BusLog_4G_v2

Features

- **Modbus RTU RS485 Input Port**
- **2-DI, 2-DO Ports**
- **4G LTE Connectivity**
- **Wi-Fi Connectivity**
- **MQTT/TCP/HTTPs Based Cloud Connectivity**
- **JSON Formatted Payload Data**
- **Local Configuration Via Embedded Web Server**
- **Connect With any IIOT cloud Server**
- **Can be configured to connect any IOT server**
- **Support Modbus Read & Write**
- **Configurable Read and Upload Intervals separately**
- **Internal Memory to Store Data During Network Loss**

Description

SilTech IIOT Gateway Model, 'BusLog_4G_v2' is a Modbus to 4G & Wi-Fi IIOT Gateway. This Device can be connected to any MQTT/TCP/HTTPs Enabled Cloud Server for Data Logging purposes. Device sends data in standard JSON format. Device can be connected to internet via inbuilt 4G-LTE/Wi-Fi connectivity. If Wi-Fi network fails the device automatically switches to 4G service, and in total network failure the device will automatically shift to storage mode in order to store the data. The device provides seamless network connectivity and designed to work 24X7. Furthermore, ensuring thorough robustness, the ABS enclosure along with DIN Rail wall mounting option makes it suitable for any Industrial environment. The device configurations can be accessed or changed anytime over inbuilt webserver feature. It also supports OTA (Over the Air Updates) of Firmware in case if any maintenance and feature updates are required.

Application

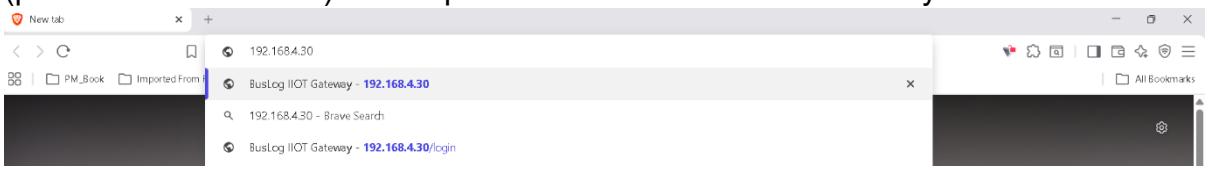
- Industry 4.0 monitoring and controlling
- Water Flow & level Meter Data Logging
- VFD Control and Monitoring
- Sensors like Temperature, Pressure Data Logging
- DG Monitoring & Data Logging
- Energy Metering and Monitoring
- PLC Data Logging
- Solar Chargers & Inverter Monitoring and Wireless Control

