PRECISOL AUTOMATION

Sense for Machines

RS422 Serial to Cloud Gateway

Quick Start Guide

Version 1.0

Contents

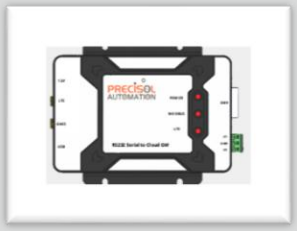
1. About

This quick start guide will provide the details about the kit contents, device hardware terminal details, power on and device setting information.

2. Kit Contents

The standard package includes below listed items,

- RS422 Serial to Cloud Gateway
- 12V DC power adapter (Optional)
- 1x LTE antenna (Rubber Duck Antenna)
- 1x GPS extendable wire antenna (Optional)
- Mini USB B to USB type A converter cable (Optional)
- 3-Pin mating connector for Analog input (Optional)



RS422 SERIAL TO CLOUD GATEWAY

4G 3DBI RUBBER DUCK LTE ANTENNA

Mini USB B to USB type A CONVERTER CABLE

12V DC POWER ADAPTER

GPS ANTENNA

3-PIN MATING CONNECTOR

Figure 1 Kit Contents

3. RS422 Serial to Cloud Gateway Device Specification

The following section will describe the hardware terminal details of the device.

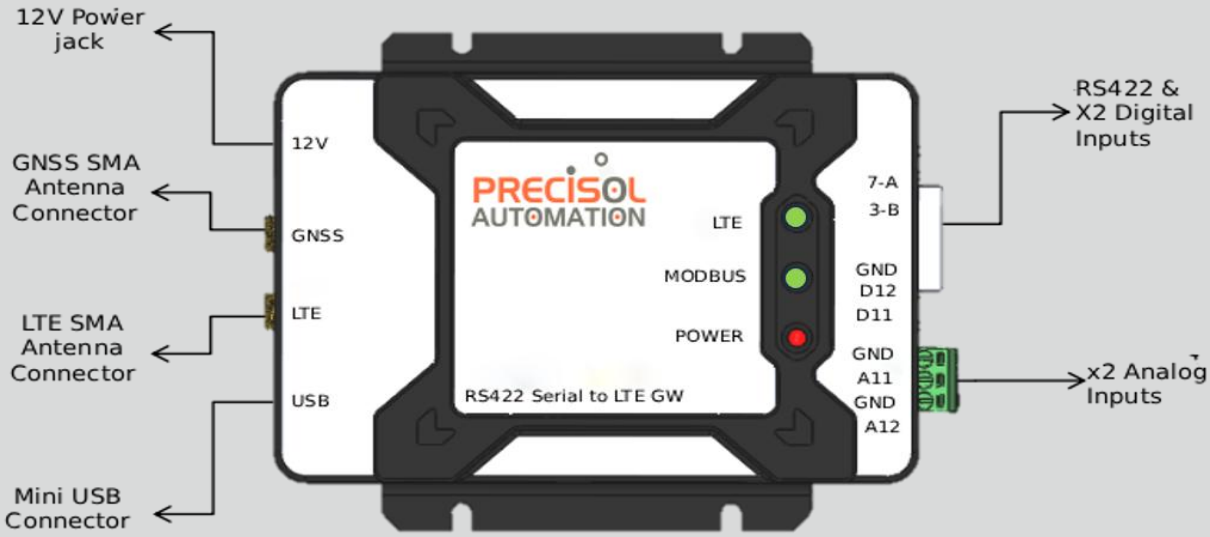


Figure 2 Pictorial representation of Serial to Cloud Gateway

For detailed device specifications and advanced features, please visit the link below: https://precisol-automation.com/images/documents/PA_422_SCGW_PSG_1.0.pdf

4. Setting up the system

The following section will describe how to setup and run the Gateway with your slave Modbus device.

Note: PreciCon and PreciCloud tools should be downloaded and installed on the PC before starting the gateway setup.

- PreciCon tool download link: https://precisol-automation.com/rs422-serial-to-lte-gateway
- PreciCloud dashboard link: http://cloud.precisol-automation.com

1 Connect your Modbus Device

Connect RS422 A, B, Z and Y signals to your slave device. Check whether the DB-9 connector is properly plugged to the gateway and if there is no loose connection in between the device & gateway.

2 Connect the Antennas

Connect the provided LTE & GNSS (if opted) antenna to the gateway's SMA connector. Make sure the antenna is tightened to the correct SMA connector properly.
Flip the antenna so that it will be right angled to the gateway.

3 Connect the Inputs

Connect your device's analog and digital output from the sensor or slave device to the gateway input terminal via 3-pin terminal connector and DB-9 connector respectively.
Screw the analog input wire to the mating connector and plug the mating connector to the gateway. Make sure the wires are screwed tightly and there are no loose connections.

4 Connect the Power Supply

Power the gateway with the 12V DC power supply provided with the package. If not opted, kindly use the standard 12V/2A DC power adapter.
Make sure the adapter connector will mate with the gateway's 5.50mm OD barrel connector.
The power LED will turn on once the device is powered up.

5 Configure your Gateway

Connect the Gateway to your PC using a USB Mini-B cable. Open the PreciCon (Custom Configurator) tool, Configure the required parameters such as serial settings, Modbus configuration, and cloud settings, and click Configure to download the settings to the device. Once the device is configured successfully, cloud and Modbus LED will blink slowly showing proper device operation.

6 View the live data

Users can view the live acquired data in PreciCloud, a custom cloud dashboard. Login to the PreciCloud using the provided credentials.
The gateway will communicate with the cloud continuously after successful configuration and the Cloud LED will notify the communication status.
All the configured Modbus device data will be available in the cloud dashboard.

For further information, refer to the user manual of the gateway, PreciCon and PreciCloud.