

SENSISTANT | MODBUS CONFIGURATION AND MONITORING TOOL

Mounting and operating instructions

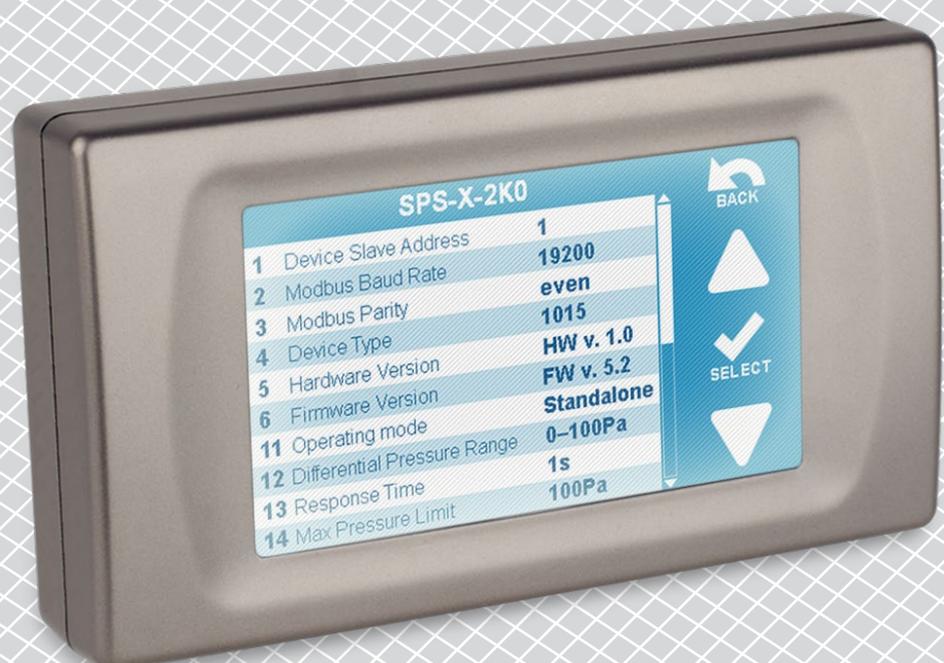


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SAFETY AND PRECAUTIONS



Read all the information, the datasheet, mounting and operating instructions and study the wiring and connection diagram before working with the product. For personal and equipment safety, and for optimum product performance, make sure you entirely understand the contents before installing, using, or maintaining this product.



For safety and licensing (CE) reasons, unauthorised conversion and /or modifications of the product are inadmissible.



The product should not be exposed to abnormal conditions, such as: extreme temperatures, direct sunlight or vibrations. Long-term exposure to chemical vapours in high concentration can affect the product performance. Make sure the work environment is as dry as possible; avoid condensation.



All installations shall comply with local health and safety regulations and local electrical standards and approved codes. This product can only be installed by an engineer or a technician who has expert knowledge of the product and safety precautions.



Avoid contacts with energised electrical parts; always treat the product as if it is live. Always disconnect the power supply before connecting, servicing or repairing the product.



Always verify that you apply appropriate power supply to the product and use appropriate wire size and characteristics. Make sure that all the screws and nuts are well tightened and fuses (if any) are fitted well.



Recycling of equipment and packaging should be taken into consideration and these should be disposed of in accordance with local and national legislation / regulations.



In case there are any questions that are not answered, please contact your technical support or consult a professional.

PRODUCT DESCRIPTION

SENSISTANT is an easy to handle 4,3 inch intuitive graphical user interface with a TFT touch screen intended for assistance in setting-up Sentera sensors and controllers. It communicates over Modbus RTU with PoM (power over Modbus) and automatically recognizes the connected sensor / controller.

INTENDED AREA OF USE

- Configuration and monitoring of all Sentera sensors and controllers equipped with Modbus RTU (RS485) interface with an RJ45 connector or terminal blocks
- For indoor use only

TECHNICAL DATA

TFT touch screen

- Display size: 4,3"
- Display type: Resistive
- Interface type: 24 bit RGB
- Resolution: 480 x 272 px

Other

- Power supply: 24 VDC (PoM)
- Maximum power consumption: 1,2 W
- Nominal or average power consumption in normal operation: 1,2 W
- I_{max}: 50 mA
- Power consumption: 50 mA
- Wall mounting enclosure: ABS plastic, grey (RAL7035)
- Protection class: IP54 (according to EN 60529)
- Operating ambient conditions:
 - ▶ temperature: -10—40 °C
 - ▶ rel. humidity: 5—80 % rH (non-condensing)
- Storage temperature: -10—50 °C

STANDARDS

- Low Voltage Directive 2014/35/EC
- EMC Directive 2004/108/EC: EN 61000-6-3:2007, EN 61000-6-2:2006, EN 60730-1:2011
- WEEE Directive 2012/19/EC
- RoHs Directive 2011/65/EC



WIRING AND CONNECTIONS

Pins 1 & 2	Pins 3 & 4	Pins 5 & 6	Pins 7 & 8
24 VDC	A	/B	GND
Supply voltage (24 VDC)	RS485, Modbus RTU communication, signal A	RS485, Modbus RTU communication, signal /B	Supply voltage, ground

MOUNTING INSTRUCTIONS IN STEPS

The back plate of the enclosure is mounted onto a wall using an in-built cable junction box.

