with LED indicators enhance user-friendly system maintenance and setup.

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

Serial over Cellular Gateways

Making Network Connection Easy with 5G NR/4G LTE Cellular Gateway

PLANET ICG-2515 and ICG-2510 Series are robust industrial cellular gateways designed for high-performance mobile applications, M2M, and IoT deployments. With 5G NR, 4G LTE, 2.4G/5G Wi-Fi, Ethernet ports, serial console port, DI and DO interfaces, and VPN technology, these gateways ensure reliable and secure communication. Housed in a compact, rugged metal case, they provide fast cellular connections between Ethernet and serial port-equipped devices.

Industrial Cellular Gateways			Industrial 5G NR IoT Gateway Series						
Model			ICG-2510W-LTE	ICG-2510WG-LTE	ICG-2515-NR	ICG-2515W-NR	ICG-2515FW-NR	ICG-2515F-NR	ICG-2210W-NR
Product Image									
Hardware	LAN	5 10/100/1000BASE-T			4 10/100/1000BASE-T		1 10/100/1000BASE-T		
	WAN	1			1 10/100/1000T		1 1000X SFP		1 10/100/1000BASE-T
	WLAN	2.4G/5G			2.4G & 5G (W models)				2.4G/5G
	DI & DO	2 DI & 1 DO			2 DI & 2 DO				-
	GPS	-/●			GNSS positioning				-
	COM Port	1*RS232/RS485			1*RS485				1*RS232 & 1*RS485
Multi Band Support	EU Model	FDD LTE B1/B3/B5/B7/B8/B20 (2100/1800/850/2600/900/800) TDD LTE B38/B40/B41 (2600/2300/2500) WCDMA B1/B5/B8(2100/850/900) GSM/EDGE B3/B8 (1800/900)			5G NR n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/ n40/n41/n48/n66/n71/n77/n78/n79		EU Model • Sub-6: n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n75, n76, n77, n78, n79 US Model • Sub-6: n2, n5, n7, n12, n14, n25, n30, n48, n41, n70, n66, n71, n77, n78		
	US Model	FDD LTE B2/B4/B12 (1900/AWS1700/700) WCDMA B2/B4/B5 (1900/AWS1700/850)			4G LTE B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/ B19/B20/B25/B26/B28/B29/B30/ B32/B46/B66/ B71		EU Model • LTE FDD: B1, B3, B5, B7, B8, B20, B28, B32 • LTE TDD: B38, B40, B41, B42, B43 US Model • LTE FDD: B2, B4, B5, B7, B12, B13, B29, B30, B66, B71 • LTE TDD: B41, B46(LAA), B48		
	LTE	20MHz bandwidth: 100Mbps (DL), 50Mbps (UL)			Data Transmission Throughput		Sub-6G: 2.4Gbps (DL) / 500Mbps (UL) LTE: 1Gbps (DL) / 200Mbps (UL)		2.47Gbps (DL)/ 900Mbps (UL) for NR 1.2Gbps (DL)/200Mbps (UL) for LTE
Power	Inputs	9-36V DC			9-54V DC				9-36V DC
	Connector	6 pin 3.5mm terminal block			6 pin terminal block				6 pin 3.5mm terminal block
Mechanical	Consumption	7 watts			6W Max. 10W				14.4 watts
	Dimensions (W x D x H)	115.7 x 133 x 45 mm			50 x 135 x 135 mm				106 x 23.5 x 76 mm
	Enclosure	IP30 metal			IP30 metal				IP30 metal
Environment	Mounting	DIN rail			DIN-rail				DIN-rail and wall-mountable
	Operating Temperature	-35 ~ 75 degrees C			-40~75 degrees C				-40~75 degrees C
Regulatory	Operating Humidity	95% (non-condensing)			5 ~ 90% (non-condensing)				5% ~ 95% (non-condensing)
	Emissions	FCC Part 15 Class A, CE			Interface				Web browser, TLS, PLANET Smart Discovery utility, NMS Controller, CloudViewer supported
Management	Stability	Static Route, Open VPN, DDNS, TR069, IP Filter, SMTP			SNMP				v1, v2c
	Interface	Console, Web, telnet			System Log				System Event Log
SNMP		v1, v2c, v3 and trap			System Log				System Log and Remote Syslog
System Log		System Log and Remote Syslog							



