



WIR VERSTEHEN
DIE ZEICHEN DER ZEIT

KEEPING PACE
WITH THE SIGNAL OF TIME

CUSTOMER REFERENCE

T-Systems-Nova, Germany
RUSK X, RUSK XL, RUSK WLL, RUSK XA

SLM, Germany
RUSK X

TMobil, Germany
RUSK SX

IMST, Germany
RUSK SX

Quintec, UK
RUSK WLL

NTT DoCoMo, Japan
RUSK DoCoMo, MATSYS

University of Bristol, UK
RUSK BRI, MATSYS

Toshiba, UK
MATSYS

University of Edinburgh, UK
MATSYS

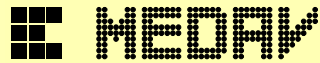
Universities of Taiwan, Taiwan
RUSK NTU/NCTU, MATSYS

FTW and University of Vienna, Austria
RUSK ATM MIMO

HHI Berlin, Germany
MATSYS

University of Athens, Greece
RUSK ATM MIMO, MATSYS

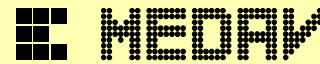
DLR, Germany
RUSK DLR, MATSYS



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COOPERATION & PARTNERSHIP



MEDAV GmbH
Uttenreuth, Germany

TeWiSoft GmbH
Ilmenau, Germany

Technical University
of Ilmenau, Germany

VAD GmbH
Dresden, Germany

WMT Elektronik
Hattingen, Germany

IRK
Dresden, Germany

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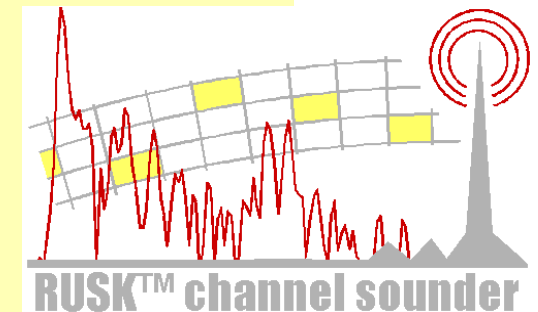


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RUSK™

WIDEBAND RADIO VECTOR CHANNEL SOUNDER



<http://www.channelsounder.com>
<http://www.channelsounder.de>



RUSK™ MIMO

CHANNEL SOUNDER FOR MIMO CHANNELS

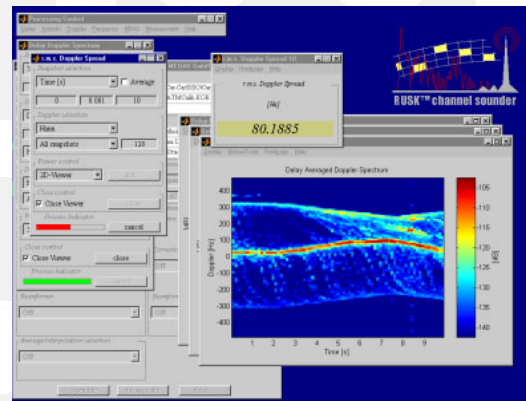
RUSK™ MIMO is a very sophisticated measurement device for high resolution characterization of radio channels in time, frequency and space domain. It measures the vector channel impulse response (VCIR) of the radio channel using multiple antenna transmitter and multiple antenna receiver configurations. The complex VCIR snapshots accompanied by position data of TX and RX are stored continuously at high speed data rates to disc arrays for later offline analysis.



The operating software provides multichannel viewers for online display of results in time, frequency and space domain. Synchronization requires the accuracy of atomic reference clocks like Rubidium. The measurement principle is based on correlation technique using a wideband multicarrier spread spectrum signal.

MATSYS

MATSYS is a MATLAB® based software package for offline analysis of the measured data. MATSYS offers a easy to use graphical user interface, but it can be also operated directly from the MATLAB command line.



Examples of analysis capability:

- Power, Delay Window, SNR, Dynamic,...
- Doppler, Doppler Spread, Coherence time,...
- Frequency Response, Azimuth, Azimuth Spread,...
- Eigenvalues, Calibration data, ...

MATSYS Parallel Processing

Processing speed can be enhanced by the MATSYS Parallel Processing option. This option provides dynamic configuration of various MATLAB computers within a heterogeneous network structure.

Application of Super Resolution Algorithms:

- Multidimensional ESPRIT
- "Enhanced" SAGE

RENT A RUSK

Users who wish to perform measurements in their own propagation environment do not necessarily need to purchase a channel sounder. MEDAV offers "Channel Sounder for Rent". System configuration, required accessories as well as custom specific options will be specified in close cooperation. While renting a RUSK an experienced MEDAV engineer will take care for support and onsite training.



MEASUREMENT DATA AND SERVICE

MEDAV offers Measurement Data on CDROM for exclusive Measurement Scenarios. The CDROM typically includes measurement protocol, documentation, archiving and basic characterization of measurement data. For custom specific scenarios MEDAV offers Measurement Service according to the customer's conception. The measurement campaign is defined, prepared and carried out jointly with the customer.