



## TMR880i TETRA mobile radio

### Mobile connection with confidence

The TMR880i TETRA mobile radio meets the requirements for secure and efficient voice and data communications.

The TMR880i consists of a radio transceiver and a separate control unit for easy installation and use in a wide variety of vehicles. The radio unit can be integrated into - and controlled by - an external device or application, making it ideal for data applications such as telemetry, positioning and remote control.

The CUR-3 control unit has a professional, balanced design and a large colour display for optimised visibility, even in changing light conditions. Voice feedback guides the user in talk group selection and the Fast Menu functions enabling reliable and intuitive operation.

Configurable menus and keys and a "Go to" quick menu enable customising of the radio to meet an organisation's precise needs.

TMR880i supports smart card based end-to-end encryption. Communications can be encrypted all the way from the sending unit to the receiving unit. This encryption solution provides the highest level of security, allowing implementation of organisation's specific encryption algorithms. The TMR880i has an integrated slot for the smart card. An external smart card reader is available for further flexibility.

The Java™ platform allows organisations easily introduce its own applications with a customised user interface.

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 radio can be requested over the air or the radio can send its position at certain intervals, or at defined triggers. Users can view their coordinates, altitude, speed, and direction on the display. For enhanced user safety, the radio can be set to send details of its current or latest position to a predefined address. The user friendly GPS-based Waypoint guidance application can show the direction and distance to a selected destination.

# TMR880i TETRA mobile radio

## Frequency bands

- 330 – 360 MHz
- 350 – 380 MHz
- 380 – 430 MHz
- 450 – 470 MHz
- 806 – 825, 851 – 870 MHz

## Power class

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

## Size

- Radio Unit
  - Weight: 1004 g
  - Dimensions: 60 x 182 x 125 mm (H x W x D)
- Control unit CUR-3
  - Weight: 240 g
  - Dimensions: 72 x 190 x 36 mm (H x W x D)

## Display

- High-resolution, active TFT color display
- 130 x 130 pixels, 65,536 colors
- Display texts in more than 25 languages
- Support for Latin, Arabic, Greek, Chinese, Korean, Cyrillic and Bulgarian characters and keymats
- Night vision mode

## Keypad / controls

- Alphanumeric keypad
- 4 navigation keys, 3 selection keys
- Power-on key, volume keys, red function key, duty key, fast menu key, group selector, back key, display brightness control

## GPS receiver

- Inbuilt A-GPS with internal memory
- Power save mode
- GPS activity indicator
- Sensitivity -162 dBm
- Simultaneous satellites up to 12
- Cold start accuracy (open sky)\*
  - 2,5 meters CEP
- Cold start TTFF, time to first fix (open sky)\*
  - < 30 seconds
- \* measured at -130 dBm
- Automatic position saving
- Position information sending on request or on triggers, e.g. time, distance, status message
- Position information sending during red key calls and public emergency calls
- Waypoints, waypoint guidance
- Saving own waypoint with one key press for Waypoint guidance
- Network-based terminal assisted positioning
- Support for ETSI location information protocol for TETRA (LIP)

## Call types

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

## Group communication

- Up to 2 000 groups
- Up to 200 group folders
- Up to 400 groups per folder
- Dynamic Group Number Assignment (DGNA), up to 200 DGNA groups
- Up to 10 background groups
- Priority scanning
- Scanning list up to 59 groups
- Voice override in group calls (pre-emption)
- Late entry

## Direct mode features

- Up to 180 DMO groups
- 60 DMO channels
- DMO gateway support
- Support for repeater type 1A and 1B
- Scanning
- DMO individual call
- 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, encryption classes 2A, 2B and 2C
- DMO Status messages
- DMO SDS messages
- ETSI TETRA type 1A DMO repeater operation (option)

## Messaging

- Status messages
- Text messages with concatenation
- Situation indicators to a predefined address
- Flash messages
- Call-out
- Predictive text input T9\*\*
- Unit alert (Selective alert)
- \*\*for most languages

## Security

- Authentication and Mutual authentication
- Air Interface Encryption (AIE) security classes:
  - Class 1: Clear
  - Class 2: SCK
  - Class 3: DCK/CCK
  - Class 3G: GCK (requires TETRA SIM card)
- Phone and Security code
- Temporary disable/enable (Stun)
- Permanent disable (Kill)
- Transmission barring (Tx inhibit)
- Alert for out of network coverage
- Support for smart card based end-to-end encryption (option)

## TETRA SIM support (option)

- TSIM card with subscriber identification information (ITSI and authentication key K)
- Easy to move subscriber information with TSIM card from one radio to another

## Wireless data

- IP packet data
- WAP 2.0 over TETRA IP packet data
- xHTML browser
- AT-command interface for applications
- Java™ MIDP 2.0 platform

## 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
- 12 V supply voltage
- Ignition sense
- Internal slot for smart card
- External smart card reader
- Active GPS antenna
- TETRA antenna
- Service connector for programming

## Other features

- 500 phone book entries
- 4 profiles: General, Silent, Meeting, Outdoor
- Voice feedback
- Configurable main menu
- Configurable fast menu
- Configurable functions keys
- Speed dialing (one touch dialing, locations 2-9)
- DTMF tone dialing
- Any key answer
- Duplex call barring
- Multiple network support
- Clock synchronisation with network and/or GPS time
- Remote control through SDS or status
- Secondary control channel (SCCH)



For more information please contact

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