Specifications

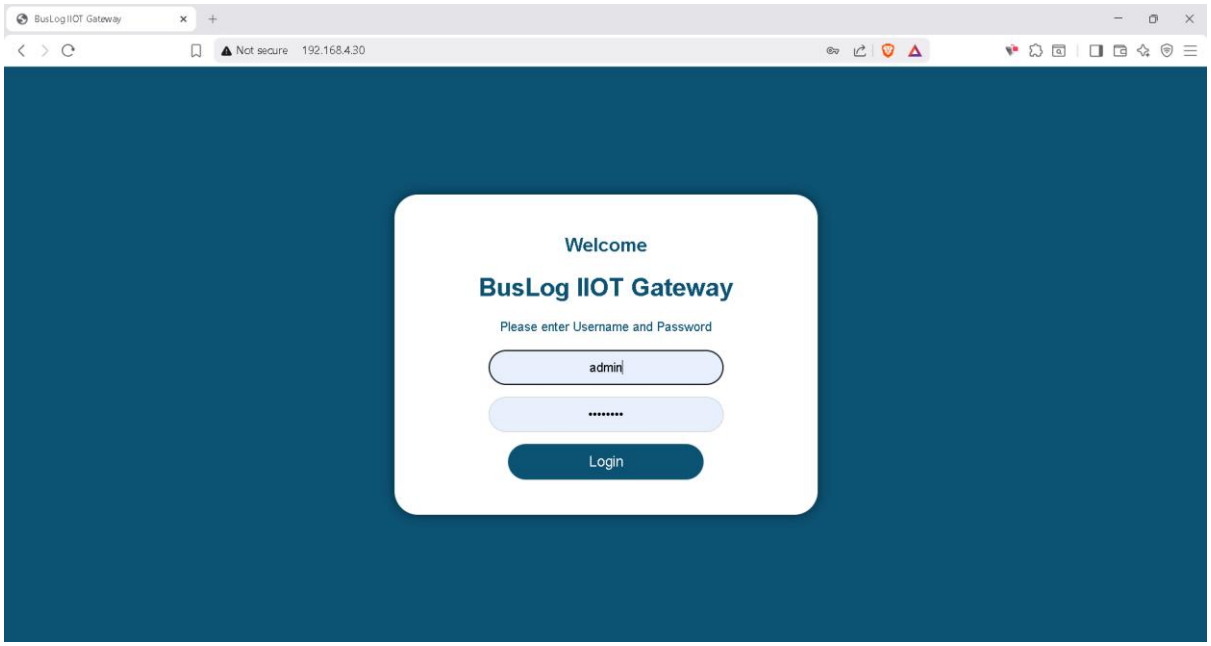
S N	Parameter	Specification
1	Input Power Supply	9-24VDC with Reverse Polarity Protection
2	Data Reading	RS485 Modbus-RTU input with ESD protection
3	Digital IO	2 Digital Input, 2 Digital output Ports (Support Vin logic)
4	Data Storage (Online)	Data Upload to Server via 4G/Wi-Fi at configurable interval
5	WI-FI	802.11 b/g/n Wi-Fi functionality
6	4G LTE	4G LTE CAT - 1 Module --BAND -B1/B3/B5/B8, B34/B38/B39/B40/B41 SIM Card – NANO (inbuilt) (Separately Chargeable)
7	Communication Protocol	MQTT/TCP-IP/HTTPs Support
8	APN SETTING	Fully automatic APN selection for any network Operator across India
9	Indications	Power, Network Led, buzzer sounds for events
10	SMS command & Alerts	Supports SMS command configurations, alerts for setting change (Optional)
11	RTC/Time	Automatic accurate time syncing with Time servers
12	Terminal	Clamp Cage Screw Terminal
13	Dimensions	106 X 48 X 53 mm

Configuration

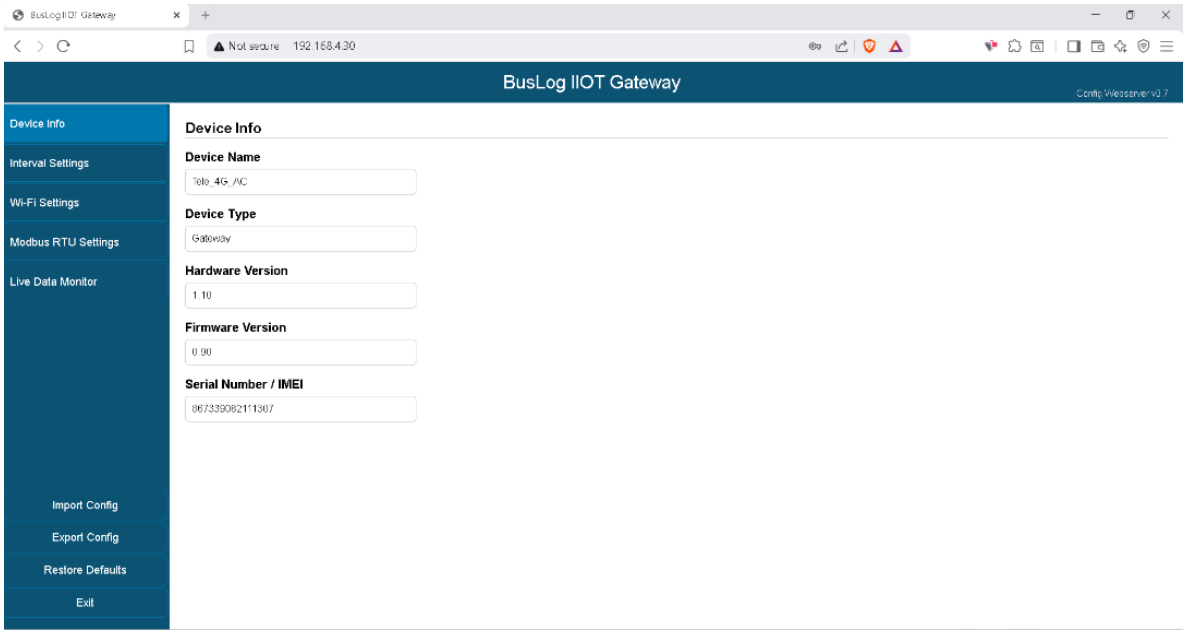
Press and hold the Config button for 5 seconds until two buzzer beeps confirm Config Mode, then connect your laptop to the Wi-Fi network **"BusLog_AP-XXXXXXXX"** (password: **12345678**) and open the shown IP address in your web browser.



