

TETRA Radiolocation

The R&S®DDF-TRA option enables the R&S®DDF0xE/A digital direction finders to locate specific TETRA terminals and base stations when used together with a TETRA analyzer.



Finding the position of a TETRA terminal with running fix and display on R&S®MapView.

Your task

Operators of TETRA radio networks are continuously faced with the situation that specific terminals can disturb or even block the network due to a defect or due to incorrect configuration. In some cases, TETRA terminals are actually stolen and used by unauthorized parties. Such terminals must be quickly identified and located.

In other applications, users want to fix the position of specific TETRA base stations.

Our solution

By using the combination of the R&S®DDF0xE/A direction finder with R&S®DDF-TRA, R&S®RAMON software components and the TETRA AirAnalyzer from the fjord-e-design GmbH company, users can immediately and precisely identify and locate TETRA terminals/base stations.

The R&S®DDF0xE/A direction finders offer high immunity against reflections in conjunction with high measurement speed. The R&S®DDF-TRA option (available on request) expands the R&S®DDF0xE/A to include the interfaces to the AirAnalyzer.

In combination with the compact R&S®ADD253 wide range DF antenna, the R&S®DDF0xE/A becomes a universal DF system with a wide frequency range of 20 MHz to 3 GHz for general applications. If necessary, this frequency range can even be expanded to lower frequencies.

75 Years of
Driving
Innovation


ROHDE & SCHWARZ

Application

The R&S®DDF0xE/A digital direction finders are fast enough to find the bearings of each individual transmission in a TETRA radio network, but they require a clock source that is synchronized to the network. This helps to ensure that transmissions from different transmitters can be separated from each other.

Identifying specific terminals and base stations in a TETRA radio network requires a device for analyzing the transmissions. The TETRA AirAnalyzer from the fjord-e-design GmbH company offers not only comprehensive analysis functions but also the interfaces to the R&S®DDF0xE/A digital direction finders that are necessary to find positions and to provide the clock information.

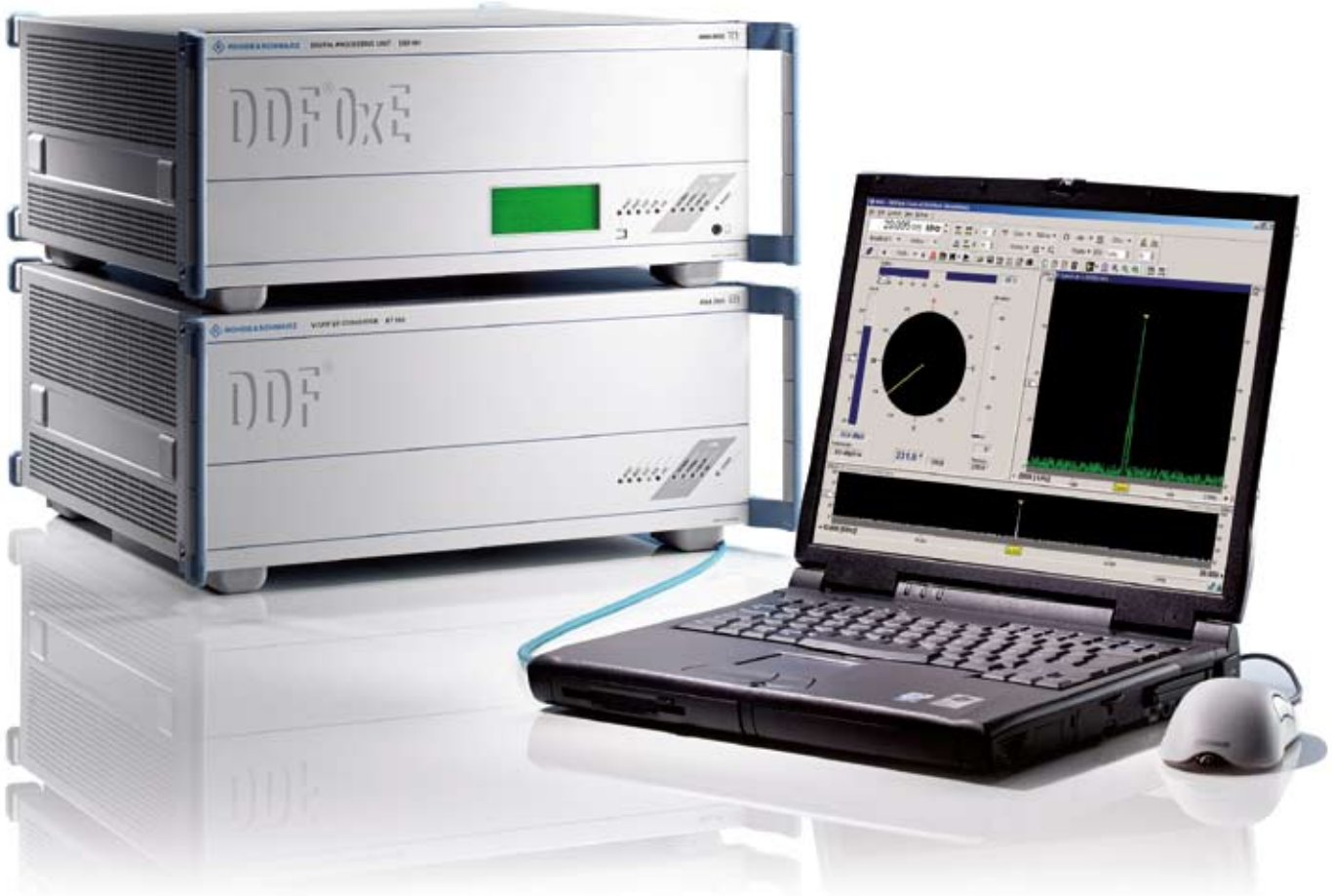
After the TETRA terminal/base station to be located has been selected on the AirAnalyzer, the R&S®DDF0xE/A direction finder is automatically set up as required and finds

the bearings of the selected transmitter. The R&S®RAMON Locate software and R&S®MapView enable users to collect and display bearings from different locations that intersect at the transmitter site (running fix).



R&S®ADD253 DF antenna (open).

R&S®DDF05E digital broadband direction finder.



Rohde & Schwarz GmbH & Co. KG

Europe, Africa, Middle East +49 89 4129 137 74

customersupport@rohde-schwarz.com

North America 1 888 TEST RSA (1 888 837 8772)

customer.support@rsa.rohde-schwarz.com

Latin America +1 410 910 7988 | customersupport.la@rohde-schwarz.com

Asia/Pacific +65 65 13 04 88 | customersupport.asia@rohde-schwarz.com

www.rohde-schwarz.com

R&S® is a registered trademark of Rohde & Schwarz GmbH & Co. KG

Trade names are trademarks of the owners | Printed in Germany (ft)

TETRA Radiolocation | PD 5214.3481.92 | Version 01.00 | November 2009

Data without tolerance limits is not binding | Subject to change

© 2009 Rohde & Schwarz GmbH & Co. KG | 81671 München, Germany