



Configuration and Diagnostics of Soluzione Solare Sensors using ALL Config

User Manual

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About This Document

Purpose

This document introduces the Configuration set up of Soluzione Solare sensors with ALL config interface which acts as the control center of all soluzione solare sensors. This document gives a clear instructions to configure Soluzione solare sensors for accurate evaluation of the Performance Ratio and other required controls.

Intended Audience

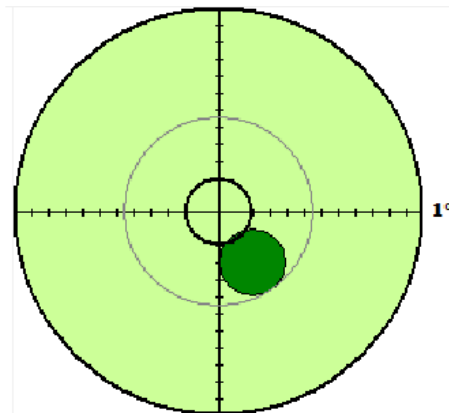
This document is intended for consumers of Soluzione solare sensors and qualified electricians.

NOTE

ALLCONFIG.EXE is now available on our website (<https://solucoesolare.com/>). With it you can carry out the diagnostics and the configuration of the parameters of the serial port of: Sunmeter, Litemeter Digital, Pyr1-485, Pyr2-485, Envmeter-485 and Windmeter. AllConfig runs on Windows 7 or higher platform.

ALLCONFIG **automatically** recognizes the type of sensor connected so you can view the values in the correct scale and UoM, as well as being able to configure the parameters of the serial port. It is a rather compact program (less than 6Mb of zipped space including two small satellite files).

The other novelty offered by this program is the possibility to level the thermopile pyranometers of our production with output in RS485 through the display of a '**virtual bubble**' which allows an accurate leveling of the pyranometer connected to it.



1.1 Cable connections for our Sensor Cable

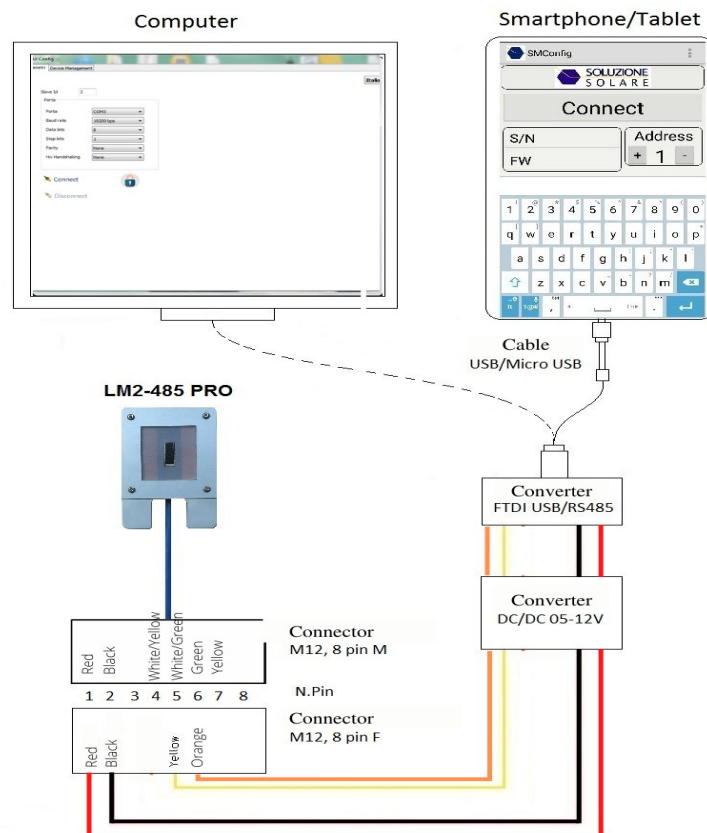
Context

- Soluzione solare devices can be connected to a computer and mobile phone using the RS485 communications.

Procedure

The connections should be done as per the table given below.

