



# Sedac Lite

## Data Sheet

### The next-generation IoT gateway

## Features

- Connect meters/devices with RS485 communication to collect data from the devices and make it available through the IoT platform via MQTT
- Configure and read multiple slave IDs, selectable register address to fetch data
- Allow changing the parameter data type, data polling time from user end
- Provide communications to diverse devices with MQTT transmission types

## Technical Specifications

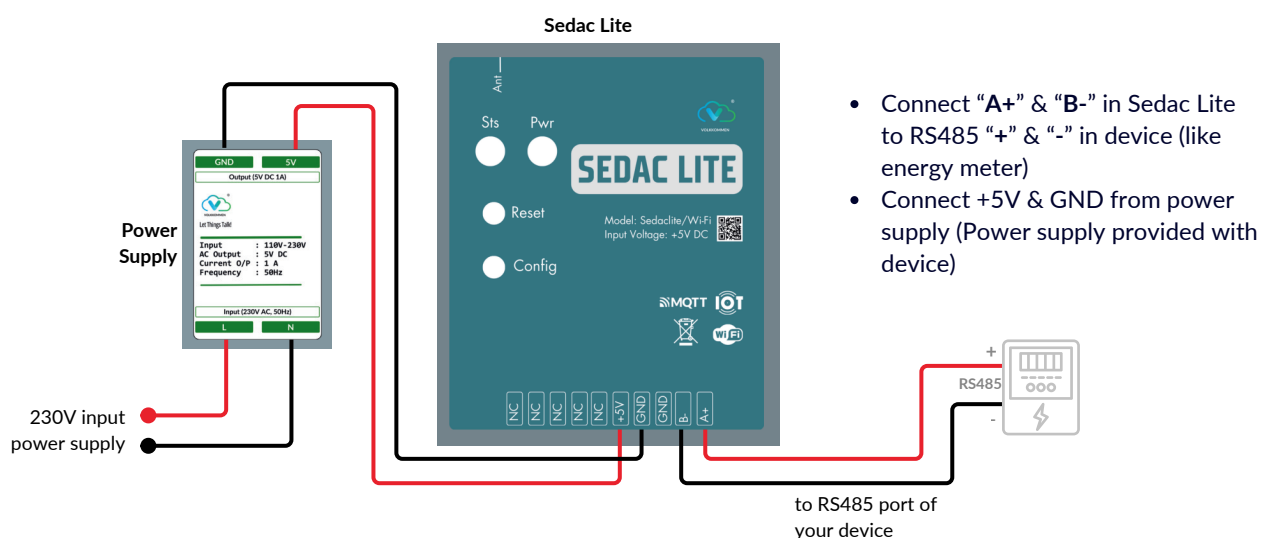
Power supply	5V, 1A DC
Wi-Fi Antenna	2.4 GHz
Connectors	UFL connectors (LoRa & Wi-Fi antenna)
Mounting	DIN Rail/Direct Mounting
Dimensions	102mm x 87mm x 28mm
LED	Status (Sts) LED: Blue: No Wi-Fi connection Green: Wi-Fi connected Yellow (Blink): Data being requested Purple: Configuration mode Red: Not connected with any device Power (Pwr) LED: Solid Red when power is supplied
Button	Reset Config

## Ports



Sedac Lite interface 1

## Connection description



## User Interface

### i. Network Configuration

Step 1: Press the "Config" button to initiate the setup process. The status LED will turn purple to indicate the device is ready for configuration.

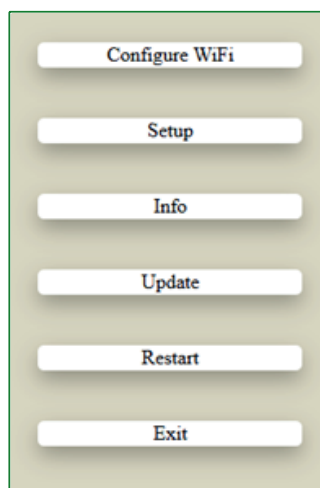
Step 2: On your device, select "Sedac Lite" from the available Wi-Fi networks.

Step 3: A dialog box will appear prompting you for a password. Enter the password: 12345678.

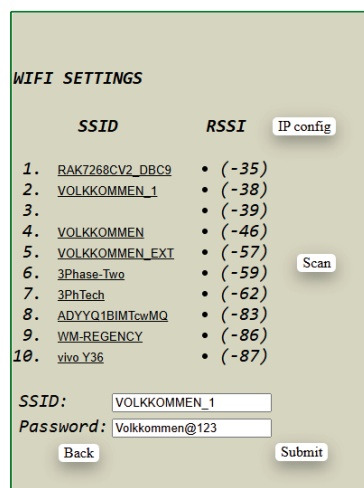
Step 4: Upon successful password entry, you will be directed to the Main menu page-01. (Img: 1)

Alternatively, you can directly access the page by entering the IP address 192.168.4.1 in your browser's address bar.

Step 5: Click "Configure Wi-Fi", this will bring to Wi-Fi Settings page: Enter SSID: VOLKKOMMEN\_1  
Password: Volkkommen@123 (Img 2)



Img; 1 Main menu page



Img;2 Wi-Fi Settings

## ii. Modbus Configuration

Step 6: Use your Wi-Fi router or a network analyzer application to find the IP address of your device.

Step 7: Open a web browser and enter the device IP address. Once connected, go to the list of connected devices and select "Sedac Lite" from the list.

