



UWB 9GHz EVALUATION KIT

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UWB 9GHz M-Sequence Evaluation Kit

The high resolution provided by Ultrawideband (UWB) technology offers excellent performance for many sensor applications. The Kit is designed for our UWB technology to be evaluated for customer applications.

The UWB Evaluation Kit applies the M-Sequence technique in integrated chips. Monolithic circuit integration provides for very high measurement flexibility and stability. It is achieved with low amplitude signals through the distribution of energy over the complete measurement time so as not to require high energy impulses. The UWB Evaluation Kit has a large bandwidth of up to 4.5 GHz producing high spatial resolution and a measurement speed of up to 32.000 IRS/s.

The Evaluation Kit can capture data characterised by high quality and quantity enabling decisions in application environments with highly inhomogeneous structures. This provides for the identification of objects in such environments as well as for changes in environments themselves.

Application areas include:

- Risk and Security: through wall radar for person localisation, room observation, landmine detection
- Civil engineering: pipe detection, moisture measurement, asphalt condition measurement
- Automation: plant and machine control management systems
- Diagnostics and Pharmaceutical: impedance spectroscopy for diseased tissue identification, culture growth observation
- System and process development: Electromagnetic wave propagation in air and solids



Transmitter:

Stimulus Signal: M-Sequence
Output power: 0 dBm
Bandwidth: 1MHz - 4.5 GHz
Output impedance: 50 Ohm
balanced
Connector: SMA female

Receiver:

Channels: 2 synchronised
Measurement speed: 32.000 IRS/s
Input impedance: 50 Ohm
balanced
Connector: SMA female

Power supply:

90 - 240 V AC or 12V DC

Interface:

Ethernet 10/100

Data format:

Binary, ASCII, MATLAB