INSTALLATION MANUAL
TIS COMMUNICATION PORT
IP Gateway with RS232/RS485 Ports
MODEL: IP-COM-PORT

TIS ®
CONTROL EVERYTHING

ℹ PRODUCT INFORMATION

This product is a programming and communication gateway ideal for integration of third-party devices with TIS network. Additionally, it can be used as a modbus RTU master or slave converter.

PRODUCT SPECIFICATIONS

⌁	**Ports**	RS232 RS485 RJ45	RS232 ASCII / HEX 2-way connection Modbus, RS485 ASCII / HEX 2-way connection Ethernet UDP - TCP/IP connection
TISBUS	**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
⚙	**Function programmable options**	PRG button	IP address 192.168.1.100 (default)
⊞	**Dimensions**	Width × length × height	90mm × 73mm × 76mm
⬚	**Housing**	Materials Casing color IP rating	Fireproof ABS Black IP 20

CE RoHS COMPLIANT PCT ✓ FC

Read Instructions

We recommend that you read this Instruction Manual before installation.

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.

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.

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.

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.

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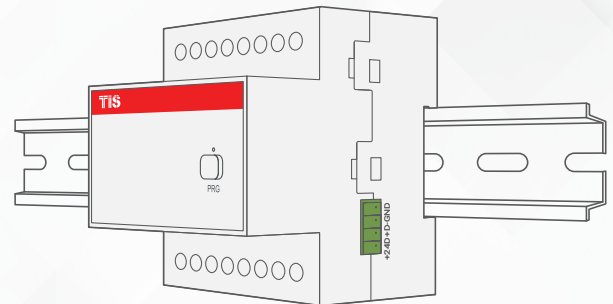
INSTALLATION STEPS

1 Turn Off TIS Power supply

⚠ **WARNING! HIGH VOLTAGE**

2 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.

3 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.

To the TIS BUS Network

Cat5e

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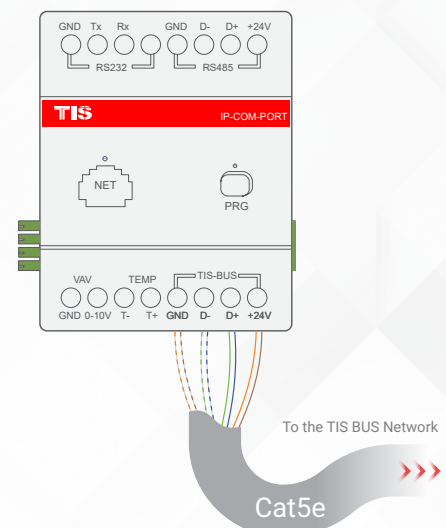
INSTALLATION STEPS
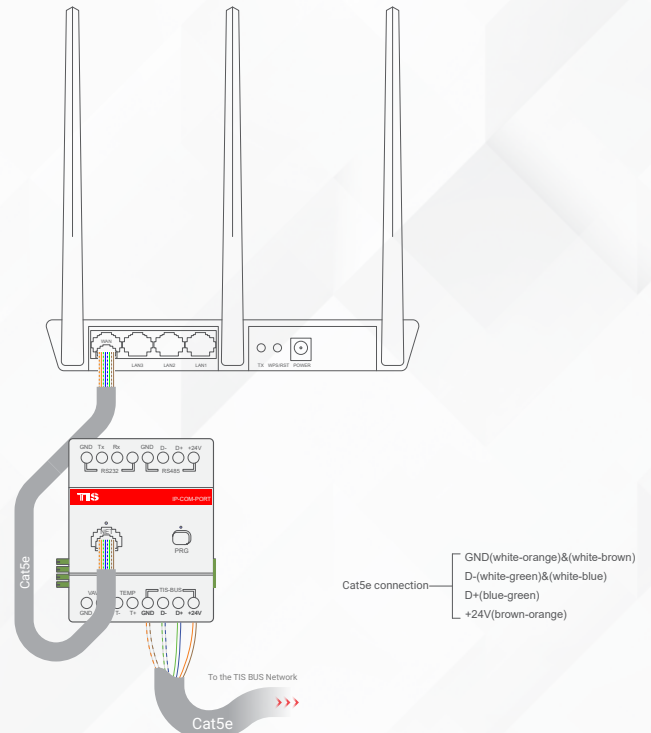
4 ≫ Complete the connection, as per the following steps:

CONNECTING TO ETHERNET

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

Cat5e connection
GND(white-orange)&(white-brown)
D-(white-green)&(white-blue)
D+(blue-green)
+24V(brown-orange)

To the TIS BUS Network

Cat5e

CONNECTING TO RS232 3rd PARTY

Connect as follows:

▶ 3rd-party device RS232 TX pin to TIS RS232 RX terminal.