Now you will see a web page open, you have to enter the Login ID, Password here which will be "admin", "12345678". You can change them later in the settings.



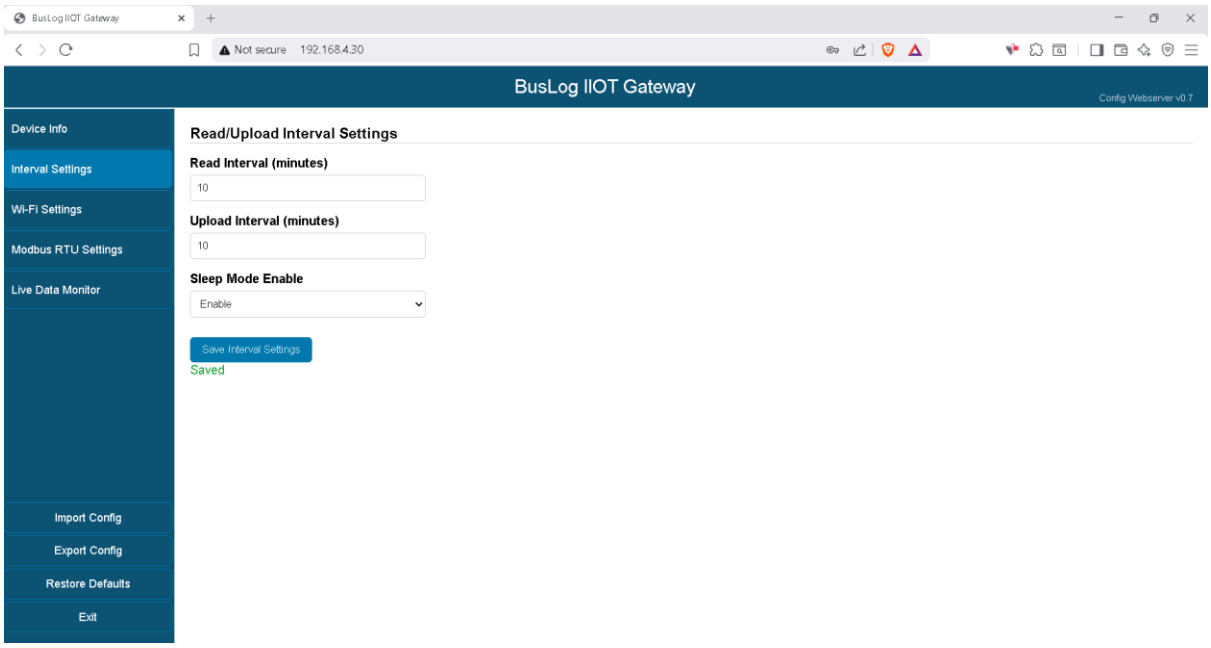
After Login you will see the device Information,



