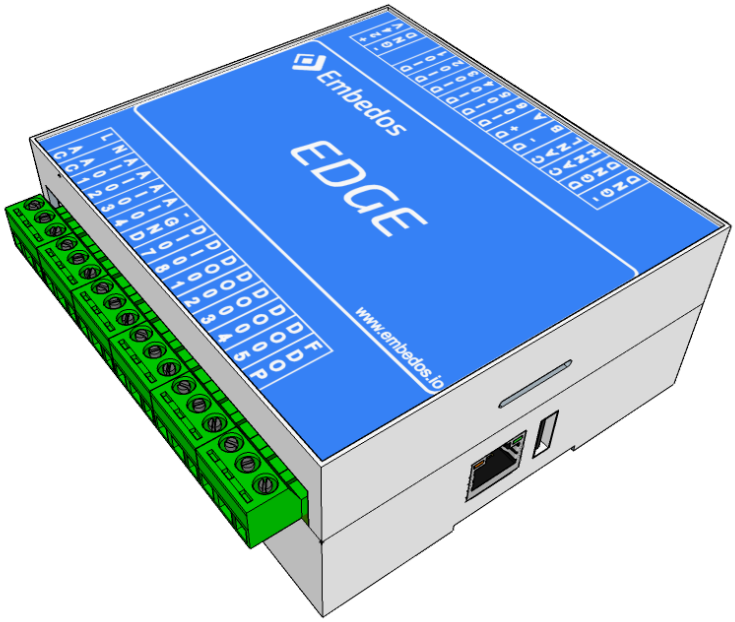
Datalogger User Manual

Embedos Datalogger User Manual



December 2020
Version 1.0.0

Document Revisions

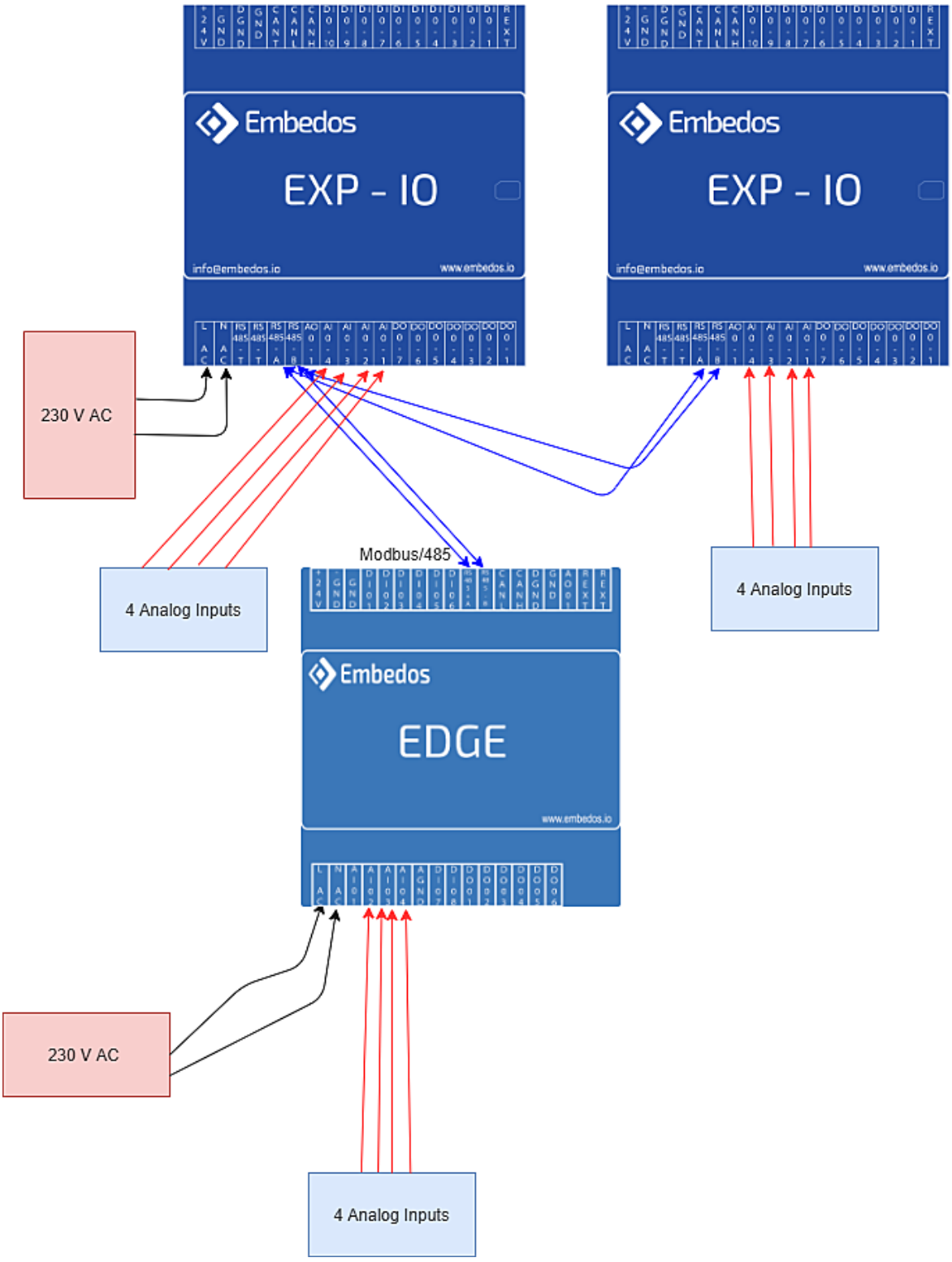
Date	Version Number	Document Changes
08-12-2020	1.0.0	Initial draft

