- Wiring and infrastructure saving
- Measuring point mobility
- Temp, RH and Lux measurement
- Indication of coverage
- Plug & Play Autodetection of units

## Application

To manage and control consumption in:

Offices

Industry

Installations with mobile measuring points / Remote applications

## Technical features

| | | |
|---|---|---|
| **Power supply** | **AirGATEWAY** | Rated voltage: 230 V ±10%<br>Frequency: 50/60 Hz ±5% |
| | **AirBRIDGE** | |
| | **AirREPEATER** | |
| | **AirTHL** | 3.6 Vdc battery |
| | **AirHANDZER** | 3x AAA 1.5 $V_{DC}$ battery |
| **Consumption** | **AirGATEWAY** | 2.4 VA |
| | **AirBRIDGE** | 2.4 VA |
| | **AirREPEATER** | 4.6 VA |
| **Communications** | Interface | RS-485 to Radio<br>**IEEE 802.15.4** compliance |
| | Range | 2405 MHz ÷ 2480 MHz |
| | Modulation | DSSS |
| **Build features** | Enclosure | Polycarbonate |
| | Protection degree | IP44 |
| | Dimensions | 227 x 100 x 51.5 mm |
| **Environmental features** | Maximum humidity | 95% without condensation |
| | Maximum altitude | 2000 m |
| **Safety** | **Class III** according to **EN 61010**<br>Class II double-insulated<br>electric shock protection | |
| **Standards** | **EN 60950-1**, **EN 62479**, **EN 61000-6-2**, **EN 61000-6-3**, **ETSI EN 301 489-1 v1.8.1**, **ETSI EN 300 328 v1.7.1**, **ETSI EN 301 489-17 v1.2.1**, **IEEE 802.15.4** | |

## References

| Type | Code | Description |
|---|---|---|
| **AirGATEWAY** | **M62001** | RS-485 (Modbus/RTU) to Radio Converter |
| **AirBRIDGE** | **M62002** | Radio to RS-485 (Modbus/RTU) Converter |
| **AirREPEATER** | **M62003** | Signal repeater |
| **AirTHL** | **M62004** | Wireless probe (Temp, RH, Lux) |
| **AirHANDZER** | **M62005** | Portable signal coverage analyzer |


**www.circutor.es**
**CIRCUTOR**, SA - Vial Sant Jordi, s/n
08232 Viladecavalls (Barcelona) Spain
Tel. (+34) **93 745 29 00** - Fax: (+34) **93 745 29 14**
**central@circutor.es**

@circutor youtube.com/circutoroficial circutor



Designed by: communication dept. - **CIRCUTOR**, SA.

**Code:** C2M653-01


*Measurement and Control*

# AirLINK

## Wireless communications system

*No communications limit*


CIRCUTOR

*Technology for energy efficiency*

# Wireless communications system

**AirLINK** is a system made up of various devices that help build a wireless communication architecture between a Modbus master and slave devices. The **AirLINK** system enables the simple and secure configuration of a transparent wireless network between Modbus RTU slave units.

The system consists of an **AirGATEWAY** unit that acts as a converter from Modbus series to Radio; **AirREPEATER** units or repeaters, which extend the range of the radio signal and **AirBRIDGE** units, which convert the radio signals to Modbus RS-485 signals for slave units. As terminal units, the **AirLINK** system has battery-powered **AirTHL** units, able to measure and transmit the temperature, humidity and light intensity of the environment where they are installed. The **AirLINK** system is completed with **AirHANDZER**, the portable unit for measuring the radio signal, providing information on available coverage and informing whether it is necessary to install repeaters.


## Wireless communications

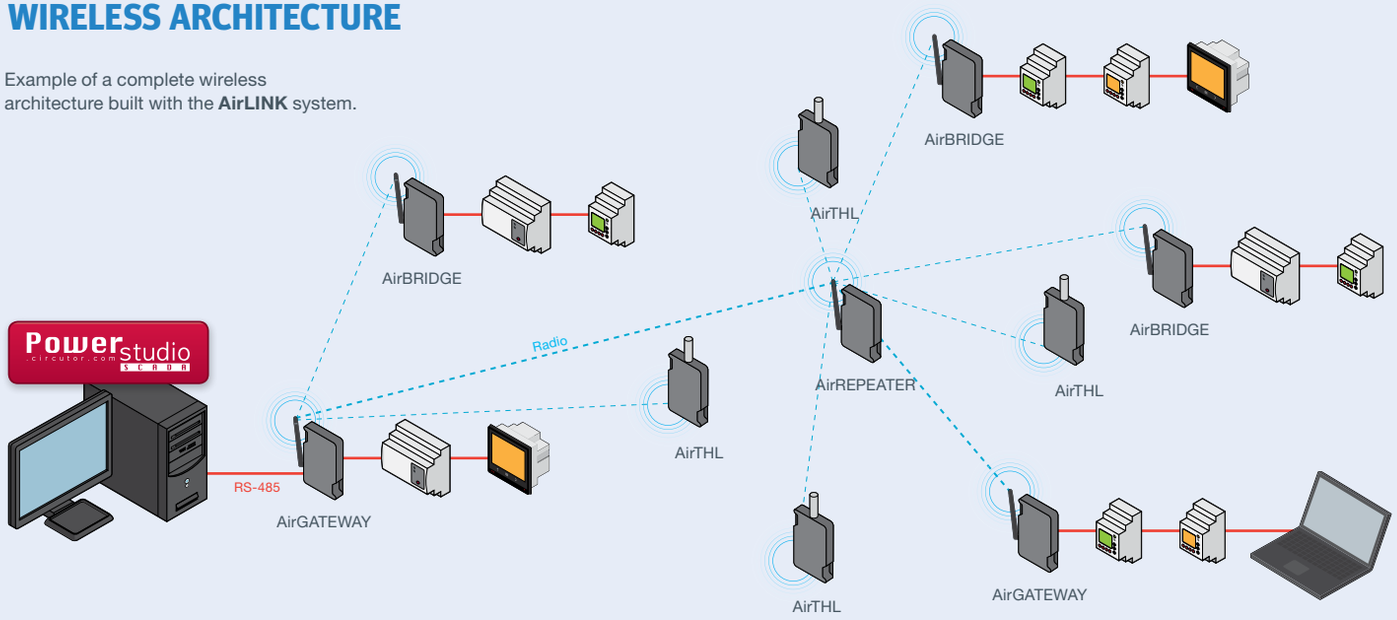
**AirGATEWAY**, **AirBRIDGE** and **AirREPEATER** make it possible to link all devices wirelessly, creating a secure and robust network.

## Measurement of coverage

**AirHANDZER** is vital for defining and designing the optimum communication architecture, selecting the amount and location of signal repeaters.

## WIRELESS ARCHITECTURE

Example of a complete wireless architecture built with the **AirLINK** system.




## Wireless probe

**AirTHL** provides the infrastructure with wireless communications, able to measure temperature, humidity and brightness.

## Coverage

**AirLINK** is a very robust wireless communications system, designed to reach approximate distances of 30 metres in open-plan interiors (without obstacles) and 100 metres* outdoors with an **AirGATEWAY** repeater, extendable up to 50 metres indoors and 200 metres outdoors with the use of a **AirREPEATER**.

* Antennas must be visible to guarantee this distance.