▶ 3rd-party device RS232 RX pin to TIS RS232 TX terminal.

▶ 3rd-party device GND pin to TIS GND terminal.

▶ If required to use RS232 DTR pin in some 3rd-party devices, then connect it to TIS RS232 DTR terminal.

Connect to GND
RS232 RX
RS232 TX
RS232 DTR

GND Tx Rx DTR GND D- D+ +24V
RS232   RS485

IP-COM-PORT

NET   PRG

VAV   TEMP   TIS-BUS
GND 0-10V T- T+ GND D- D+ +24V

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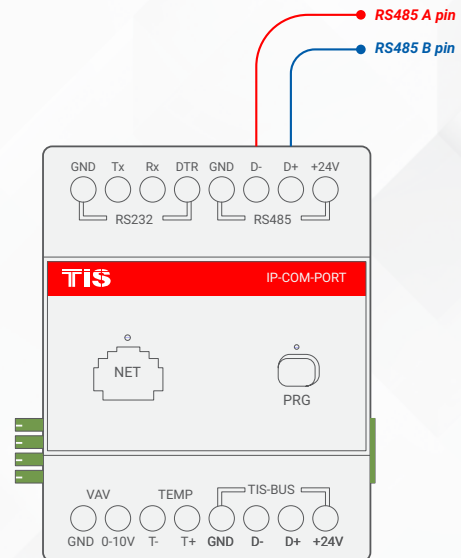**TIS CONTROL LIMITED**
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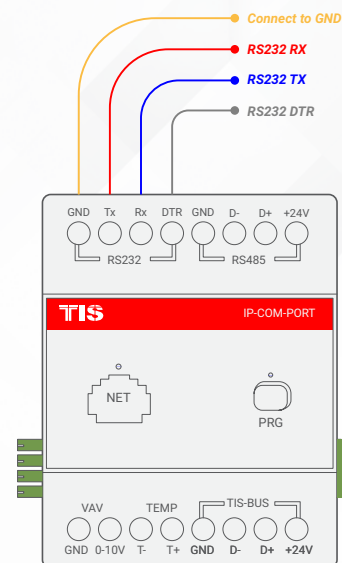
INSTALLATION STEPS
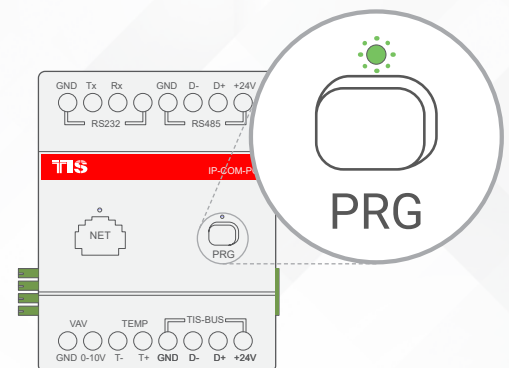
CONNECTING TO MODBUS RTU OR RS485 3ʳᵈ PARTY

Connect as follows:

▶ Modbus RTU or 3ʳᵈ-party device RS485 A pin to TIS RS485 D+ terminal.

▶ Modbus RTU or 3ʳᵈ-party device RS485 B pin to TIS RS485 D- terminal.

