R&S®SECOS 5/16 TDMA SECURE EPM COMMUNICATIONS SYSTEM

The R&S[®]SECOS 5/16 TDMA waveform is a frequency hopping waveform solution with electronic protection measures (EPM/ECCM) for VHF/UHF radiocommunications.

In modern defense communications scenarios, radiocommunications are extremely vulnerable to intentional or unintentional eavesdropping, intrusion and jamming. With an ingenious concept, R&S®SECOS protects communications and thus contributes to securing transmission. The waveform supports secure and jam-resistant voice and data communications in single-channel and TDMA modes. R&S®SECOS supports user-specific encryption (COMSEC) and customizable frequency hopping methods (TRANSEC). Embedded management encryption allows the safe loading and distribution of operational mission data. The waveform is integrated into almost all Rohde&Schwarz radio platforms.

Key facts

- ► Integrated COMSEC and TRANSEC algorithm
- Operational flexibility: available on airborne, stationary and ground tactical radios to enable seamless communications scenarios
- High communications security: fast, robust, replayproof and jam-resistant synchronization schemes
- Communications flexibility: applicable in various frequency bands
- Easy to use

The R&S $^{\circ}$ SECOS waveform stands out with the following characteristics:

High security

- Proprietary user-specific algorithm for COMSEC, COMSEC/TRANSEC and waveform management
- ► Inherent time authentication, replay-proof
- Supports various orthogonal hopping schemes



R&S®SECOS 5/16 TDMA secures your mission.

TRANSEC mode

- Frequency hopping
- Frequency range: radio-dependent, user-selectable (tactical VHV (TVHF), VHF, UHF)
- Various dwell times

Communications features

- Break-in
- ► Hailing

Robustness

- ► Fast synchronization times
- ► Hop tracking
- ► Long autonomous operation time

Communications modes

- Voice and data communications with 16 kbps as standard in single-channel mode
- Data communications in TDMA modes with user-defined allocation of TDMA slots

Data Sheet | Version 02.00

ROHDE&SCHWARZ

Make ideas real



The R&S[®]SECOS waveform suite includes the following configuration, management and maintenance components:

R&S®KMC3750 key management center

The R&S[®]KMC3750 is the key generation and management tool. The tool allows configuration of all securityrelevant functions such as encryption, access control and generation of cipher keys for the communications network.

R&S®FMC3750 frequency management center

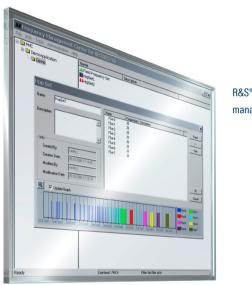
The R&S[®]FMC3750 is a software package used to manage all the frequencies used for operation and specific communications scenarios. This ensures correct and interferencefree operation. The high flexibility allows secure communications to be adapted to specific current needs.

R&S®WOF HCM 370x workshop field

The R&S[®]WOF HCM 370x workshop field is a maintenance tool for configuring and checking the embedded EPM controller while it is installed in the radio. The workshop field allows encrypted downloads of user-specific waveforms.

R&S®DS3750 waveform application for **R&S®SECOS**

The R&S[®]DS3750 includes the customized R&S[®]SECOS waveform. The application is ready to be downloaded into R&S[®]SECOS radios.



R&S[®]FMC3750 frequency management center.

ORDERING INFORMATION

Designation	Туре	Order No.
R&S®SECOS 3750 TDMA system suite		
Key management center	R&S®KMC3750SW	6207.4301.02
Key management center security module	R&S®KMC3750SM	on request
R&S [®] FMC3750 frequency management center	R&S®DS3190	6146.4943.24
R&S®WOFHCM370x workshop field	R&S [®] CP1000	6207.4353.02
Security module for R&S®WOFHCM370x	R&S [®] CP1000SM	on request
R&S [®] SECOS waveform application	R&S®DS3750	on request
Key distribution device		
Key distribution device	R&S®KDD3750	6207.3005.75

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