# INSTALLATION MANUAL

### IP GATEWAY wITH RS232/RS485 PORT

## Model: IP-COM-PORT





## **PRODUCT INFORMATION**

The IP Gateway is a programming and communication gateway that is also used to integrate 3<sup>rd</sup>-party devices with its Rs232 – RS485 serial ports. It can also be used as a Modbus RTU master or slave converter.

PRODUCT SPECIFICATIONS				
Ŷ	Ports	RS232 RS485 RJ45	RS232 ASCII / HEX 2-way connection Modbus, RS485 ASCII / HEX 2-way connection Ethernet UDP - TCP/IP connection	
(TI SBUS)	TIS Bus	Number of devices on 1 line Bus voltage Current consumption Protection	Max. 64 12-32 V DC <30 mA / 24 V DC Reverse Polarity Protection	
<b>0</b> 0	Function programmable options	PRG button	IP address 192.168.1.100 (default)	
Ŧ	Dimensions	Width $\times$ length $\times$ height	90mm × 73mm × 76mm	
	Housing	Materials Casing color IP rating	Fire-proof ABS Black Gray IP 20	







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#### **Read Instructions**

We recommend that you read this Instruction Manual before installation.



#### **Mounting Location**

Install in a dry, well-ventilated location. Controllers may emit some mechanical noise. Take this into account when deciding on a mounting location.



### Safety instructions

Electrical equipment should only be installed and fitted by electrically skilled persons.

Failure to observe the instructions may cause damage to the device and other hazards.

These instructions are an integral part of the product and must remain with the end customer.



#### Data Cable

Use screened stranded RS485 data cable with four twisted pairs. Configure devices in a "Daisy Chain."

Do not cut or terminate live data cables.



#### Warranty

We provide a warranty as required by law. A hologram warranty seal and product serial number are provided on each device. Please send the description of the defect with Product S/N to our dealer network.



#### Programming

Advanced programming requires TIS Device Search software. Advanced software programming knowledge should be obtained in the advanced training courses.

## Simple Installation

DIN Rail mount facilitates installation. Fixing points are provided for installation without the use of DIN rail.



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Turn Off TIS Power supply

Mount the device on a DIN rail inside an approved enclosure. The device can also be installed without the use of DIN rail by two mounting screw holes.



WARNING! HIGH VOLTAGE

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Connect a Cat5e TIS network data cable to the TIS-BUS port as per the connection diagram. No need to loop the TIS-bus cable if 2 DIN rail modules are connected together from the side bus train terminal.



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Complete the connection, as per the following steps:

#### **CONNECTING TO ETHERNET**

Connect the IP ethernet cable to the module's RG45 ethernet port.





Connect as follows:

- 3<sup>rd</sup>-party device RS232 TX pin to TIS RS232 RX terminal.
- 3<sup>rd</sup>-party device RS232 RX pin to TIS RS232 TX terminal.
- ▶ 3<sup>rd</sup>-party device GND pin to TIS GND terminal.
- If required to use RS232 DTR pin in some 3<sup>rd</sup>-party devices, then connect it to TIS RS232 DTR terminal.





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#### CONNECTING TO MODBUS RTU OR RS485 3<sup>rd</sup> PARTY

Connect as follows:

- Modbus RTU or 3<sup>rd</sup>-party device RS485 A pin to TIS RS485 D+ terminal.
- Modbus RTU or 3<sup>rd</sup>-party device RS485 B pin to TIS RS485 D- terminal.



**5** Turn on TIS power supply. The module's PRG LED should start blinking.



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#### TO PAIR THE MODULE TO APPLICATION AS A SERVER GATEWAY:

1 Press the PRG button for 6 seconds until the green LED turns on and produces a steady light.



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Go to the application's Air configuration setting and follow the steps on the app.







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MODEL: IP-COM-PORT



# TO RESET THE IP ADDRESS SETTING TO THE DEFAULT ADDRESS (192.168.1.100):

Press the PRG button for 15 seconds until the red LED turns on and produces a steady light.



## TO DISABLE THE ADVANCED SECURITY LOCK SETTING IF ENABLED BY SOFTWARE:

Press the PRG button for 6 seconds until the green LED turns on and produces a steady light.





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# **TIS**

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## TROUBLESHOOTING

	PRG Button Blinks Red Color Rapidly	<b>Reason:</b> The module's address conflicts with another device in the TIS network. You need to press and hold the PRG button for 6 seconds so that the module can get a new address.
	Device PRG LED is not Blinking; Device not Powered	<b>Reason:</b> Device is not powered on; no TIS-BUS 24V supply connected to the device.
	Device Ethernet LED is not blinking	<ul><li>Reason 1: The ethernet cable is not plugged in to the module port firmly.</li><li>Reason 2: The ethernet cable has a problem or is not plugged in to the data switch.</li></ul>
		<b>Reason 1:</b> PC IP address is not in the same range as the IP Module (192.168.1.xxx).
	Device Search software can not communicate with the module	<b>Reason 2:</b> Device search software was opened before setting the PC IP address; you need to restart your software.
		<b>Reason 3:</b> If linked by ethernet cable, check the connectivity, disable the WiFi on your laptop/PC, and restart the software.
		<b>Reason 4:</b> TIS software is opened in the same PC. Close all TIS software and open just one.
	Device Search software can only search the IP module but no other TIS devices.	<b>Reason:</b> Could be a short in connection between devices in TIS bus network .
	New IP address in the software could not be changed.	<b>Reason:</b> The module is protected. You need to press the PRG button for 6 seconds to open the protection for 2 minutes so that you can give the module a new address.
		<b>Reason 1:</b> Make sure your mobile is on the same network as the IP-COM-PORT.
	TIS app is not able to communicate with TIS devices in your local area network.	<b>Reason 2:</b> In app network settings, you should add the Subnet ID, Device ID, and MAC Address of the IP-COM-PORT.
		<b>Reason 3:</b> Some setting or address is wrong in the app.

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