Step 8: You will be directed to a login page. Enter the following credentials: Username: User@volk.com Password: Pass@123 (Img 3)

Step 9: After logging in, the main menu (Page 02) will appear. Click on "Modbus". (Img 4)

Step 10: A sign-in prompt will appear. Enter the following credentials: Username: admin Password: admin (Img 5)

Step 11: This will open the Modbus Register Entry page. (Img: 6)

Baud Rate: Set the baud rate according to your specific requirements.

Word Parity: Select the appropriate word parity based on your configuration.

Stop Bit: Choose the appropriate stop bit based on your device specifications.

Parameter ID: Enter the appropriate parameter ID, which can be obtained from your energy meter.

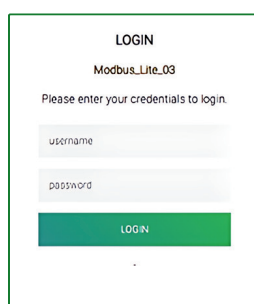
Function Code, Offset, Format, and Endian: These details can be found in your device datasheet.

Maximum Number of Registers: Set the maximum number of registers to 90.

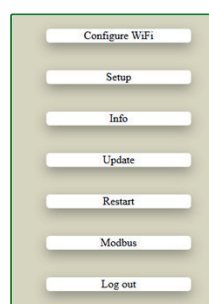
Step 12: After entering the necessary details, click on "Submit Form". The output value will be displayed.

Step 13: Click the "Read" button to initiate the data reading process.

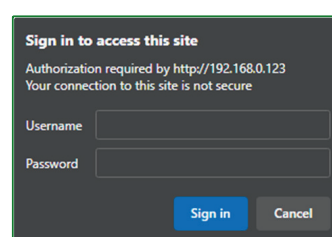
Step 14: If "timeout" is displayed under the output, check your input data and ensure there is a proper connection between your device and Sedac Lite.



Img; 3 Login



Img; 4 Main menu 02



Img; 5 sign in

SL No.	Enable	ID	Fn Code	Offset	Format	Sign	Endian	Div	Param ID	Topic	Interval (min)	Output Action
1	<input checked="" type="checkbox"/>	2	03	140	Float		Little	0	100	6	1	Read
2	<input checked="" type="checkbox"/>	2	03	142	Float		Little	0	101	6	1	Read
3	<input checked="" type="checkbox"/>	2	03	156	Float		Little	0	102	6	1	Read
4	<input checked="" type="checkbox"/>	2	03	158	Float		Little	0	103	6	1	Read
5	<input checked="" type="checkbox"/>	2	03	214	Float		Little	0	104	6	1	Read
6	<input checked="" type="checkbox"/>	2	03	100	Float		Little	0	105	2	1	Read
7	<input checked="" type="checkbox"/>	2	03	133	Float		Little	0	106	2	1	Read
8	<input checked="" type="checkbox"/>	2	03	161	Float		Little	0	107	2	1	Read
9	<input checked="" type="checkbox"/>	2	03	163	Float		Little	0	108	2	1	Read
10	<input checked="" type="checkbox"/>	2	03	165	Float		Little	0	109	2	1	Read
11	<input checked="" type="checkbox"/>	3	03	19009	Float		Big	0	110	7	1	Read
12	<input checked="" type="checkbox"/>	3	03	19002	Float		Big	0	111	3	1	Read
13	<input checked="" type="checkbox"/>	3	03	19004	Float		Big	0	112	3	1	Read
14	<input checked="" type="checkbox"/>	3	03	19050	Float		Big	0	113	7	1	Read
15	<input checked="" type="checkbox"/>	3	03	19006	Float		Big	0	114	7	1	Read
16	<input checked="" type="checkbox"/>	3	03	19054	Float		Big	0	115	3	1	Read
17	<input checked="" type="checkbox"/>	3	03	19078	Float		Big	0	116	3	1	Read
18	<input checked="" type="checkbox"/>	3	03	19080	Float		Big	0	117	3	1	Read

Image: 7

Baud rate options

Baud Rate:

9600
4800
9600
19200
57600
115200

Image - 7.a

Function code options

Fn Code

03
01
02
03
04

- 01 - read coil status
- 02 - read input status
- 03 - read holding registers
- 04 - read input registers

Image - 7.b

This is the combination of bit, parity and stop bit

Word-Parity-Stopbit

8 N 1
8 N 1
7 N 1
7 N 2
8 N 2
7 E 1
8 E 1
7 E 2
8 E 2
7 O 1
8 O 1
7 O 2
8 O 2

Image - 7.c

For example: 8N1 means 8 bit word, parity none and stop bit 1  
Were N for none ,E for Even and O for odd parity

Format

Float
Bit
Bool
Int16
Int32
Int64
Float
Double

Find the appropriate data format from your Modbus slaves datasheet and enter accordingly

Image - 7.d

Default polling:
☒

Image - 7.e

If default polling tick mark is signed, the default polling previously set on the setup page will take action. Otherwise, add custom polling time for each parameter.

Topic

6
0
1
2
3
4
5
6
7
8

Image - 7.g

Note:  
We can add upto 10 MQTT topic

55	<input checked="" type="checkbox"/>	1	03	241	Int16	unsigned
56	<input checked="" type="checkbox"/>	1	03	242	Int16	unsigned
57	<input checked="" type="checkbox"/>	1	03	500	Int16	signed
58	<input checked="" type="checkbox"/>	7	02	0	Bool	
59	<input checked="" type="checkbox"/>	7	02	1	Bool	
60	<input checked="" type="checkbox"/>	7	02	2	Bool	

Image - 7.f

After adding all parameters ,click on "submit form" to save all these data to the device



## PRECAUTIONS

Check power and voltage compatibility of the power supply before connection, as there is a risk of damaging the device.