

blue'Log
X - Series

Connection & Settings
of
SEVEN Sensor to
Blue'Log Series



1. Introduction

This document is prepared for Blue'Log Series users. The steps are explained below to connect SEVEN Sensor Box to Blue'Log.

The following meteorological data can be provided by SEVEN Sensor Box. The communication is provided via RS485 with Modbus RTU protocol.

1. 3S-IS, Irradiance Sensor (W/m²)
2. Internal Temperature (°C)
3. 3S-MT-PT1000, Module Temperature Sensor (°C)
4. 3S-AT-PT1000, Ambient Temperature Sensor (°C)
5. 3S-WS-PLS, Wind Speed Sensor (m/s)
6. 3S-WD, Wind Direction Sensor (°)
7. 3S-RH&AT, Relative Humidity Sensor (%)

- SEVEN has the right to make modifications without notice.


2. Cable Connection


Connect the green wire of the output cable of the Sensor Box to (A) (RS485 A / Data (+)) on the Blue'Log RS485-1 port and connect the yellow wire of the output cable of the Sensor Box to (B) (RS485 B / Data (+)) on the Blue'Log RS485-1 port. RS485-2 port can be selected instead of RS485-1 for the same purpose.

White and brown wires of the output cable of the Sensor Box power up the Sensor Box as shown in Table 1.

Brown	Power (+)
White	Power (-)
Green	RS485 A / Data (+)
Yellow	RS485 B / Data (-)

Table 1: Communication and Power Cable Color Coding

 A cable with magnetic field protection can be used as communication and power cable between the sensor and the datalogger. Please don't use CAT6 cable.

 SEVEN Sensors are supplied with a voltage of 12-30 VDC. The recommended voltage value is 24 VDC. A high quality power supply must be used for the sensor supply.

