

TMR880i TETRA Mobile Radio

Mobile connection with confidence



The TMR880i is an advanced TETRA mobile radio for professional users. Featuring an integrated GPS receiver with waypoint guidance, active high-resolution colour display, Java™ platform and support for smart card based end-to-end encryption, the TMR880i meets diverse customer requirements in both mission-critical and civil use.

Best-in-class user experience

The TMR880i offers quick and straightforward access to all functions. The new separate CUR-3 control unit has a professional, balanced design, optimised for easy and reliable use in vehicles. The sharp colour display with adjustable brightness offers excellent visibility, making it easy to capture information, even in varying light conditions. Voice feedback, clear menu structure and the Series 40-style user interface make the TMR880i as easy to learn and use as the other products of the latest generation EADS TETRA terminal portfolio.

GPS for accurate positioning

With its integrated GPS receiver, the TMR880i can provide the user - as well as the command and control centre - with accurate position information. The position of a specified radio can be requested over the air when needed. Alternatively, the radio can be set to send its position e.g. at certain intervals, or at defined triggers. The user-friendly GPS-based waypoint guidance application can show the direction and distance to a selected destination.

Flexible usage options

The TMR880i offers a wealth of options for installation and integration in vehicles. Thanks to its versatile interfaces and 16 I/O lines, the TMR880i is



perfectly suited to diverse operating environments. It can also be used as a radio modem or integrated into compatible control systems of vehicles. Its advanced AT command interface as well as the Java™ platform make it an ideal solution for applications in the field, such as mobile command and control, database access and navigation.

The TMR880i supports the EADS total solution for end-to-end encryption for confidential communication. The smart card based solution allows smooth introduction of e2ee when needed. The TMR880i radio unit has an integrated smart card slot for the smart card. For added flexibility, an external smart card reader is available as an alternative.

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EADS TETRA terminals fulfil the following specifications for TETRA radio equipment in the temperature range of -20°C to +55°C:

EN 300 392 V+D air interface

EN 300 394 V+D conformance testing

Frequency bands

- Wideband, 380-430 MHz

Power class

- EN 300392-2 compliant, power class 3
- Receiver class A
- RF power control, 5 steps of 5dB

Size

Radio Unit

- Weight: approximately 810 g
- Dimensions: 60 x 188 x 120 mm (H x W x D)

Control unit CUR-3

- Weight: approximately 270 g
- Dimensions: 72 x 190 x 38 mm (H x W x D)

Display

- High-resolution, active TFT colour display
- 130x130 pixels, 65,536 colours

Keypad / controls

- Alphanumeric keypad
- Call and end-call keys
- 4 navigation keys, 4 selection keys
- Power-on key, volume keys, red function key, duty key, fast menu key, group selector, back key, display brightness control

GPS receiver

- Sensitivity -152 dBm
- Cold start accuracy (open sky)*
5 meters (50% confidence level)
10 meters (95 % confidence level)
* measured at -130 dBm
- GPS activity indicator
- Automatic position saving

- Position information sending on request or on triggers, e.g. time, distance, status message
- Position sending during red key calls and public emergency calls*
- Waypoints, waypoint guidance
- NMEA routing to serial port
- Support for ETSI location information protocol (LIP) for TETRA

Call types

- Phone calls in TETRA network
- Phone calls to public network
- Express and group calls in TETRA network
- TETRA emergency calls
- Public emergency calls (e.g. to 112)

Group communication

- Up to 2000 talk groups
- Up to 200 talk group folders
- Up to 400 groups per folder
- Dynamic Group Number Assignment (up to 200 DGNA groups)
- Up to 10 background groups
- Priority scanning
- Scanning list up to 59 talk groups
- Voice override in group calls (pre-emption)
- Late entry

Direct Mode features

- Up to 180 DMO groups
- 60 DMO channels
- DMO gateway and repeater support
- Scanning
- Red key call to DMO group
- Red key call to TMO within TETRA network coverage
- Public emergency call within TETRA network coverage
- DMO SCK encryption
- Status messages in DMO

Messaging

- Status and text messages
- Flash messages
- Predictive text input (T9)
- Unit alert (selective alert)

Security

- Authentication
- Mutual authentication
- Security class:
Class 1: Clear
Class 2: SCK
Class 3: DCK/CCK
- Phone and security code
- Temporary disable/enable (Stun)
- Alert for out of network coverage
- Support for smart card based end-to-end encryption (option)

Wireless data

- IP packet data
- XHTML browser (WAP 2.0)
- AT command interface for applications
- Java MIDP 2.0 platform

Other features

- Voice feedback
- Configurable main menu
- Configurable fast menu
- Tx inhibit
- Speed dialing (one touch dialing, locations 2-9)
- Functional number keys
- DTMF tone dialing
- Any key answer
- Duplex call barring
- Multiple network support

Interfaces

- Separate control unit CUR-3
- 16 configurable I/O pins
- Multiple audio devices
- Helmet audio interface
- Serial data
- External power on / off
- External PTT
- External emergency PTT
- Ignition sense
- Internal slot for smart card
- External smart card reader
- Active GPS antenna
- TETRA antenna
- Service connector for programming

(*) configurable feature

Headquarters: EADS Secure Networks SAS

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