



**Sensors**



**Switches**



**Controls**

## Application notes



**Application Note : September 2017**

**Market involved : Conventional energy**

**Product : WM50 branch circuit monitoring system**

**Customer : System integrators, panel builders**

**Subject : Branch circuit monitoring in big data centres**

### CUSTOMER ISSUE :

Groups, each of 48 servers, are installed in rack panels in big data centres.

Each server supply is protected by a dedicated breaker and, for variables control and energy cost allocation reasons, it is necessary to monitor each branch.

The mains supplying the distribution panel (located close to the server racks) must also be monitored and controlled.

A traditional metering system requires too much space and a short installation time is also important, as a single data centre can include 100 to 200 distribution panels.

### OUR SOLUTION :

The WM50 is a revolutionary solution for data centres and critical load applications. While the base unit with its wide LCD display measures the mains data, its 2 branch buses link up to 8 12-channel split-core CT blocks. The system can therefore be scaled according to specific needs. In this way, retrofitting 12 channels requires just a couple of minutes, even less in the case of new installations.

The system configuration is extremely fast and intuitive: following the graphical suggestions of its software or APP, any different topological panel configuration can be easily made.

All data can be transmitted to the BMS or data centre monitoring system via either Modbus RTU or TCP/IP, by selecting the required module.

### BENEFITS :

- Modular and expandable architecture, suitable for retrofitting
- Software and app tools for easy and intuitive configuration
- Integrated display for main metering
- Management of main and branch circuit measurements in the same metering solution
- Possibility of regulating the number of current measurements according to the application needs
- Fast digital data transmission to avoid flat cable connections from branch circuit sensors to main unit, thus reducing EMC issues