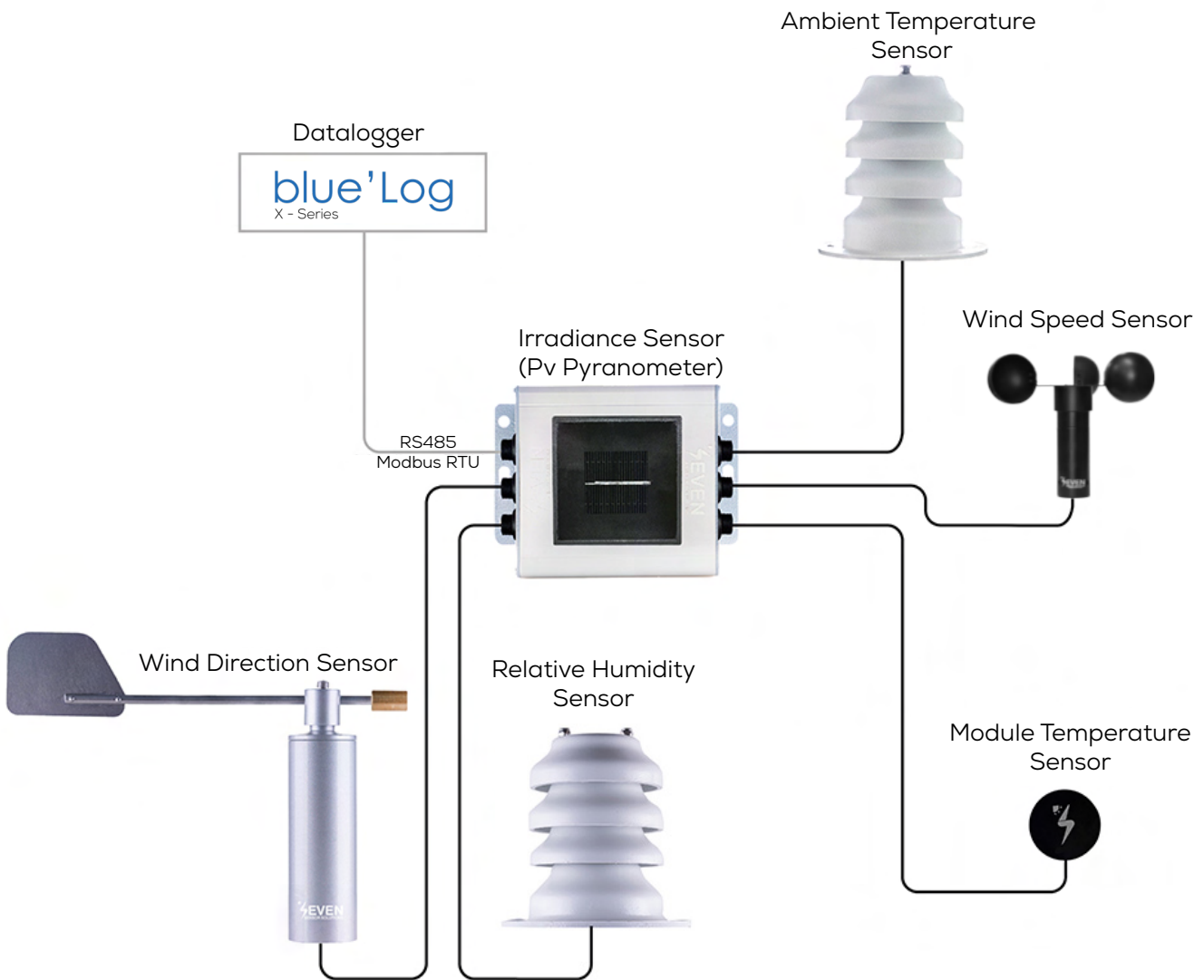


Figure 1: Blue'Log Series Weather Station

3. Blue'Log Network Configuration

Blue'Log's IP address and other parameters are automatically obtained from the DHCP server. For this, the router's automatic assignment must be enabled.

To access to the Blue'Log interface, enter the Blue'Log IP address in your PC browser.

4. Settings

Step 1 : Enter the Username and the Password to log in to the interface. Then click on **"Sign in"** button.

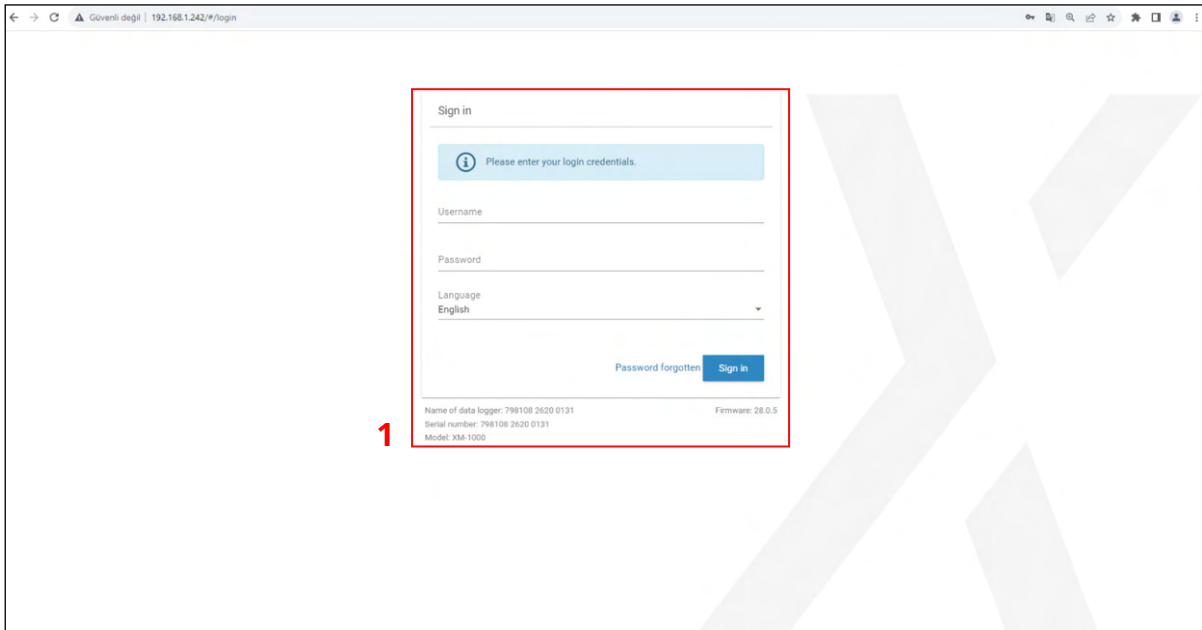


Figure 2: Interface Enter Page

Step 2 and 3 : Click on **"Sensors"** in the **"DEVICE"** menu.