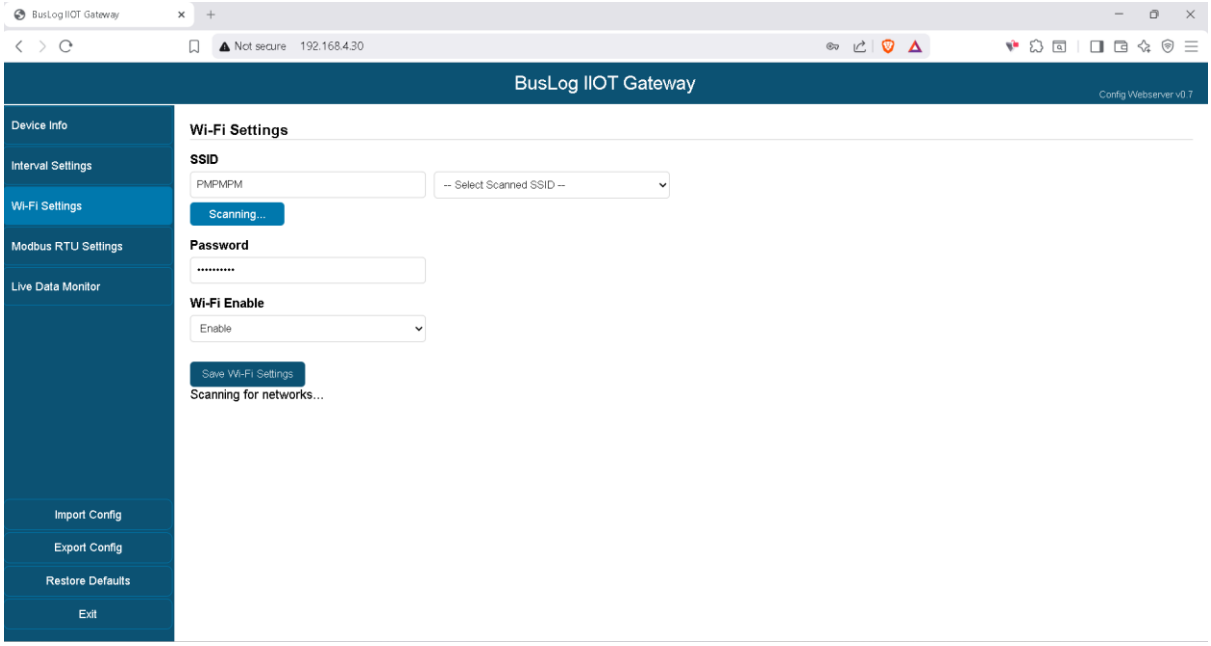
Next you can choose the settings you want to change.

On selecting the settings, you will see the current settings saved in the device, you can change them and click save to change the settings in the device as shown in the images given below.

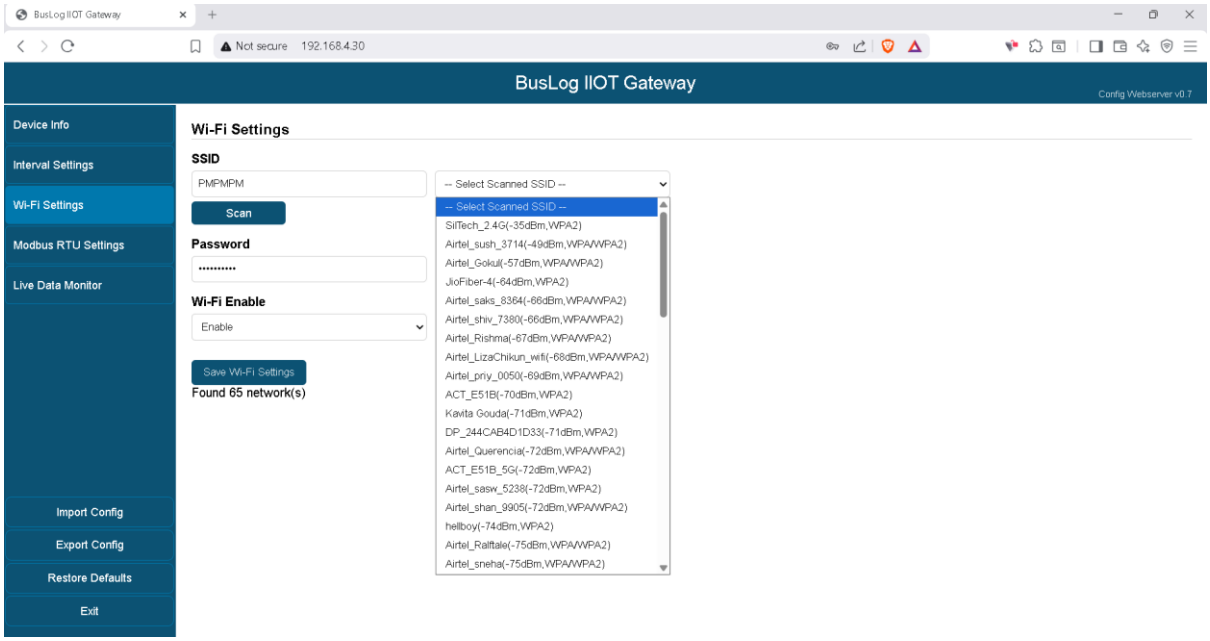
Interval settings:



