

Third party sensors

Connecting third party sensors

In the various market sectors where WiSensys® can be applied, there is a wide variety of measuring instruments and sensors for measuring process data, environmental conditions, and state variables.

Many measuring instruments have their own operation and presentation capabilities. WiSensys® however has the feature to connect the many instruments with an analogue or digital output to a single user interface.

Sensors with the following output signals can be connected:

- Electric output signals such as
0/4 – 20 mA, 0 – 30 V DC,
0 – 4 V DC, 0 – 1 V DC.
- Pulse output signals
- Digital output signals (RS232, RS485, SDI-12)

WiSensys® is an open system. Various types of interfaces can be connected to it. This means you can make use of your own sensors or sensors from other suppliers.



Most WiSensys® modules may have the following power supply options:

- 3.6 V lithium battery
- external power
- external (battery) power with on/off switch for third party sensors

All units with standard sensor housing can be delivered in the robust industrial housing, with an external antenna and a pressure relief device for outside use.

Third party sensors

Sensor WS-DLXa

WS-DLXa measures process signals and transmits data to the base station. Sensing is done using any available sensor that has 0 - 25 mA output.

Measurement range: 0 - 25 mA

Accuracy: +/- 0.25% of range

Sensor WS-DLXv/s

WS-DLXv and WS-DLXs measure process signals. Sensing is done using any available sensor that has 0 - 30 V DC (WS-DLXv) or any available sensor that has 0 - 4 V DC (WS-DLXs) output.

Measurement range: 0 - 30 V DC or 0 - 4 V DC

Accuracy: +/- 0.25% of range

Sensor WS-DLXm

WS-DLXm measures process signals. Sensing is done using any available sensor that has 0 - 1 V DC output; for accuracy reasons the unit is equipped with a 16 bits A/D convertor. The unit has no power switch.

Measurement range: 5 values for range can be selected:

0-75 mV, 0-150 mV, 0-300 mV, 0-600 mV, 0-1000 mV

Accuracy: +/- 0.1% of range + resolution step

(5 μ V - 40 μ V depending on range)

Sensor WS-DLTh

WS-DLTh measures thermocouple signals. Sensing is done using any available thermocouple sensor of the J, K or S type. For accuracy reasons the unit is equipped with a 16 bits A/D convertor. The unit has no power switch.

Measurement range: Depends on sensor type (K, J or S)

Accuracy: +/- 0.1% +/- 0.5 °C



Sensor WS-DLPd

WS-DLPd measures the output of a potentiometer. The output is displayed in percentage of the full scale. Sensing is done using any available sensor having potentiometer principles such as wind direction, tree grow etc.

Measurement range: 0 - 25 k Ω

Measurement output: 0 - 100%

Accuracy: \pm 0.1%

Sensor WS-DLS

WS-DLS can be connected to sensors and measurement instruments (such as a weather station) which have a serial digital outlet. The unit features RS232, RS485 and SDI-12. Depending on the connected unit communication protocols have to be adapted.

Maximum number of variables for transmission is 10

The unit has an external power supply of 12 V DC

The unit is configured via SensorGraph.