Industrial Automation Realizing Connectivity to the IoT

RS232/RS422/RS485 Serial Device Servers

ICS-2100T/ICS-2105AT/ICS-2200T/ICS-2400T/
ICS-2102T/ICS-2102TS



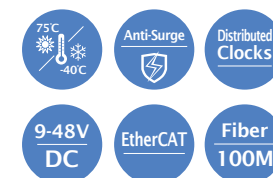
RS232/RS422/RS485 Modbus Gateway

MG-110/MG-115AT/MG-120



Industrial EtherCAT Slave I/O Modules

IECC-210KIT/IECJ-300/400/410FT



Serial over Cellular Gateways

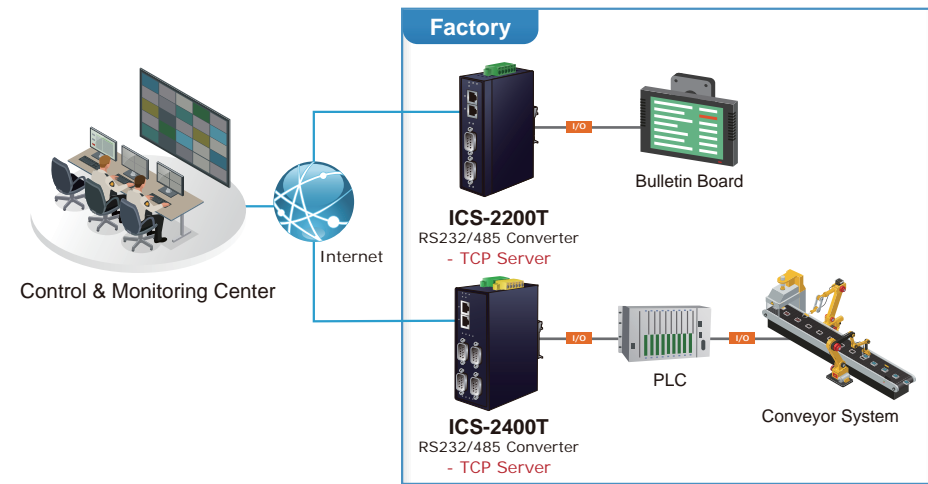
ICG-2515-NR/ICG-2515W-NR/ICG-2210W-NR



RS232/RS422/RS485 Serial Device Servers

Industrial Automation and Data Exchange for Industrial 4.0 Infrastructure

PLANET ICS Serial Device Server Series is specially designed to convert RS232, RS422 or RS485 serial communication to IoT and TCP/IP networking. It makes the connected legacy serial devices become IP-based facilities and is able to connect to the industrial Ethernet network allowing serial and Ethernet communications to connect efficiently and inexpensively. The ICS Series is a time-saving and cost-effective solution with no need of replacing the existing serial equipment and software system.