Wi-Fi Settings: click “Scan” button.



Wi-Fi Settings: Choose Wi-Fi SSID, Enter Password, click “Save Wi-Fi Settings”

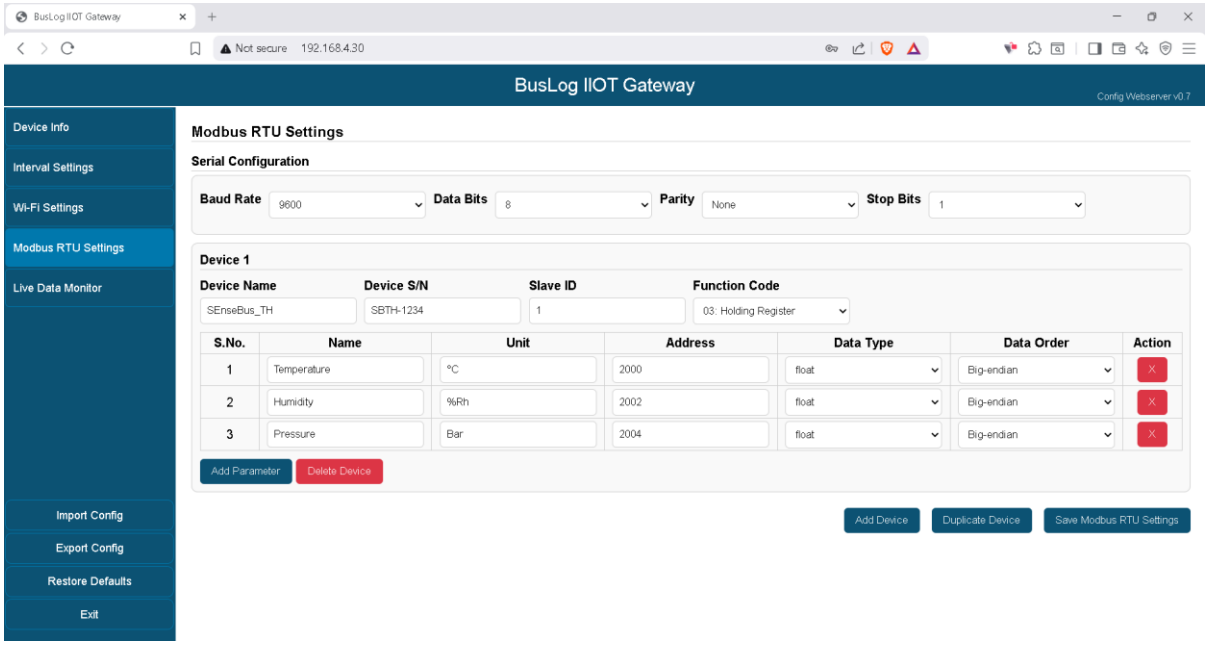


Modbus RTU Settings: Select Communication Parameters- Baud Rate, Data Bits, Parity, Stop bits.

Enter Device Name, Device Seria Number, Slave ID (Modbus ID or the Device), Function Code.