Step 4 : Select **"SEVEN Sensor Solutions"** from the **"All Vendors"** list. **"3S-IS"** option will be selected automatically from the **"Series"** list.

Step 5 : Select the communication parameters of the sensor in the **"Interface Setting"** section.

Factory default settings for SEVEN Sensor Box :

- Addres : 1
- Baudrate : 9600
- Parity : None
- Stop Bit : 1
- Data Bit : 8

Step 6 : Click on **"Start Scan"** button.

Step 7 : When the connection with SEVEN Sensor Box is established, it will be displayed in the **"Bus Sensors"** section as shown in Figure 4.

If the communication parameters of SEVEN Sensor have been changed by the user, enter the new values in the **"Interface Settings"** section.

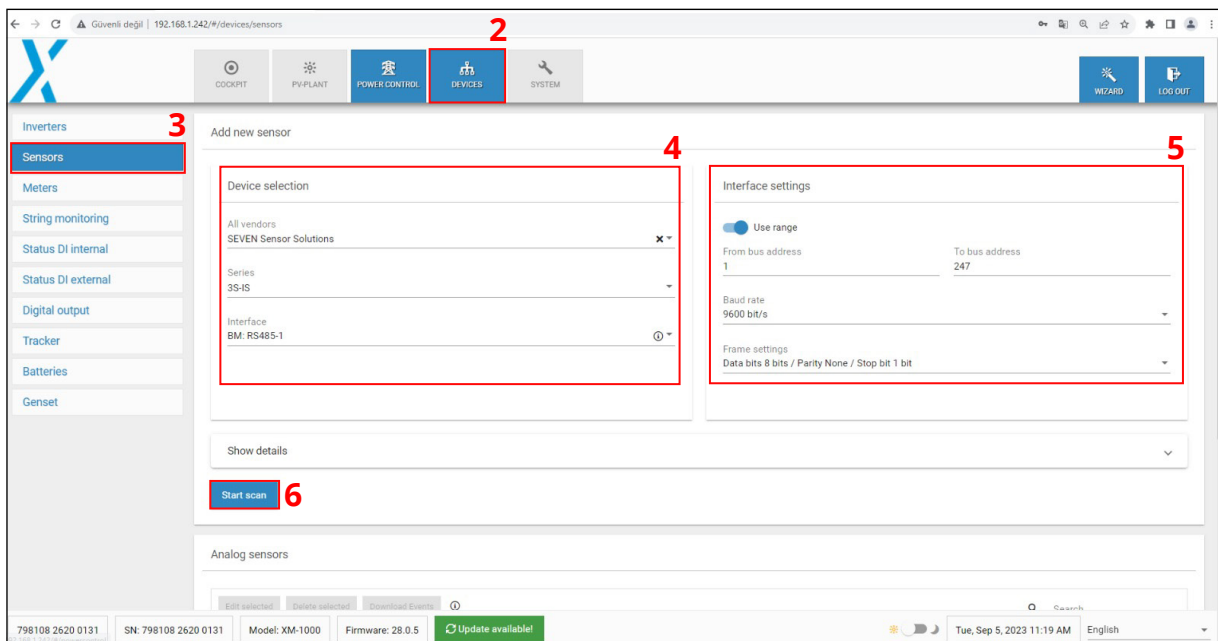


Figure 3: Seven Sensor Box Settings

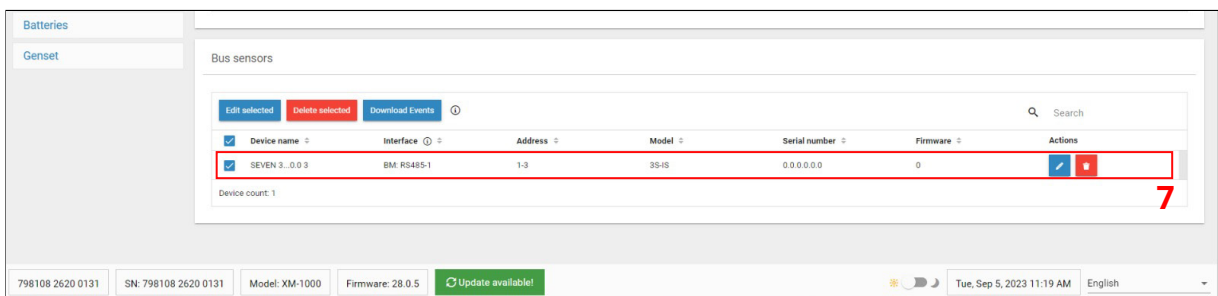


Figure 4: Founded Sensors

Step 8 ve 9 : Click on **"Realtime Values "** in the **"COCKPIT"** menu.

