



Resolution  
 $\pm 30.000$  div

DIGITAL  
CALIBRATIONS

Max distance  
100 m



ON BOARD ASSEMBLY

STAND ALONE

The **WIMOD** is a radio transmitter suitable for strain gauge sensors such as load cells, force transducers, pressure transducers, torque transducers and displacement transducers with 2mV/V output.

It can be applied directly on the body of the sensor or connected to the output cable (stand alone) to make measurements of **WEIGHT, FORCE, PRESSURE, TORQUE** and **DISPLACEMENT** at a distance, with the possibility to interface up to 32 sensors to a single control PC.

The module powered by an internal rechargeable battery guarantees an autonomy of 1000 hours covering a maximum distance of 100 m in free area.

The 433 MHz transmission frequency makes communication safe and reliable even in the presence of other transmission systems such as mobile phones, walkie talkies, radio microphones, remote controls etc. that normally work on other frequencies.

Due to its extreme simplicity of installation the system is used in various applications such as:

Weighing and balancing of plants, machinery, boats where it is necessary to change the position and number of load cells to be used from time to time.

Real time monitoring of load distribution on suspended metal structures used for lighting and stage installations.

For **point to point** applications an **RxWIMOD** receiver with **RS232** or **USB** output is available for direct connections to PLC or other devices in order to create specific software for every need.

## DATI TECNICI

RF FREQUENCY	433MHz
RF TRANSMISSION RANGE	100 m (in free area)
MAX DATA TRANSMISSION FREQUENCY	10 Hz <sup>(1)</sup>
POWER SUPPLY	Rechargeable Battery Li-Ion 3.6V
ACCURACY	≤ ± 0.05 %
SENSOR INPUT	± 2 mV/V
STANDARD RESOLUTION (2mV/V)	± 10.000 div.
INTERNAL RESOLUTION	± 30.000 div.
TEMP. OF NOMINAL WORKING	0 / +50 °C
TEMP. OF MAXIMUM WORK	-10 / +50 °C
STORAGE TEMPERATURE	-20 / +70 °C
LOW BATTERY INDICATION	SI
ZERO FUNCTION	100 %
UNITS OF WEIGHT and FORCE MEASUREMENT	g, kg, t, N, daN, kN, MN, lb, klb
UNIT OF PRESSURE MEASUREMENT	mbar, bar, psi, Pa, kPa, MPa, mH2O inH2O, kg/cm2, mmHg, cmHg, inHg atm, mHg, mmH2O
UNIT OF MEASUREMENT TORQUE	N·m, N·mm, kN·m, in·lb, ft·lb kg·m g·cm, kg·mm
UNIT OF MEASUREMENT DISPLACEMENT	mm, inch
DEGREE OF PROTECTION (EN 60529):	
WIMOD (transmitter)	IP65
RECEIVER	IP40
CONTAINER	Aluminium
DIMENSIONS (HxWxD)	35 × 84 × ~60 mm
WEIGHT	~ 0.9kg

<sup>(1)</sup> The transmission frequency used must be limited taking into account ETSI EN 300-220-1 which requires a commitment of the 433 MHz band for a maximum of 6 minutes every hour (10% duty cycle).



Each transmission packet commits the band for about 3 ms (3 % duty cycle in case of 10 Hz transmission frequency). The number of modules in the network must be taken into account when assessing the overall band

commitment.



The module can be applied to different sensors to meet all requirements for the technical characteristics of the consular sensors and the related data sheet.

**For outdoor applications** it is recommended to protect the WIMOD transmitter inside an IP67 ABS enclosure.

## Configuration of a NETWORK with PC

This solution allows to realize a network with up to **32 sensors** using WinWIMOD Software.