PIN Number	Connector 8 PIN M (M12)	Connector 4 PIN F (M8)	Description
1	Red	Red	Supply V_{in}
2	Black	Black	Gnd
3	Reserved for certified SM		mV-
4	White/Yellow		
5	White/Green	Yellow	RS 485+
6	Green	Orange	RS 485-
7	Yellow		
8	Reserved for certified SM		mV+



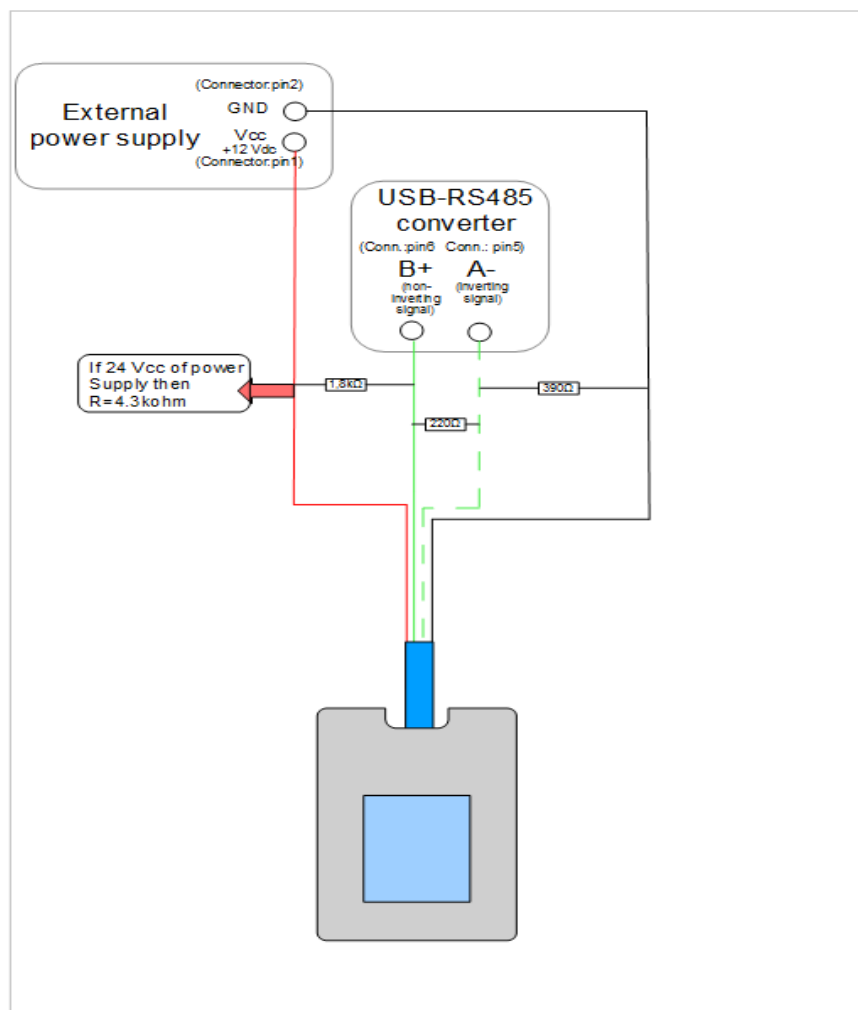
NOTE

Using our configuration cable users can directly plug in the sensor and use without any manual connection processes.

1.2 Cable connections – For Third party cables

Procedure

The connections should be done as per the diagram shown below.



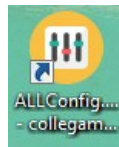
2.Configuration of Soluzione Solare Sensors using ALL Config

