



COMM. CODE	ORDER CODE
20WGI	IWM01



ModBUS Wireless Master

- BMS functions
- Suitable for industrial use
- ModBUS Master
- Interoperability with third party systems

This device is a ModBUS RTU master that allows information to be acquired from devices capable with this protocol that are equipped with RS485 ports. The acquired information is sent to a receiver/gateway (IWMON or IGW02) at the configured frequency. The device uses the transmission technology required by the LoRa® standard, which guarantees wide coverage with no need for signal repeaters. The device can be powered at 10 to 38VDC.

The module has an SMA connector for connecting an external 868 MHz ISM band antenna. The receiver has an RTC backed by a button battery (replaceable), which allows the time to be kept even in the event of a power failure. Up to 32 devices can be connected on its RS485 port. The maximum number of registers is 56. The configuration of the ModBUS registers is done via radio with the LoRa Seeder tool.

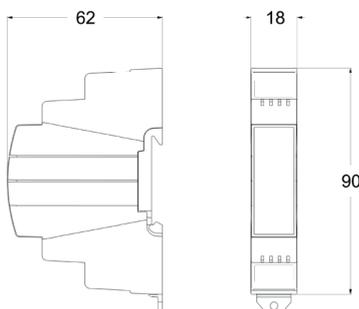
APPLICATIONS
Industry and tertiary sector
Smart Building
Smart City
Accounting
Temperature regulation

CERTIFICATIONS
EN60730-1:2011. Automatic electrical controls for household and similar use.
EN60730-2:2011. Particular requirements for energy controllers.
EN60730-3:2011. Home and Building Electronic System HBES.
EN61010-1:2010. Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements.
EN61326-1:2012. Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements. For article 3.2 : Effettive use of spectrum allocated. For article 3.1b : Electromagnetic Compatibility.
EN 300 220 - 1 V3.1.1
EN 300 220 - 2 V3.1.1
EN 301 489 - 1 V2.2.0 (2017-03)
EN 50581:2012 RoHS

ACCESSORIES
RAL01, RAN05, RAN07, LoRa seeder

TECHNICAL CHARACTERISTICS

USER INTERFACE	Led and activation button, USB port on the panel, PC application via LoRa® wireless USB dongle.
FASTENING	DIN BAR - encumbrance 1 DIN module
ANTENNA	SMA female connector for external ISM/LoRa® antenna (868 MHz).
WEIGHT	55 g
OPERATING TEMPERATURE	-40 to +85 (°C) Industrial Range
STORAGE TEMPERATURE	-40 to +85 (°C) Industrial Range
CONTAINER MATERIAL	Self-extinguishing ABS UL 94 V0
POWER SUPPLY	10 to 38VDC
LITHIUM RTC BATTERY LIFE	Typically 5 years
TRANSMISSION FREQUENCY	868 Mhz ISM band
TRANSMISSION POWER	2.5 to 25 mW (25mW nominal)
DISTANCE	Up to 10 Km LoS (line of sight)
CONSTRUCTION STANDARDS	CEI
RADIO DISTURBANCES	EN 61000-6; EN 55024:2010-11
PROTECTION RATING	IP30
CONNECTIVITY	USB, Wireless - Local. RS485 port for connection with ModBUS RTU devices.
BMS FUNCTION	These receivers/gateways are suitable for managing BMS structures, are interoperable with third-party equipment and systems, and feature scada integration over the ModBUS RTU protocol.





LoRa[®] SEEDER

LoRa[®] Seeder is the software tool for configuring the LoRa[®] Wireless Monitoring system by Intellienergy Tech[®]. It is compatible with Microsoft's Windows 8[®] and Windows 10[®] platforms and will soon be available on the LINUX platform. LoRa[®] Seeder allows you to modify the operating configurations of all probe models (temperature, humidity, brightness, level, VOC, CO₂, 20WGI-Master Modbus, etc.) using an accessory connected to the USB port of the PC (Dongle LoRa[®]).

On the other hand, it connects directly, via a USB port, to the IGW0xx receivers, making the association operations between probes and receivers simple and fast, also allowing to automatically produce the mapping documentation of the Modbus[®] registers for the System Integrators.

For receivers equipped with the Data Logger function, Seeder allows you to download data from the receiver and store them on its database, to view them graphically and export them in CSV format.



I-Lo[®]-View

I-Lo[®]-View, thanks to the use of a LoRa[®] USB DONGLE (available as an accessory), it transforms any Windows 10[®] PC into a powerful datalogger server capable of managing all models of Intellienergy wireless probes. On the same PC, or on any other fixed or mobile device (Smartphone, Tablet) connected to the same network, it is possible to consult or manage the entire wireless system, simply by using a Web browser (such as Chrome).

Several users can be connected to **I-Lo[®]-View** at the same time and access the probe data, both real-time and historical data, being able to compare multiple sensors simultaneously. In addition to the specific sensor data (temperature, humidity, brightness, VOC air quality, CO₂ concentration, etc.). **I-Lo[®]-View** also displays and stores "service" data, such as communication quality and battery levels. If the user has administrator permissions, he can also change the operating parameters of the probes (for example the sampling intervals of the sensors and those for sending measurements).



I-Lo[®]-View it is installed in the Windows environment as a service and is therefore active even if no user is connected to the PC where it is installed. A version is also available for Linux (x86 / x64 / arm) that can be installed as a normal application.