

# R&S® ELCRODAT 7-MC

The R&S® ELCRODAT 7-MC is a fully ruggedized tactical crypto device used to encrypt and decrypt voice and data communications for German, EU and NATO security classifications up to SECRET. TEMPEST-proof, it is interoperable with HF/VHF/UHF radio, satellite communications, line transmission equipment and IP infrastructure. It is perfectly suited for deployment on stationary and mobile platforms in rugged terrain and in naval and airborne environments.

## Solution for secure tactical communication (HF/VHF/UHF/IP)

The R&S® ELCRODAT 7-MC is designed to be a form-fit replacement for its predecessor, the R&S® ELCRODAT 4-2. With its modern hardware and software architecture, it also provides the necessary capabilities for state-of-the-art crypto protocols, including post quantum algorithms and data rates up to 1 Gbit/s.

The R&S® ELCRODAT 7-MC allows flexible deployment. It provides serial interfaces for use in traditional radio and modem environments and Ethernet interfaces for integration into IP networks. Additionally, it can install, store and run multiple crypto applications implementing different crypto modes enabling flexible use needed for different national and coalition scenarios. The R&S® ELCRODAT 7-MC can be operated either with a control unit, via a web interface or using the MIL-bus module.



Product Flyer  
Version 01.00

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### Key facts

- ▶ Voice and data encryption for security levels up to GEHEIM, NATO SECRET (planned), EU SECRET/SECRET EU (planned)
- ▶ Protects HF/VHF/UHF satellite communications and line transmission
- ▶ Supports IP encryption protocols such as NINE and SCIP
- ▶ Data rates up to 1 Gbit/s
- ▶ Fully rugged, tamper-protected, TEMPEST-proof
- ▶ Stationary and mobile deployment in all military branches (army, navy, air force)
- ▶ Ideal for end-user handling and management thanks to small size and simplified setup
- ▶ Upgradability by secure software download ensures that future challenges can be met
- ▶ Hardware provisioned for future applications, e.g. post-quantum cryptography

### Form-fit function to R&S®ELCRODAT 4-2

- ▶ The R&S®ELCRODAT 7-MC is designed to be a form-fit replacement for its predecessor, the R&S®ELCRODAT 4-2:
- ▶ Dimensions (90.4 mm × 193.5 mm × 200 mm)
- ▶ Interoperable with VINSON, ANDVT and line encryption modes
- ▶ Operating modes for voice and data transmissions
- ▶ Synchronous and asynchronous transmissions over red and black interfaces

### State-of-the-art, software defined crypto device

- ▶ Interoperable with legacy cryptographic protocols
- ▶ Support for modern IP and radio based cryptographic protocols like NINE and STaC-IS

### Comprehensive protection through elaborate security concept

- ▶ High-security, custom-made hardware
- ▶ Dedicated hardware and software security architecture
- ▶ Hardware tamper protection
- ▶ Crypto ignition key
- ▶ Audited production environment

### Multiple dedicated operator interfaces for various applications

- ▶ Web interface
- ▶ Remote control interface (LAN)
- ▶ MIL-bus communications interface
- ▶ Control unit user interface

### Interoperability with other crypto devices (selection)

- ▶ SCIP and NINE compatible crypto devices
- ▶ STaC-IS compatible crypto devices
- ▶ Legacy crypto devices (e.g. R&S®ELCRODAT 4-2, KY58, KY100, KIV-7M)

### Flexible operation with state-of-the-art technology

- ▶ Software defined crypto
- ▶ Flexible configuration
- ▶ Online management

### Wide selection of accessories simplifies commissioning and operation

- ▶ PC based configuration via web interface
- ▶ Mounting frame secures the device in physically demanding environments
- ▶ Seamlessly adjustable external power supply unit (110 V/240 V)