NOTICE

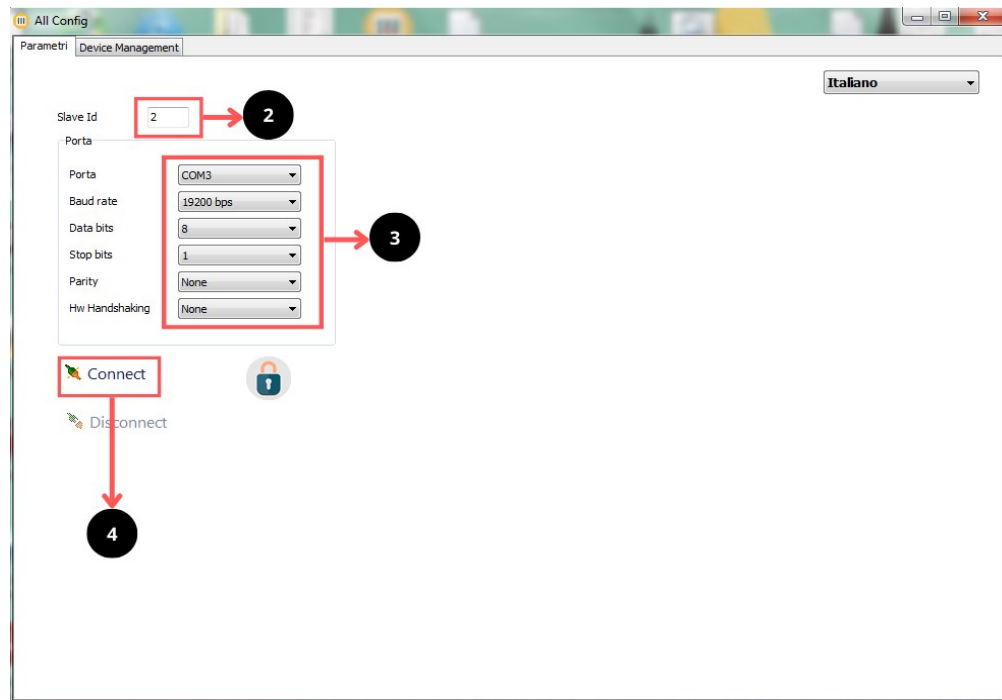
- The screenshots are for reference only.
- The parameter names, value ranges, and default values are subject to change. The actual **display prevails**.

Procedure

Step 1 After ensuring all the cable connections have been made correctly, open the ALL config application by double clicking the icon shown below.



Step 2 Once the application is opened, In the Parametri tab enter the correct **slave Id**.

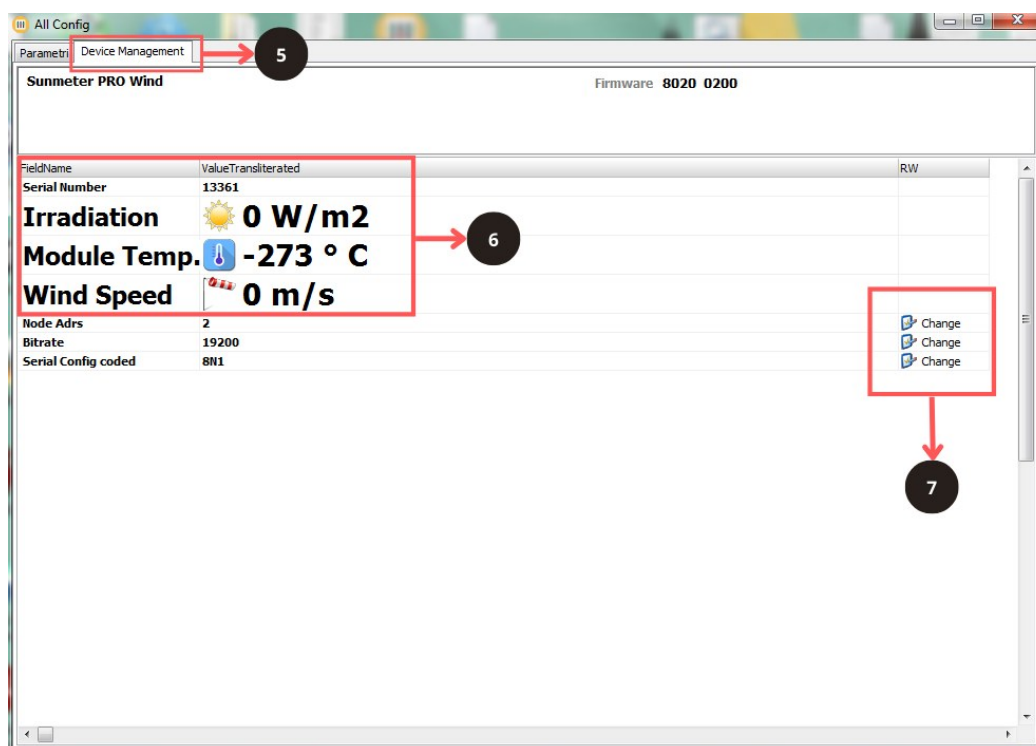


Step 3 Select the correct values for **Porta**, **Baud rate**, **Data bits** and **Stop bits**.

