

RADIO WAVES DISPLAY - 64 -PC

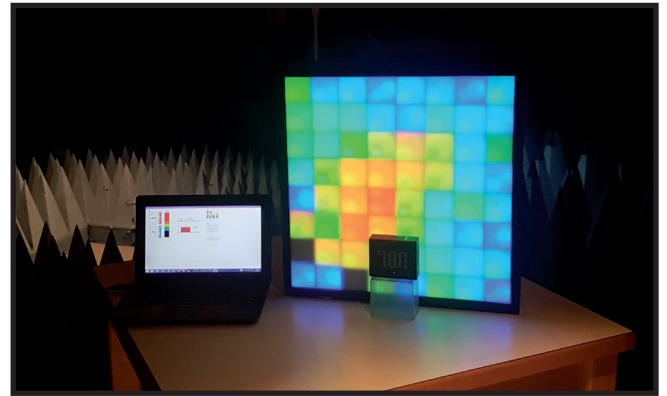


PRESENTATION

This new system for measuring and visualizing électromagnétique radiation includes 64 sensors operating between 50 MHz and 3 GHz.

Bidirectional communication (USB) is established between all sensors and a pc. This one allows to adjust in real time the sensitivity and the dynamics as well as the speed of acquisition. The software developed allows the recording and the reading of the data as well as an in-depth analysis of the results.

Fast and easy to adjust, the RWD saves time in antenna radiation pattern optimization, or quality control; for example in the analysis of communication signals of connected objects or in the study of the focusing of waves (time reversal, 5G communication). It is an ideal didactic tool for teaching and a powerful communication tool for present scientific work based on electromagnetic radiation.



Direct visualization in 3D on PC acquisition of 64 sensors. Setting thresholds in real time.

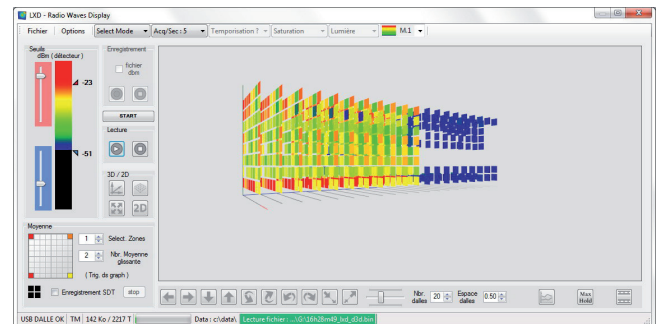
APPLICATION

- Direct mapping of the received field
- Antenna MIMO optimization
- Time reversal evaluation
- Energy focusing evaluation (5G)
- Radiation pattern observations
- ...

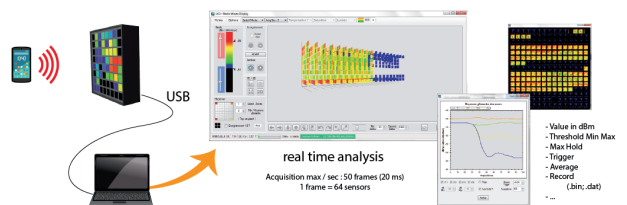
FEATURES

- Panel area : 45 cm x 45 cm
- Number of sensor : 64 (8x8)
- Sensitivity : -60 dBm to 0 dBm
- Minimal dynamic range : 3 dB
- Bandwidth : 50 MHz to 3 GHz
- Number of displayed colors : 1024

- Real-time adjustment of sensor sensitivity.
- Dynamic adjustment. (from 60 dB to 3 dB)
- Acquisition speed. (max 50 frames / Sec)
- Recording of data. (. bin & .dat)
- Replay the data.
- Max Hold function.
- Sequence function.
- Graph of the average of different areas.
- Selection of the number of sensors displayed



3D visualization software and data analysis. Recording format .dat .bin



Selection of different sensors to visualize the variation over time. Image sequence function