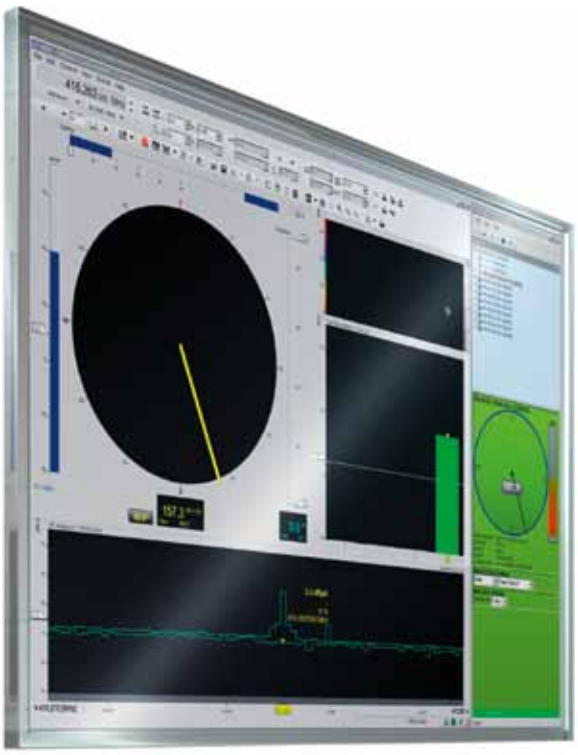
R&S®DDF-TRA
TETRA DF Option
TETRA direction finding for the R&S®DDF0xA and R&S®DDF0xE



ROHDE&SCHWARZ

Radiomonitoring & Radiolocation

Product Brochure | 01.00

R&S®DDF-TRA TETRA DF Option

At a glance

When the R&S®DDF0xA digital HF/VHF/UHF scanning direction finder or the R&S®DDF0xE digital HF/VHF/UHF monitoring direction finder is equipped with the R&S®DDF-TRA option and combined with a TETRA analyzer, specific TETRA terminals and base stations can be identified and located.

Operators of TETRA radio networks are continually faced with the situation that specific terminals can disrupt or even block the network due to a defect or because they are configured incorrectly. It is also possible that TETRA devices are 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.

TETRA terminals and base stations can be quickly and accurately located and identified by using the combination of an R&S®DDF0xA/E digital direction finder and the R&S®DDF-TRA TETRA DF option, components of the R&S®RAMON COMINT/CESM family of software applications and the TETRA AirAnalyzer from fjord-e-design GmbH.