Before you start mounting your SENSISTANT, read carefully **“Safety and Precautions”**. Then proceed with the following mounting steps:

1. Arrange the appropriate cable lengths inside the junction box.
2. Attach the back plate to the junction box or directly to the wall by inserting standard fastening materials through the holes on the box while adhering to the mounting dimensions in **Fig. 2 Mounting and dimensions**.

Fig. 2 Mounting and dimensions



3. Connect the wires of the cable according to the section **“Wiring and connections”**.
4. Plug the RJ45 connector into the socket at the back of SENSISTANT.
5. SENSISTANT has been designed to be combined with Sentera Power over Modbus modules. If you will use a Sentera PoM module to supply the device - plug the other side of the RJ45 cable into the Power over Modbus module (e.g. a Sentera PDM unit). Then connect the unit, which will be controlled by SENSISTANT, to the already connected Power over Modbus module. See **Fig. 3 Connecting PoM module**. If you intend to use a module other than Sentera PoM, connect the cable according to the section **“Wiring and connections”**.

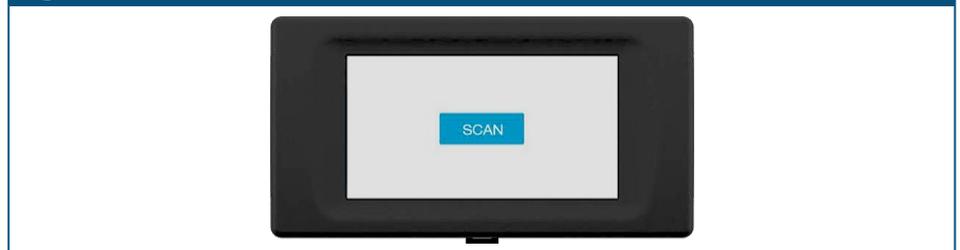
Fig. 3 Connecting PoM module



VERIFICATION OF INSTALLATION

1. After switching on the power supply, the LCD screen should be on and the main screen will be loaded (see Fig. 4).

Fig. 4 Main screen



2. After pressing the 'SCAN' button, the Rx (receiving) Modbus LED indication of the connected sensor / controller should blink. If not, check the connections.
3. When SENSISTANT has detected the controller, a window displaying Modbus registers will appear. See Fig. 5 *Input or holding registers selection*.

Fig. 5 Input or holding registers selection



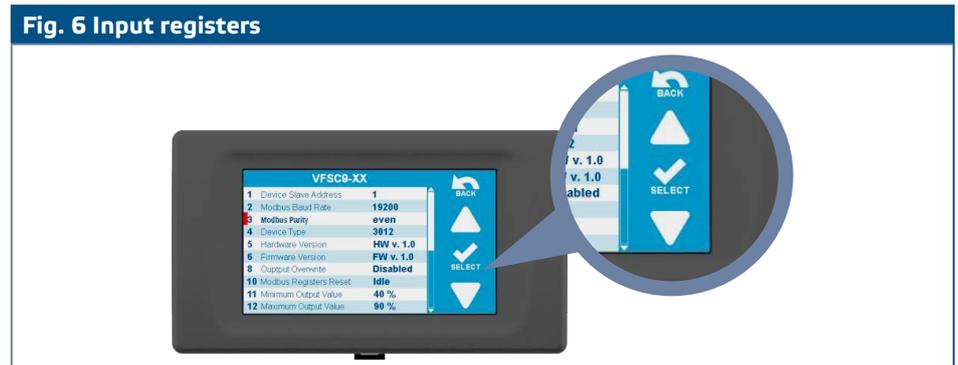
PROGRAMMING INSTRUCTIONS

1. Press 'SCAN' to find and connect the module. The unit will automatically search for connected sensors / controllers.
2. After the sensor / controller has been detected and recognised, its Modbus registers will appear on the screen.
3. The input registers are read-only and you cannot change them, you can only view

them.

4. To navigate between registers, use the up and down buttons or the scrollbar, or simply swipe through the registers.
5. The holding registers can be read and written. When you select them, you can view the current measurements / settings. To edit the settings, select the relevant register by pressing the 'SELECT' button and change the values using the up and down buttons (see **Fig. 6** *Input registers*).

For further information, refer to the **SENSISTANT user guide**.



TRANSPORT AND STORAGE

Avoid shocks and extreme conditions; stock in original packing.

WARRANTY AND RESTRICTIONS

Two years from the delivery date against defects in manufacturing. Any modifications or alterations to the product after the date of publication relieve the manufacturer of any responsibilities. The manufacturer bears no responsibility for any misprints or mistakes in this data.

MAINTENANCE

In normal conditions this product is maintenance-free. If soiled, clean with a dry or damp cloth. In case of heavy pollution, clean with a non-aggressive product. In these circumstances the unit should be disconnected from the supply. Pay attention that no fluids enter the unit. Only reconnect it to the supply when it is completely dry.