Table of Contents

1. Introduction

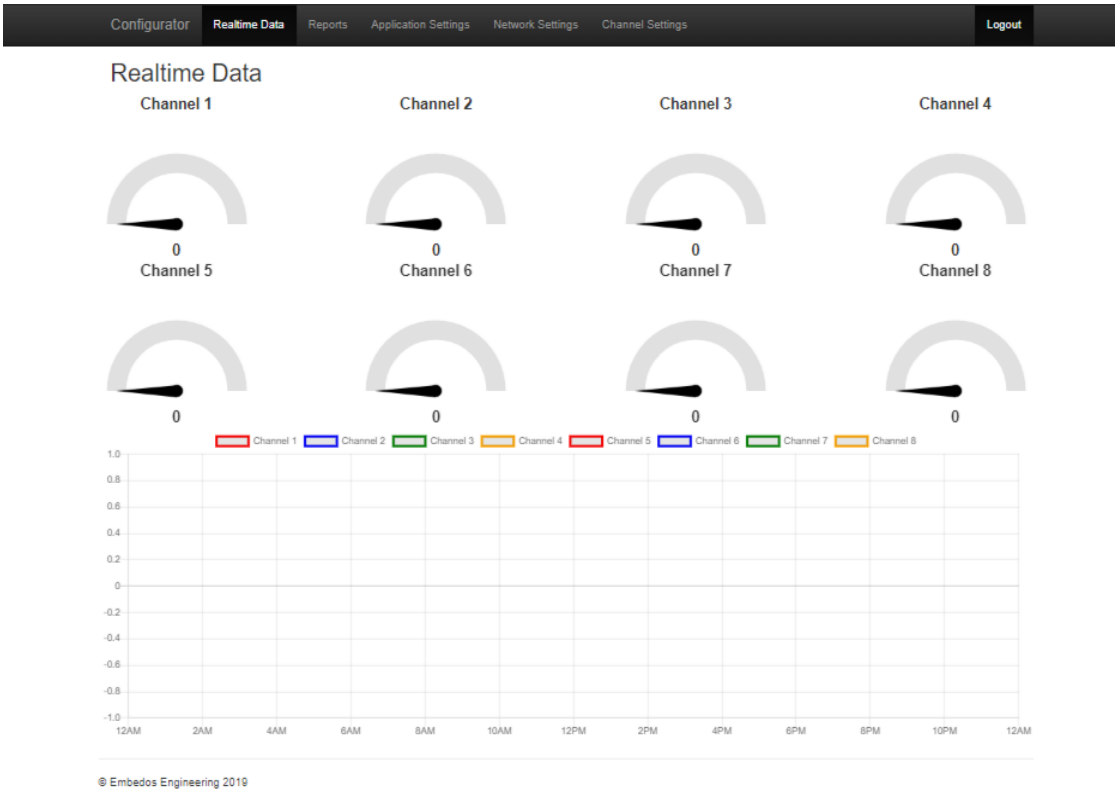
- The HUL project includes 1 Embedos Master device and 2 Embedos Slave devices
- The master and slaves communicate with each other using RS485 – Modbus protocol
- The Embedos master device and one slave has 4 analog inputs enabled and one slave has 1 analog input enabled.
- The data connected to the Embedos analog interfaces can then be seen on the Embedos Local Dashboard.
- Widgets are in the form of gauges and real time charts displayed on Real Time page.
- Analog channels can be calibrated using Channel Settings page.