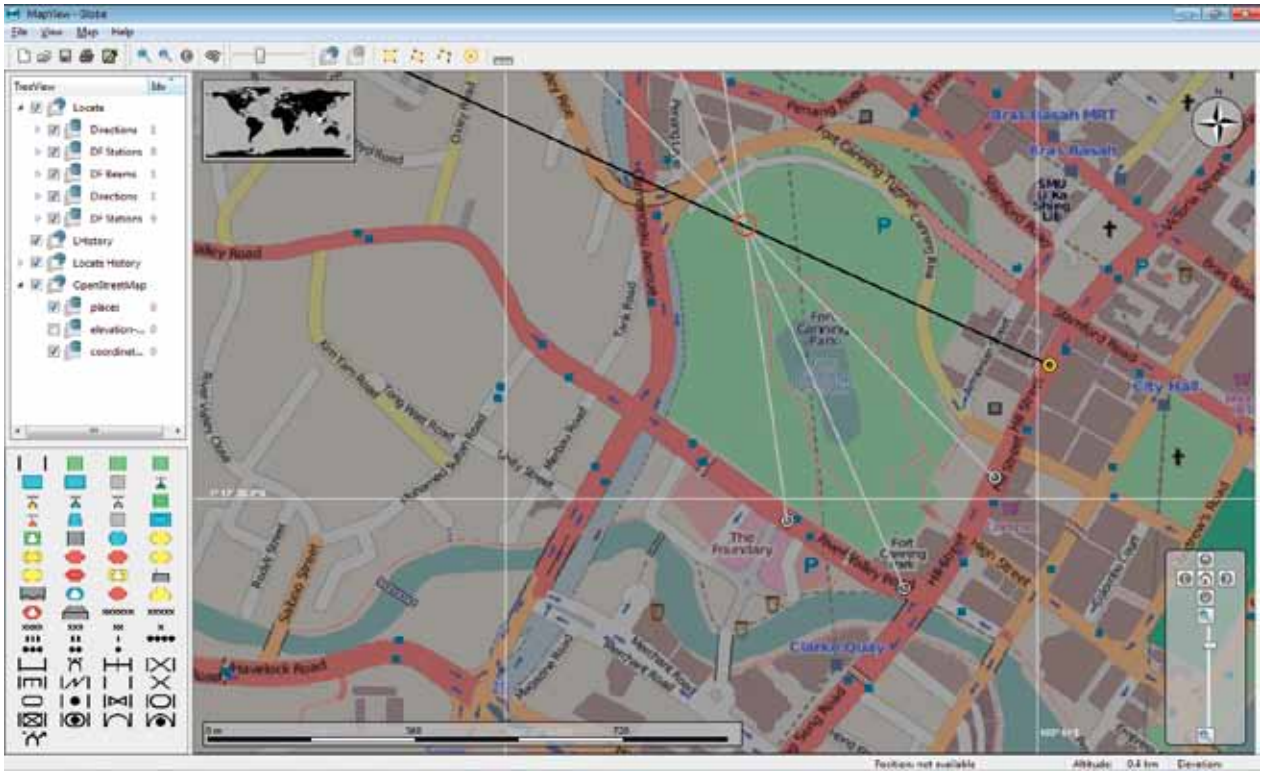
The R&S®DDF0xA/E digital direction finders offer high immunity to reflections in conjunction with high measurement speed. The R&S®DDF-TRA option expands the R&S®DDF0xA/E with the interfaces to the TETRA AirAnalyzer.

In combination with the compact R&S®ADD253 VHF/UHF broadband DF antenna, the R&S®DDF0xA/E becomes a universal DF system with a wide frequency range from 20 MHz to 3 GHz. If necessary, this frequency range can be expanded toward lower frequencies using frequency extension options and suitable DF antennas.

Key facts

- Extensive analysis of TETRA signals in combination with the TETRA AirAnalyzers from fjord-e-design GmbH
- Provides the R&S®DDF0xA/E digital direction finders with interfaces to the TETRA AirAnalyzer
- Superior immunity to reflections
- High measurement speeds
- Automatic position fixing of selected TETRA device

Finding the position of a TETRA terminal using a running fix, and display on a map using the R&S®MapView geographic information software.



Operating principle

The R&S®DDF0xA/E 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 fjord-e-design TETRA AirAnalyzer offers not only comprehensive analysis functions but also the interfaces to the R&S®DDF0xA/E 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 TETRA AirAnalyzer, the R&S®DDF0xA/E direction finder is automatically set up and finds the bearings of the selected transmitter. The R&S®RAMON Locate software and R&S®MapView enable users to collect and display the bearings of multiple locations that intersect at the transmitter site (running fix).

Ordering information

Designation	Type	Order No.
TETRA DF Option, for the R&S®DDF0xA digital HF/VHF/UHF scanning direction finder	R&S®DDF-TRA	4066.9101.02
TETRA DF Option, for the R&S®DDF0xE digital HF/VHF/UHF monitoring direction finder	R&S®DDF-TRA	4066.9101.03

Data sheets:
R&S®DDF0xA, see PD 0758.0374.32 and www.rohde-schwarz.com
R&S®DDF0xE, see PD 0758.0400.32 and www.rohde-schwarz.com

Service you can rely on

- Worldwide
- Local and personalized
- Customized and flexible
- Uncompromising quality
- Long-term dependability

About Rohde&Schwarz

Rohde&Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established more than 75 years ago, Rohde&Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

Environmental commitment

- Energy-efficient products
- Continuous improvement in environmental sustainability
- ISO 14001-certified environmental management system

Certified Quality System
ISO 9001

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