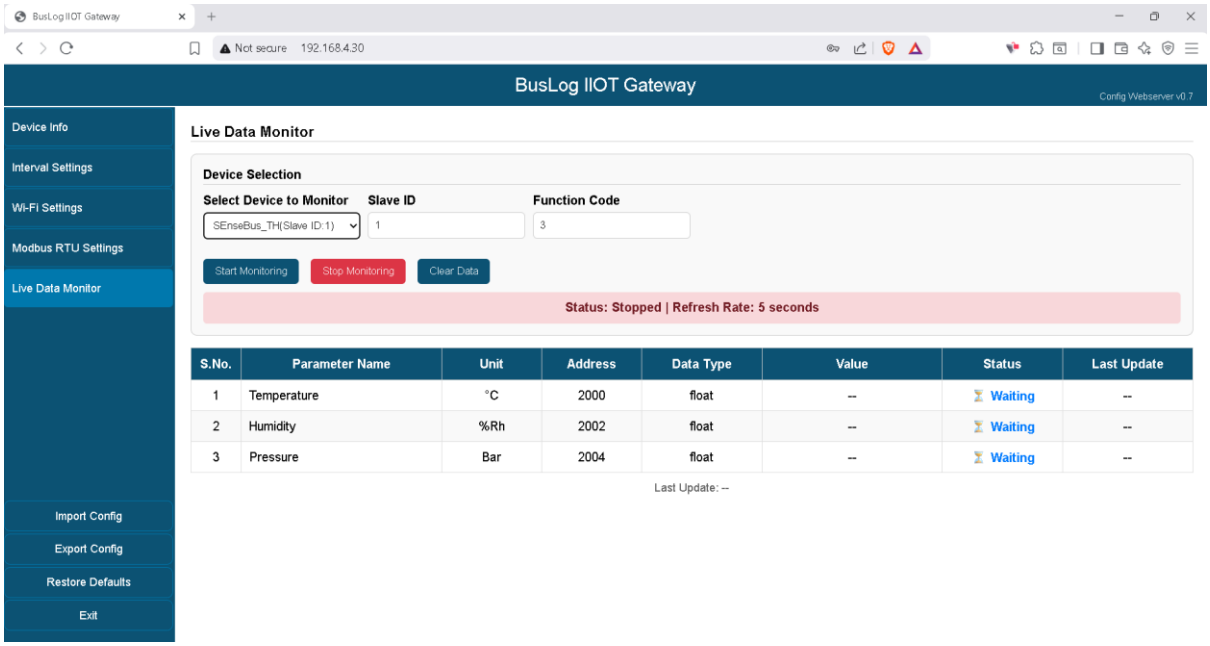
Enter the Name, Unit, Address, Data Type, Data Order of the Parameter.

Add or remove Parameters as needed.