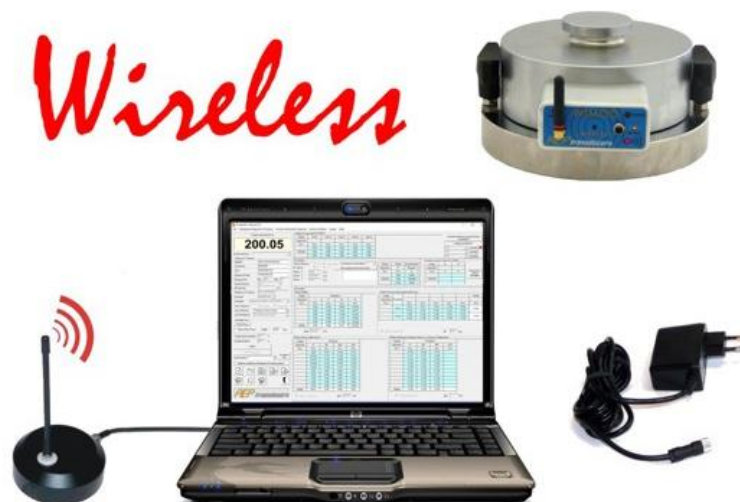


### NECESSARY COMPOSITIONS:

- One or more WIMOD transmitters.
- Receiver with USB connection.
- Power supply to recharge the WIMOD battery.
- **WinWIMOD** application software.

## Configuring a POINT TO POINT network with a PC

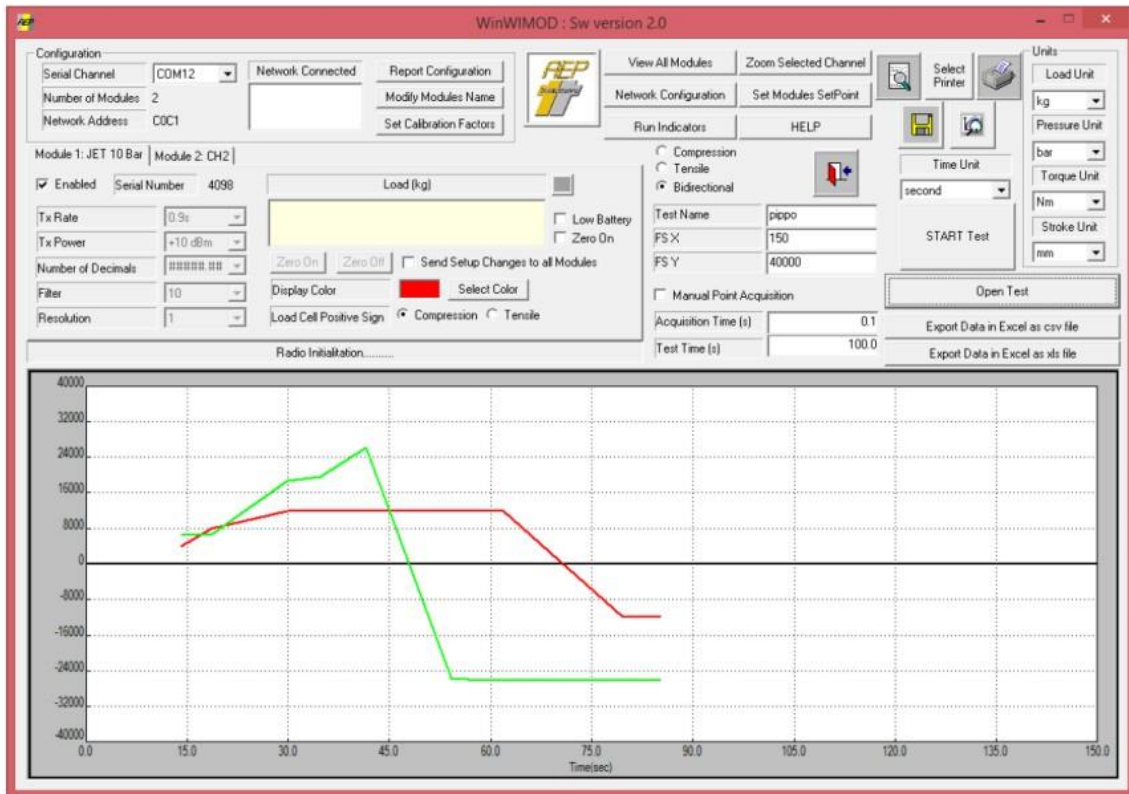
This solution allows to realize a network with only one sensor using **WinWIMOD LIGHT** Software.



### NECESSARY COMPOSITIONS:

- One WIMOD transmitter.
- Receiver with USB connection.
- Power supply to recharge the WIMOD battery.
- **WinWIMOD LIGHT** application software.

## Software WinWIMOD and WinWIMOD LIGHT



The software allows you to view and manage the various sensors connected to the network via PC in real-time.

The available functions allow to visualize in various ways the measurements of all the sensors on the PC video, graphically record the measurements of all the sensors, print the reports, save and export the acquired data to Microsoft Excel.