RS485 A pin

RS485 B pin

GND Tx Rx DTR GND D- D+ +24V
RS232   RS485

IP-COM-PORT

NET   PRG

VAV   TEMP   TIS-BUS
GND 0-10V T-   T+ GND D- D+ +24V

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

GND Tx Rx GND D- D+ +24V
RS232   RS485

IP-COM-P

NET   PRG

VAV   TEMP   TIS-BUS
GND 0-10V T-   T+ GND D- D+ +24V

PRG

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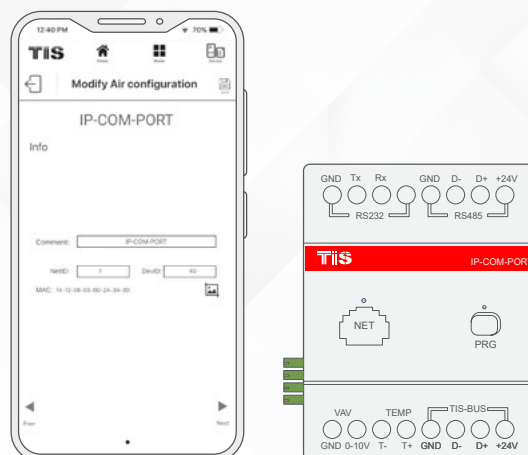www.tiscontrol.com

PAIRING (MANUAL PROGRAMMING)

TO PAIR THE MODULE TO APPLICATION AS A SERVER GATEWAY:

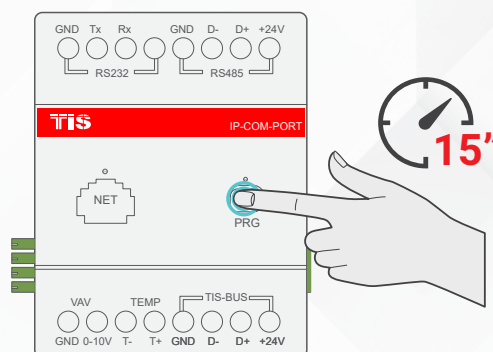**1** ›› Press the PRG button for 6 seconds until the green LED turns on and produces a steady light.
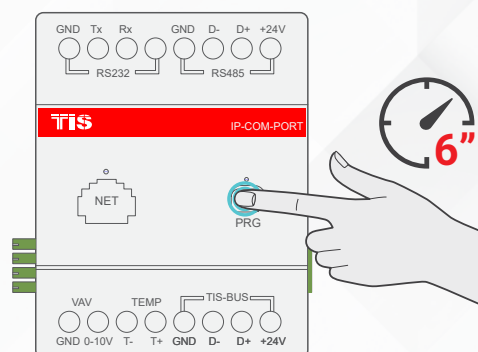
2 ›› Go to the application's Air configuration setting and follow the steps on the app.

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PAIRING (MANUAL PROGRAMMING)

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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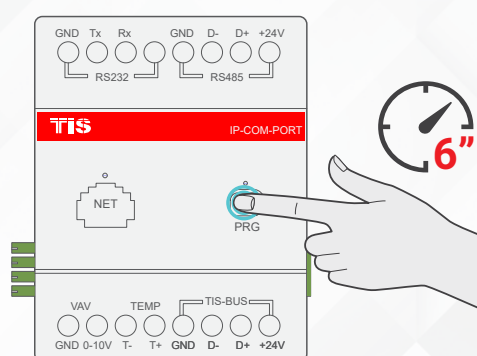
🧰 TROUBLESHOOTING

PRG Button Blinks Red Color Rapidly

Reason: 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

Reason: Device is not powered on; no TIS-BUS 24V supply connected to the device.

Device Ethernet LED is not blinking

Reason 1: The ethernet cable is not plugged in to the module port firmly.

Reason 2: The ethernet cable has a problem or is not plugged in to the data switch.

Device Search software can not communicate with the module

Reason 1: PC IP address is not in the same range as the IP Module (192.168.1.xxx).

Reason 2: Device search software was opened before setting the PC IP address; you need to restart your software.

Reason 3: If linked by ethernet cable, check the connectivity, disable the WiFi on your laptop/PC, and restart the software.

Reason 4: 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.

Reason: Could be a short in connection between devices in TIS bus network .

New IP address in the software could not be changed.

Reason: 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.

TIS app is not able to communicate with TIS devices in your local area network.

Reason 1: Make sure your mobile is on the same network as the IP-COM-PORT.

Reason 2: In app network settings, you should add the Subnet ID, Device ID, and MAC Address of the IP-COM-PORT.

Reason 3: Some setting or address is wrong in the app.

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