

# Wireless Diagnostics in industrial environment



## Theme

Wireless applications are enjoying growing popularity. Especially applications for Wi-Fi and Bluetooth have shown a significant growth for the last years. Low material costs as well as eliminated wiring efforts and cable wear, especially on moving parts of the plant, make wireless applications increasingly popular in manufacturing industries. Not least, a high security of modern encryption methods is a convincing case for using wireless applications.

But this high sensitive technology is subject of many disturbances because of the transmission medium air. Movements, surface materials, humidity and the influence of other wireless systems are just a few of the potential disturbers. That's why an accurate installation, a correct configuration and the analysis of the surrounding air are essential when operating wireless systems in industrial environments.

## BLUambas: Wireless Data Transmission in PROFIBUS and PROFINET

The wireless system BLUambas provides wireless data transmission in fieldbus systems PROFIBUS or PROFINET. Mobile plant components or machines can be integrated in the communication. So that BLUambas is the perfect alternative for slip rings and trailing cables and without mechanic wear. As seen from the perspective of the controller the wireless system acts like a cable.

### BLUambas for PROFIBUS:

- Transmission rate: up to 1,5 Mbit/s
- Connecting up to 7 slaves

### BLUambas for PROFINET:

- Using of maximum 4 I/O devices

WIRELESS

PROFI  
BUS

PROFI  
NET

CAN

SafetyBUS p

DeviceNet



Ordering information	Art. No.
BLUambas for PROFINET	125100000
BLUambas for PROFIBUS, master module (7 slaves)	125100001
BLUambas for PROFIBUS, slave module (7 slaves)	125100002

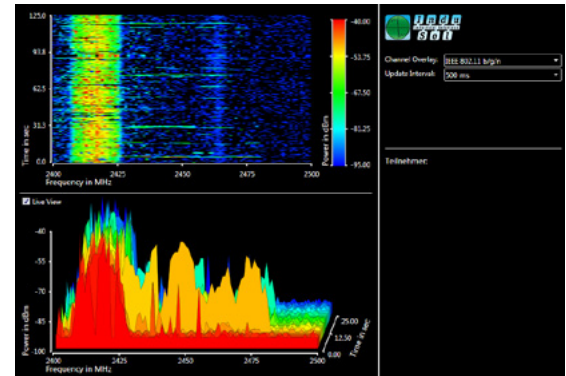
# Wireless Diagnostics in industrial environments



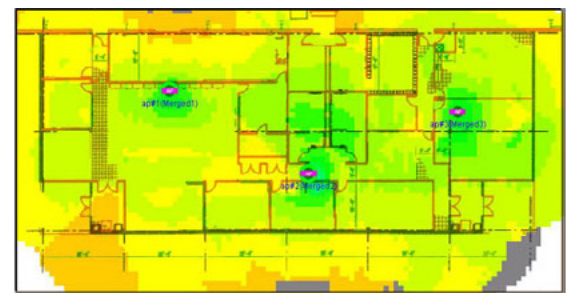
## Wireless Measurement

Our smart measuring tools listen into your radio field. Quality problems or disturbances of the wireless transmission are detected and improving measures are taken. A detailed record tailored to the environment makes it easy to understand the results and provides solutions for disturbance reduction.

With our measuring tools we can evaluate all usual wireless systems like Wi-Fi, Bluetooth, ZigBee, DECT etc. Especially for Wi-Fi we provide further analyses in greater depth. For example, we execute a site survey and make comprehensive logical evaluations possible.



Spectrum analysis



Site Survey

### Scope of measurements:

- Spectrum analysis in ISM band
- Spectrum analysis in ISM sidebands
- Level measurement of devices
- Site Survey in Wi-Fi
- Wi-Fi planning
- Evaluation of logical data traffic in Wi-Fi
- Optimizing the configuration

## Training Wi-Fi



The training has been structured so that all participants interested in wireless transmissions are made acquainted with the Wi-Fi subject in an easy to understand and straightforward manner. The objective is to provide persons working in the areas of planning, commissioning, maintenance and service with the necessary knowledge to enable them to build up Wi-Fi systems and evaluate the quality of the same. Prior knowledge of Ethernet/LAN would be desirable.

- Fundamentals of wireless technology
- Fundamentals of Wi-Fi
- Planning and start-up
- Measuring tools and diagnosis

Ordering information	Art. No.
Wireless Measurement	210080000
Training Wi-Fi - 2 days internal at Indu-Sol (incl. hotel accommodation)	220080001
Training Wi-Fi - 2 days at your premises (max. 8 participants)	220080000

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