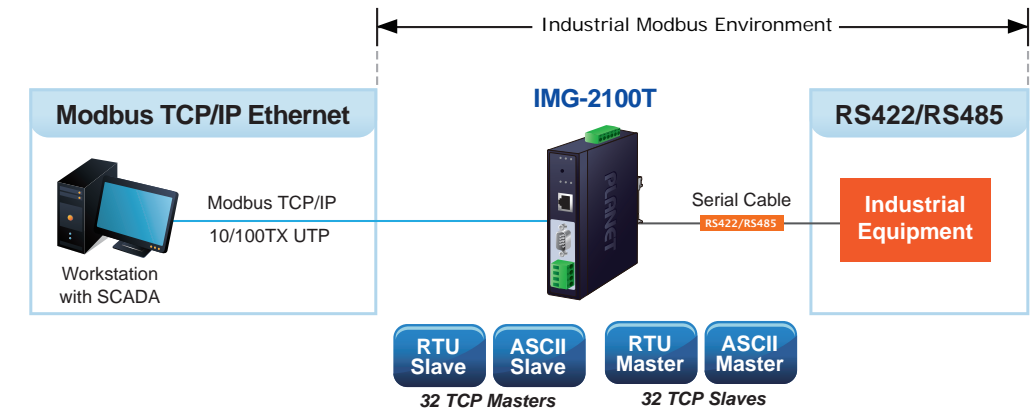


RS232/RS422/RS485 Modbus Gateways

Economical Solution for Industrial Modbus TCP/RTU/ASCII Network Integration

To fulfill the demand of automation and data exchange for industrial 4.0 infrastructure, PLANET MG and IMG Modbus Gateway Series can act as a conversion bridge between the RS233/422/485 equipment with the Modbus RTU/ASCII Protocol and the administrator workstations that run the Modbus TCP/IP Protocol.

The advantage of having the MG and IMG Series is to assist users to build an industrial environment between the Modbus TCP/IP Protocol and the Modbus RTU/ASCII Protocol easily, thus offering an application solution to the industrial control equipment without Ethernet ports.



Standard Serial Device Servers				Industrial Serial Device Servers				
Model	ICS-110	ICS-115A	ICS-120	ICS-2100T	ICS-2105AT	ICS-2102T ICS-2102TS	ICS-2200T	ICS-2400T

Product Image



Serial Port	Interface	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	2 x RS232/422/485	4 x RS232/422/485
	Connector	1 x DB9	1 x DB9	2 x DB9	1 x DB9 for RS232 1 x 4-pin terminal block for RS422/485			2 x DB9	4 x DB9
	Baud Rate	50bps to 921kbps	50bps to 921kbps	50bps to 921kbps	50bps to 921kbps	50bps to 921kbps	50bps to 921kbps	50bps to 921kbps	50bps to 921kbps
	Data Bits	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8
	Stop Bits	1,1.5,2	1,1.5,2	1,1.5,2	1,1.5,2	1,1.5,2	1,1.5,2	1,1.5,2	1,1.5,2
	Flow Control	None, RTS/CTS, Xon/Xoff			None, RTS/CTS, Xon/Xoff			None, RTS/CTS, Xon/Xoff	
	Isolation	-	-	-	-	-	-	2KV	2KV
LAN Port	Operation Mode	Virtual COM port, TCP server, UDP server, UDP client, pair connection, RFC2217, Telnet server, Modbus converter			Virtual COM port, TCP server, UDP server, UDP client, pair connection, RFC2217, Telnet server, Modbus converter				
	Standard	ICS-100/ICS-110/ICS-120: 10/100BASE-TX ICS-105A/ICS-115A: 100BASE-FX			ICS-2100/ICS-2100T/ICS-2200T/ICS-2400T: 10/100BASE-TX ICS-2105A/ICS-2105AT/ICS-2102T/ICS-2102TS: 100BASE-FX				
	Connector	RJ45	SFP	2 x RJ45	RJ45	SFP	Duplex SC	2 x RJ45	2 x RJ45
	Max. Distance	ICS-100/ICS-110: 100m ICS-105A/ICS-115A: May vary on module		100m	ICS-2100/ICS-2100T: 100m ICS-2105A/ICS-2105AT: May vary on module		ICS-2102T: 2km ICS-2102TS: 30km	100m	100m
Power	Protection	6KV ESD	6KV ESD	6KV ESD	6KV ESD	6KV ESD	6KV ESD	6KV ESD	6KV ESD
	Power Input	DC 5V	DC 5V	DC 5V	Dual DC 9-48V or AC 24V			Dual DC 12-48V	
	Power Interface	DC jack	DC jack	DC jack	Removable terminal block			Removable terminal block	
Mechanical	Power Consumption	5.5 watts max.	5.5 watts max.	5.5 watts max.	5 watts max.	5 watts max.	5 watts max.	5.4 watts max.	6.5 watts max.
	Dimensions (W x D x H)	94 x 70 x 26 mm	94 x 70 x 26 mm	94 x 70 x 26 mm	32 x 87 x 135 mm	32 x 87 x 135 mm	32 x 87 x 135 mm	32 x 87 x 135 mm	56 x 87 x 135 mm
	Enclosure	metal	metal	metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP40 metal
Environment	Installation	Wall-mountable, chassis installation		Wall-mountable	Wall-mountable, DIN-rail mounting				
	Operating Temperature	-10~60 degrees C	-10~60 degrees C	-10~60 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
Regulatory	Emissions	FCC, CE	FCC, CE	FCC, CE	FCC, CE	FCC, CE	FCC, CE	FCC, CE	FCC, CE
	Stability	-	-	-	IEC60068-2-32 (free fall), IEC60068-2-27 (shock), IEC60068-2-6 (vibration)				
Management	Interface	IPv4/IPv6 Web, telnet and SNMP management			IPv4/IPv6 Web, telnet and SNMP management				
	Utility	VCOM utility, PLANET Smart Discovery			VCOM utility, PLANET Smart Discovery				

