



Sensors



Switches



Controls

Application notes



Application Note : December 2019

Market involved : Energy efficiency

Product : EM24 W1, SIU-MBM-02, UWP 3.0

Customer : ESCOs, System integrators

Subject : Energy efficiency in commercial or industrial buildings

CUSTOMER ISSUE :

The first step for every energy efficiency program is the analysis of the main loads, in order to identify possible corrective actions.

The need for splitting the total consumption among different loads requires the installation of several meters. However, in existing commercial or industrial buildings their connection to the same bus or network for data collection is sometimes not possible or too expensive.

A wireless solution is needed.

OUR SOLUTION :

The EM24 W1 is a DIN rail energy meter with embedded wireless M-Bus communication, the only one on the market today.

The SIU-MBM-02 is a wireless M-Bus to Modbus TCP gateway. The UWP 3.0 is a monitoring gateway with an embedded datalogger, able to collect data from multiple devices. The powerful SIU-MBM-02 wireless scan, performed via UCS software, is able to automatically find the EM24 W1 installed in the area and generate the driver for the UWP 3.0, thus dramatically reducing the commissioning time of the system.

The UWP 3.0 web server is able to show consumption charts of any EM24 W1 via the SIU-MBM-02, as well as generate automatic reports or transmit data to the FTP servers for further analysis.

BENEFITS :

- The installation of the meters doesn't require any additional wiring, apart from the voltage and current connections. It is the best option in existing buildings, where the wiring of a new bus is not possible
- The external antenna version makes installation possible also in metallic cabinets
- Integration of the wireless data in the UWP3.0 is simplified thanks to the auto-scan and driver generation function of the SIU-MBM-02 via the UCS software
- Data analysis exploits all the benefits of the UWP 3.0 in terms of charts, reports and data aggregation and retransmission options including FTP/FTPS/SFTP, MQTT, BACnet and many others