Step 4 Click **Connect** to connect with the sensor.

Step 5 Click on the **Device management** tab.

Step 6 In Device management tab user will be able to view the performance parameters.



Step 7 The user will be able to change the Node Adrs, Bitrate and Serial config coded by clicking the change button on the right.

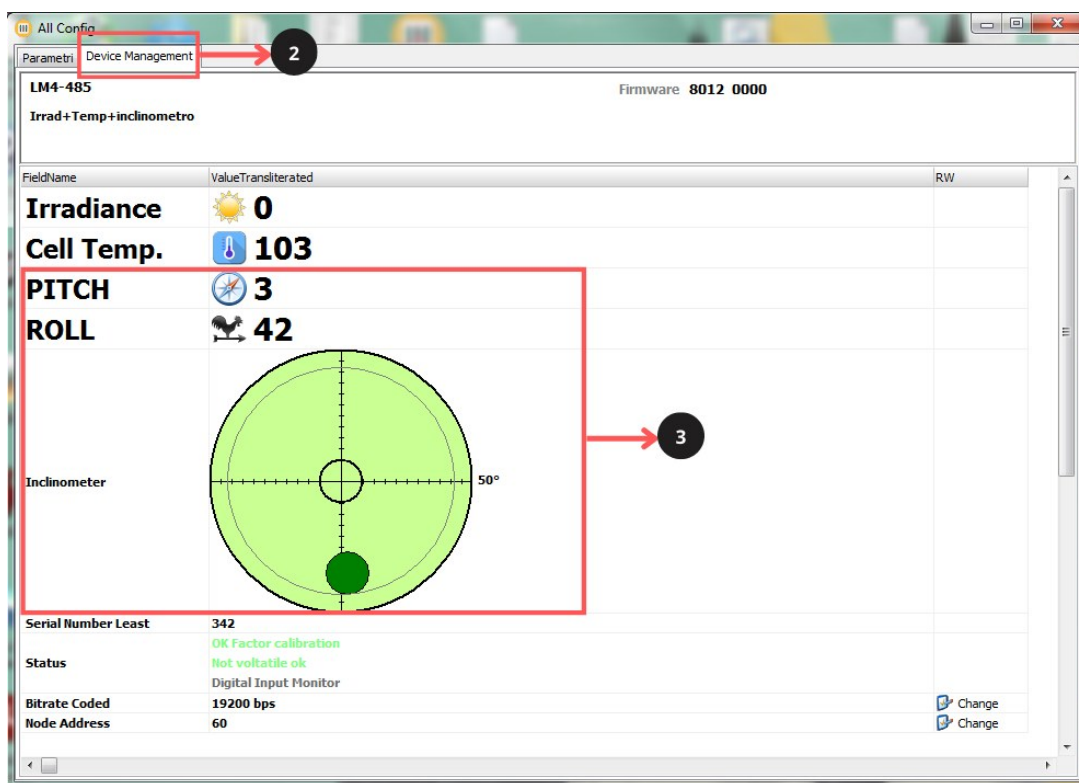
3. Configuration of virtual bubble for accurate leveling of the Pyranometer and Lite meter.

This feature offered by this program is the possibility to level the Pyranometers and Lite meters of our production with output in RS485 through the display of a 'virtual bubble' which allows an accurate leveling of the pyranometer connected to it.

Procedure

Step 1 Connect the Sensor with the ALL config application by following the steps given in chapter 2.

Step 2 Once the sensor is connected, Click on the **Device management** tab.



Step 3 In Device management tab user will be able to view the Inclinometer parameters.

Step 4 For optimal performance of the sensor make sure the values of PITCH and ROLL are equal to 0 and the virtual bubble stays at the center.