Modbus Gateway			Industrial Modbus Gateway				
Model	MG-110 MG-115A	MG-120	IMG-2100T	IMG-2105AT	IMG-2102T IMG-2102TS	IMG-2200T	IMG-2400T

Product Image



Serial Port	Interface	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	2 x RS232/422/485	4 x RS232/422/485
	Connector	1 x DB9	2 x DB9	1 x DB9 for RS232 1 x 4-pin terminal block for RS422/485			2 x DB9	4 x DB9
	Baud Rate	50bps to 921kbps		50bps to 921kbps	50bps to 921kbps	50bps to 921kbps	50bps to 921kbps	50bps to 921kbps
	Priority Type	None, Odd, Even, Space, Mark		None, Odd, Even, Space, Mark		None, Odd, Even, Space, Mark		
	Isolation	-	-	-	-	-	2KV	2KV
	Multi-master and Multi-drop	Master mode: 32 TCP slaves Slave mode: 32 TCP masters		Master mode: 32 TCP slaves Slave mode: 32 TCP masters		Master mode: 32 TCP slaves Slave mode: 32 TCP masters		
	Operation Mode	Modbus RTU Master/ Modbus RTU Slave/ Modbus ASCII Master/ Modbus ASCII Slave						
LAN Port	Standard	MG-110/MG-120: 10/100BASE-TX MG-115A: 100BASE-FX		IMG-2100T/IMG-2200T/IMG-2400T: 10/100BASE-TX IMG-2105AT/IMG-2102T/IMG-2102TS: 100BASE-FX				
	Connector	MG-110: RJ45 MG-115A: SFP	2 x RJ45	RJ45	SFP	Duplex SC	2 x RJ45	2 x RJ45
	Max. Distance	MG-110/MG-120: 100m MG-115A: May vary on module		100m	May vary on module	IMG-2102T: 2km IMG-2102TS: 30km	100m	100m
Power	Protection	6KV ESD	6KV ESD	6KV ESD	6KV ESD	6KV ESD	6KV ESD	6KV ESD
	Power Input	DC 5V	DC 5V	Dual DC9-48V or AC 24V			Dual DC 12-48V	
	Power Interface	DC jack	DC jack	Removable terminal block			Removable terminal block	
Mechanical	Power Consumption	5.5 watts max.	5.5 watts max.	5 watts max.	5 watts max.	5 watts max.	5.4 watts max.	6.5 watts max.
	Dimensions (W x D x H)	94 x 26 x 70 mm	94 x 26 x 70 mm	32 x 87 x 135 mm	32 x 87 x 135 mm	32 x 87 x 135 mm	32 x 87 x 135 mm	56 x 87 x 135 mm
	Enclosure	metal	metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP40 metal
Environment	Installation	Wall-mountable, chassis installation	Wall-mountable	Wall-mountable, DIN-rail mounting			Wall-mountable, DIN-rail mounting	
	Operating Temperature	-10~60 degrees C	-10~60 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C	-40~75 degrees C
Regulatory	Emissions	FCC, CE	FCC, CE	FCC, CE	FCC, CE	FCC, CE	FCC, CE	FCC, CE
	Stability	-	-	IEC60068-2-32 (free fall), IEC60068-2-27 (shock), IEC60068-2-6 (vibration)				
Management	Interface	IPv4 Web, telnet and SNMP management		IPv4 Web, telnet and SNMP management				
	Utility	MBVCOM utility, PLANET Smart Discovery		MBVCOM utility, PLANET Smart Discovery				