2. Connection Diagram



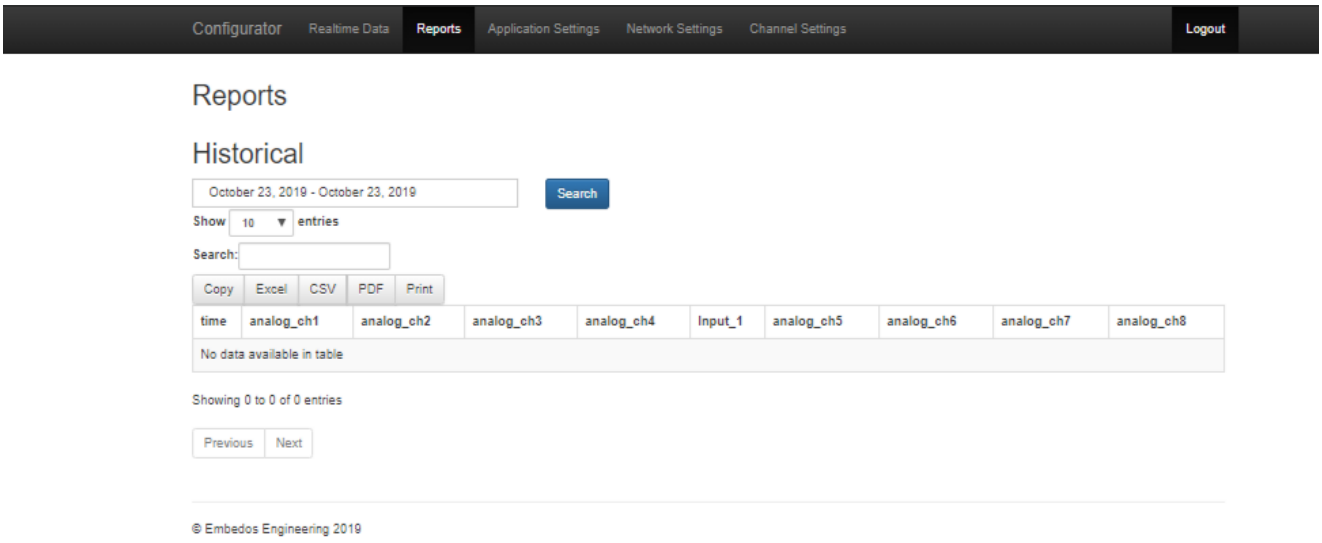
3. Real Time Data

- 4 analog inputs connected to master device are represented by the first 4 gauges. – Channel 1,2,3,4.
- 4 analog inputs connected to expansion device 1 are represented by the next 4 gauges – Channel 5,6,7,8
- 1 analog input connected to expansion device 2 are represented by the next gauge - Channel 9
- Channel 10 and 11 can be connected to any two other slaves like VFD.(There slave id has to be entered in configuration file)



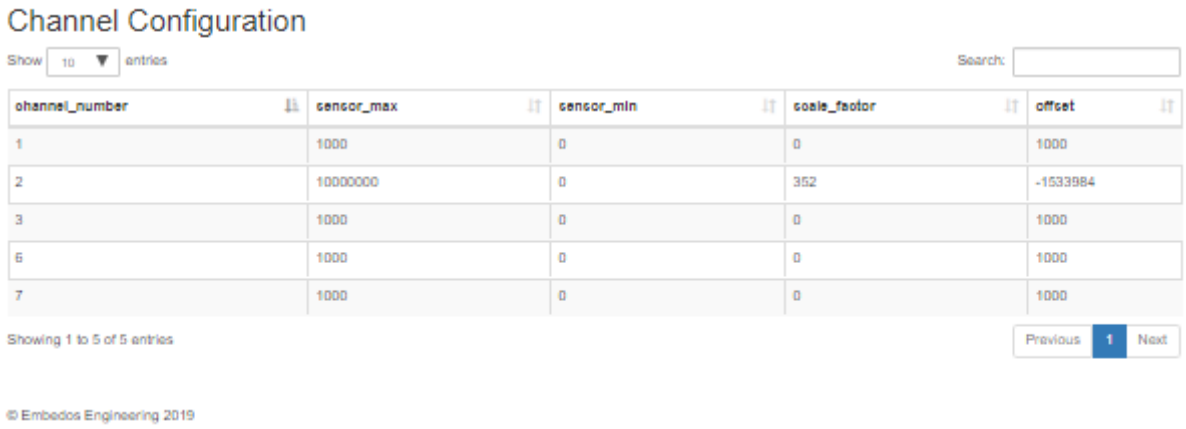
4. Reports

- Select the time duration or set a custom range for reports using the convenient drop down selector.
- The table that will be populated accordingly and can be navigated through the page buttons below.
- Download the data shown on the table using the convenient buttons in Excel, CSV or PDF formats directly. Or print data directly using the print button.
- The copy button copies the data to the clipboard for pasting as text.



5. Channel Settings

- Sensor Minimum : Enter the value of the sensor corresponding to 4mA . eg : 0mBAR
- Sensor Minimum : Enter the value of the sensor corresponding to 20mA eg:100mBAR
- To add calibration for an input press on ADD button
- To edit calibration for an input press on EDIT button



6. Application Settings

- **General Settings**

1. Interface Type:
   a. RTU: Modbus RS485 Protocol
   b. TCP: Modbus TCP Protocol
2. SMS Mode:
   a. Sim: SMS sent through a sim card.
   b. Gateway: SMS sent through internet connection.
3. Slave IP:
   a. Enter your Modbus TCP IP address. (In case of Interface Type as RTU, Slave IP option will be greyed out)
4. Baud:
   a. Enter Baud Rate of Device (In case of Interface Type as TCP, Baud Option will be greyed out)
5. Slave Port:
   a. Enter your Modbus TCP port. (In case of Interface Type as RTU, Slave port Option will be greyed out)
6. Poll Interval:
   a. Set the data logging rate. (seconds)
7. Slave ID:
   a. Set the Modbus RTU slave ID. (In case of Interface Type as TCP, Slave ID will be greyed out)