Step 10 : On the page that opens, select SEVEN Sensors defined in the Sensors section.

Step 11 : In the Values section, select the data to be obtained, from SEVEN Sensor Box. Below is the data from the sensor and the data's equivalents in the Blue'Log system are defined.

- Irradiance 4 (W/m²) : Irradiance Sensor (W/m²)
- Temperature (°C) : Internal Temperature (°C)
- Temperature 1 (°C) : Module Temperature Sensor (°C)
- Temperature 2 (°C) : Ambient Temperature Sensor (°C)
- Humidity (%) : Relative Humidity Sensor (%)
- Wind Speed (m/s) : Wind Speed Sensor (m/s)
- Wind Direction (°) : Wind Direction Sensor (°)

Step 12 : Click on **"View"** button.

Step 13 : The data from the sensor will be displayed in the **"Realtime Values"** section as shown in Figure 5.

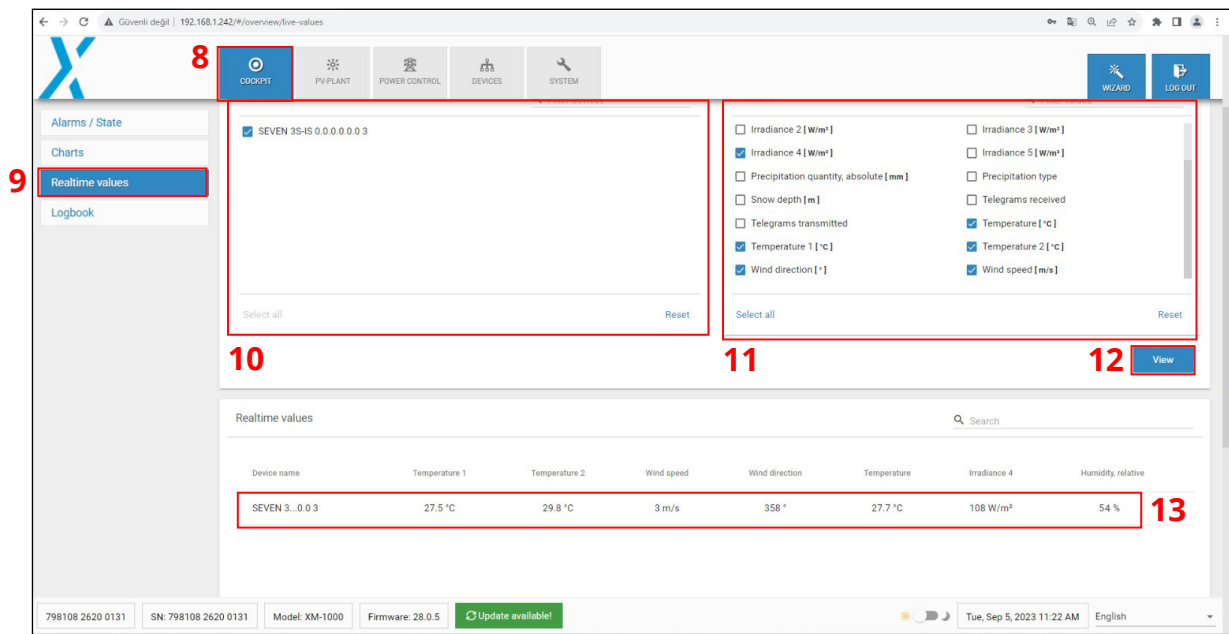


Figure 5: The Data of Seven Sensor Box

Step 14 : The data can also be displayed as a graph with the "Charts" option from the "COCKPIT" menu.

