



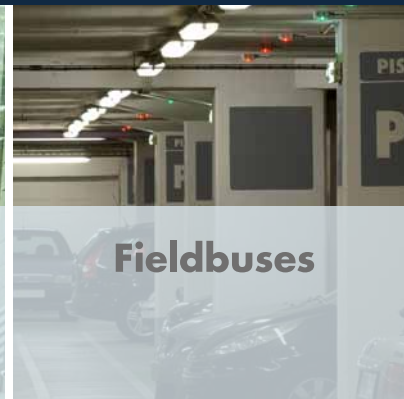
**Sensors**



**Switches**



**Controls**



**Fieldbuses**

## Application notes



**Application Note : November 2016**

**Market involved : Conventional energy**

**Product : WM20 Smart Power Analyser**

**Customer : System integrators**

**Subject : Electrical variables monitoring via BACnet in hotels**

### CUSTOMER ISSUE :

In big hotels, the BMS acquires information via BACnet.

The central system operates via Ethernet (BACnet/IP), while each floor has a dedicated RS485 bus (BACnet MS/TP).

In addition to digital and analogue I/Os, which control the whole building automation system (HVAC, access control, room commands, etc.), the system integrator needs to provide the Energy manager with all the energy consumption data of each single floor and of the main loads (such as lifts, compressors, etc.).

### OUR SOLUTION :

Using the WM20-96 with the BACnet MS/TP communication module is the most effective way of providing energy usage information to the BMS.

It can be installed on the distribution panel for each floor and in the control panel of each main load.

By using the WM20, the instantaneous electrical variables are BACnet-retransmitted and up to 2 digital outputs can locally warn in the case of abnormal conditions, so as to easily guide the maintenance staff in the case of any fault in the hotel system.

In the main BACnet network, the BACnet/IP module can be used with other WM20s, or as an alternative to WM30 or WM40, whenever more detailed control functions are required.

### BENEFITS :

- Class 0.5 accuracy for energy, class 0.2 accuracy for voltage and current measurement
- Easily programmable by a touch keypad, via serial communication or through a dedicated optical port at the front
- Supports different communication protocols, such as Modbus and BACnet (both RS485 and Ethernet) or Profibus DPVO
- Optionally supplied with 2 digital outputs for pulse retransmission or alarm