Each sensor can be assigned a name that describes its function within the system and a color of the test curve, making it easy and immediate recognition of the same within the network.

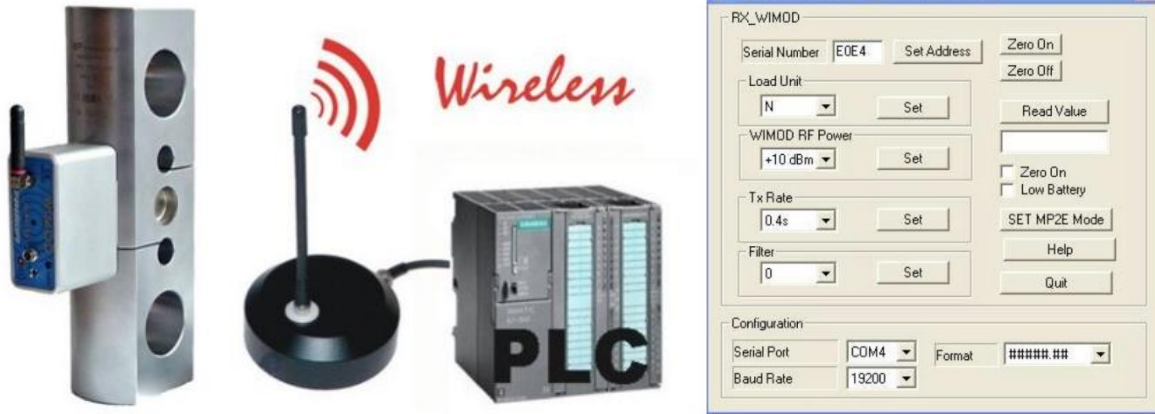
For each module it is possible to select the transmission frequency (max 10Hz), zero the load, define the unit of measurement of the sensor and display the battery status.

The print report can be configured with the customer's logo and explanatory notes of the test performed.

For applications requiring the development of custom software WinWIMOD allows access to data received via radio through a simple exchange of files containing the load data of the individual cells.

## Configuration of a POINT TO POINT network with RS232

For point-to-point applications an **RxWIMOD** receiver with RS232 or USB output is available for direct connections to PLC or other devices in order to realize specific software for every need. The receiver can transmit continuously or on demand, this solution does not require any knowledge of RADIO communication.



### NECESSARY COMPOSITIONS:

- One WIMOD transmitter.
- Receiver **RxWIMOD** RS232 or Receiver **RxWIMOD** USB
- Power supply to recharge the WIMOD battery.

The system is always supplied with the communication protocol and a simple **WinRxWIMOD** application software for WIMOD configuration.



Receiver **RxWIMOD** USB output



Receiver **RxWIMOD** RS232 output



**WARNING:** the receiver in the RS232 version must be externally powered by a 5Vdc power supply.

## Configuration of a NETWORK network with WiMP2plus

This solution allows to realize a network with up to **4 sensors** using the **WiMP2plus** panel indicator. No application software is required.



### NECESSARY COMPOSITIONS:

- 1, 2, 3 or 4 WIMOD transmitter.
- **WiMP2plus** panel indicator
- Power supply to recharge the WIMOD battery.



The system allows to manage different sensors to read simultaneously WEIGHT, FORCE, PRESSURE, TORQUE and DISPLACEMENT.

## Configuration of a NETWORK network with WiSTAR

This solution allows to realize a network with up to **4 sensors** using the handheld indicator **WiSTAR**.



### NECESSARY COMPOSITIONS:

- 1, 2, 3 or 4 WIMOD transmitter.
- **WiSTAR** handheld indicator.
- Power supply to recharge the WIMOD battery.

The system allows to manage different sensors to read simultaneously **WEIGHT, FORCE, PRESSURE, TORQUE** and **DISPLACEMENT**.

**AEP** transducers



Dasa-Rägister  
EN ISO 9001:2015  
IQ-1100-01

**ACCREDIA**  
ENTE ITALIANO DI ACCREDITAMENTO

LAT N° 093  
**Calibration Centre**  
The products are NOT  
covered by accreditation

**ATEX**

Production Quality  
Assurance Certified n°  
TÜV CY 17 ATEX 0205891 Q

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*In order to improve the technical performances of the product, the company reserves the right to make any change without notice.*