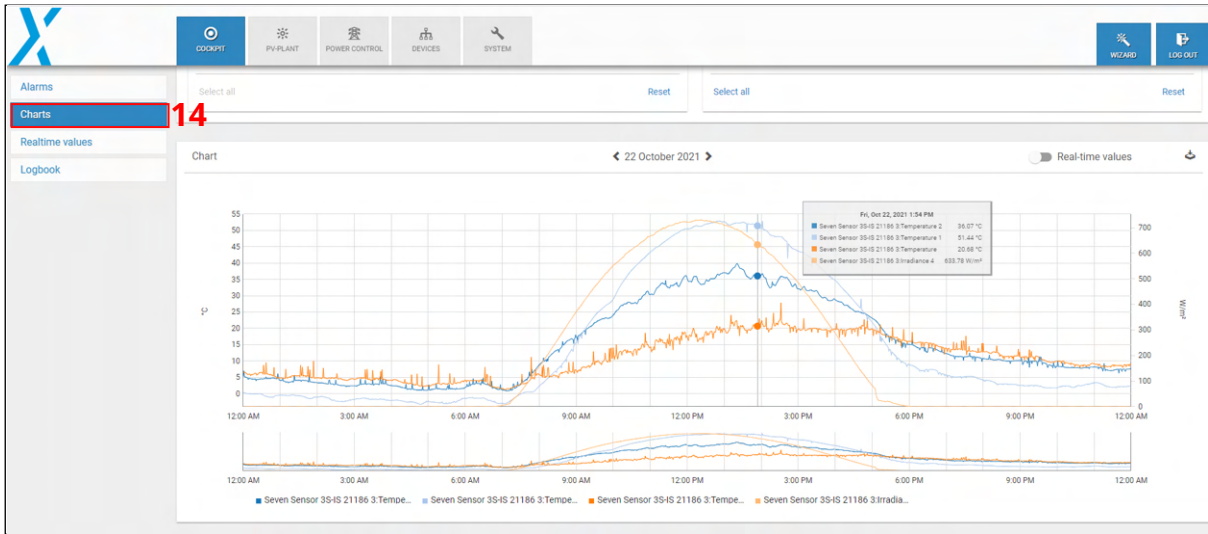


Figure 6: Data Graph

After completing all the settings, meteorological data will appear on VCOM monitoring system screen as shown in Figure 7.

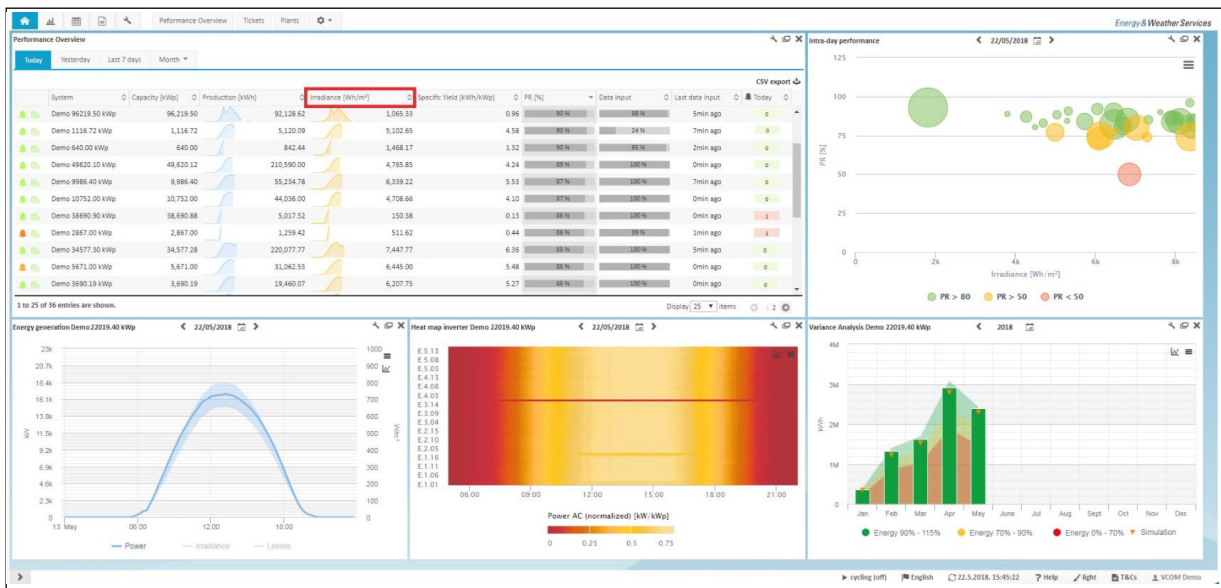


Figure 7: Vcom Monitoring System

Contact Information:

Please feel free to contact our technical team if you face any difficulties during setting.

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