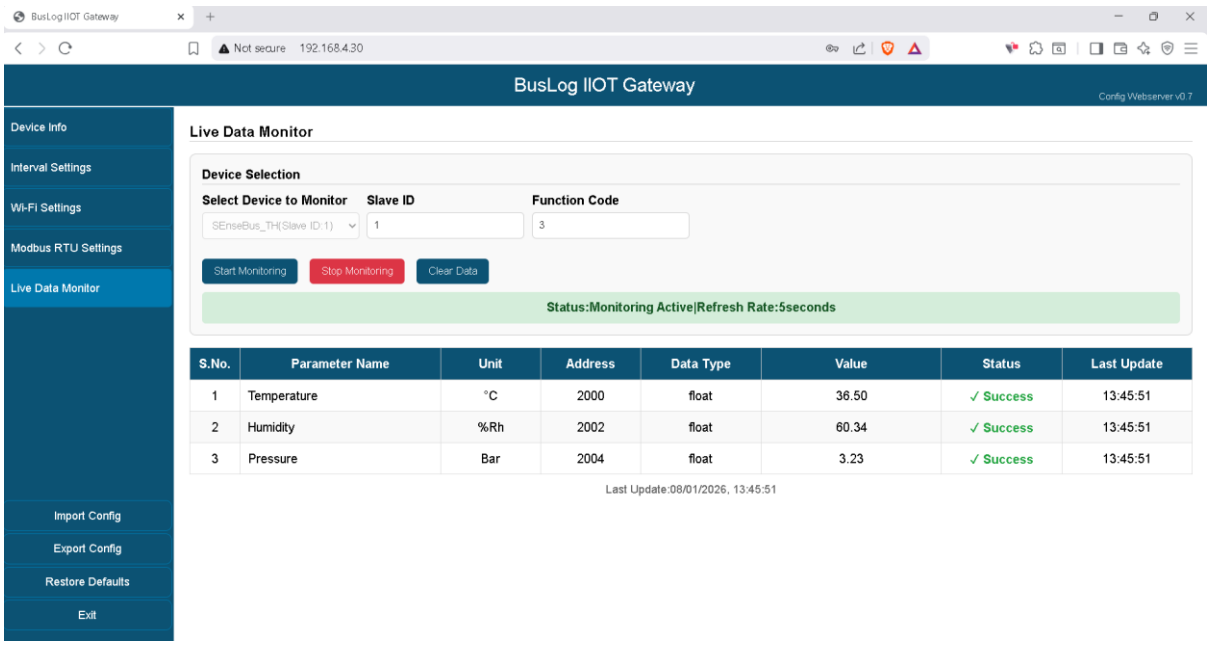


Live Data Monitor: Select the device to monitor and click the “Start Monitoring” button to read live Modbus parameters from the device to check the communication

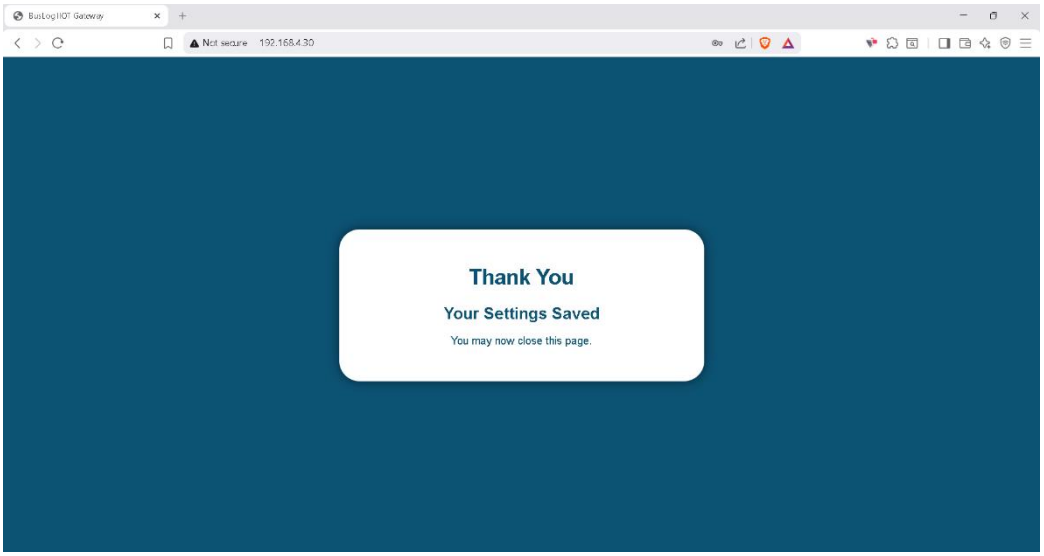
Live Data Monitor: This feature helps the user to verify the communication between the Modbus Device and the Telemetry Device.



Live Data Monitor: Success



Exit: On Click “Exit” the device will automatically restart and starts working as per the settings you have saved.



The module provides practical configurability which can be scaled and implemented to a wide variety of applications. The multi-parameter approach also allows seamless adjustability based on varying sensor requirements alongside key backup (power as well as data) planning, ensuring exhaustive reliability and robustness making it immediately viable for the industrial environment.

Installation:

Mount the device over the DIN Rail, Connect the Modbus Slave device on the given A|B Terminals given on the device as shown in the image.

Connect the Digital Inputs to the DI1, DI2 (Vin min- 9V, Max 24V)

Connect the Digital Outputs to the DO1, DO2 (Vout = Connected power supply)

Red LED: Indicates the Power ON

Blue LED: Indicates the Networ State

CONFIG Button: To put the device in config mode

Contact us:

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Warranty and Support:

- **Warranty**: 1-year limited warranty from the date of purchase.
- For any technical support, reach us at contact@siltech.in

Certifications and Compliance:

- RoHS Compliant

Maintenance and Care:

- Clean the Device periodically to avoid dust build up.
- Avoid prolonged exposure to corrosive environments.

Document Version:

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