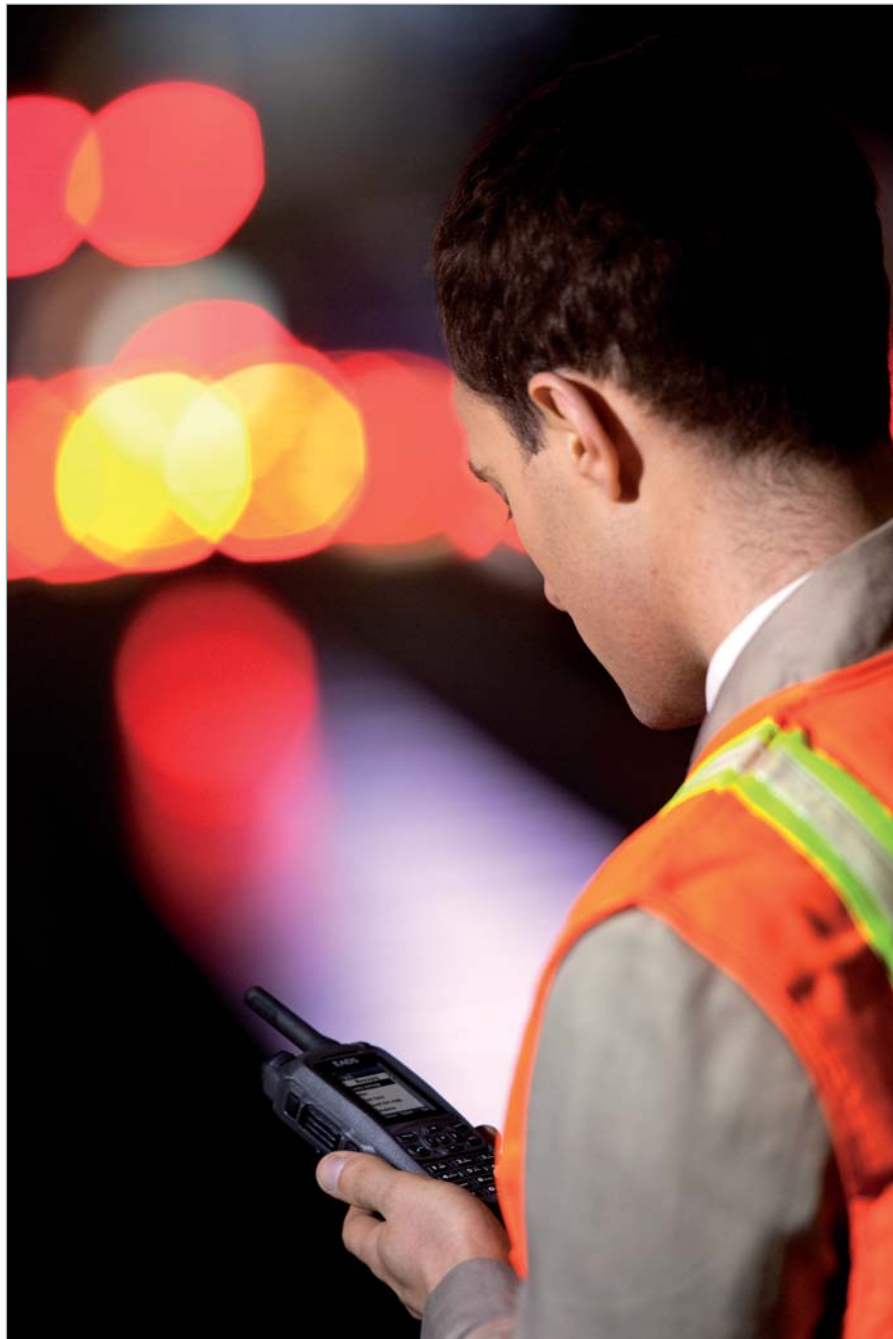




## THR9i TETRA HANDPORTABLE RADIO

# THR9i TETRA handportable radio

- **Water and dust resistant according to IP65**
- **Large QVGA colour display with support for true colour pictures**
- **Life guard, the advanced solution for man down alarm**
- **Unique GPS based «Where Are You?» application for enhanced user safety and efficiency**
- **Configurable menu and short-cut keys for easy operation**
- **Voice feedback**
- **Vibrating alert**
- **Java™ MIDP 2.0 platform for applications**
- **XHTML colour browser**
- **Support for smart card-based end-to-end encryption (option)**



The THR9i TETRA handheld radio from CASSIDIAN® delivers high performance and usability for mission-critical voice and data communication. With IP65 protection, the largest sharpest on the market QVGA display and high battery autonomy the THR9i is a solid and easy to use communication tool.

## **Keeping track of situations**

In critical situations it is important to know if additional resources are nearby. The GPS based 'Where are you?' feature shows on the radio display during a call how far your team members are. When you press the PTT, they will also see where you are. This position information can be stored as waypoint for later use. During emergency call the radio sends its coordinates to a predefined destination.

## **Loud and clear**

THR9i offers clear sound and excellent audibility for voice calls. The enhanced Cassidian style user interface with user-friendly menu and the unique voice feedback provide extra user comfort. The large display makes it possible to catch all critical information at a glance. For example, you can clearly see if you are working in direct or network mode. A red signal on the display gives a clearly visible alert on low battery capacity, and when network coverage is diminishing.

The large display of the THR9i also allows users to view sharp images, as well as benefit from mobile applications that present mission critical information in a clear visual format. Thanks to its enhanced memory and Java™ support, the THR9i can receive and host applications that can be customised to meet specific needs.

## **Safe and secure on the field**

For enhanced user safety, the radio provides an advanced Life guard solution, also known as man down alarm. If the radio stops moving or remains horizontal for too long, it triggers a local alert. If the user does not respond, the radio automatically activates an alarm and sends its coordinates to a predefined destination over the TETRA network.

### Adapting to your work

The compact THR9i is easy to carry on a lapel or belt, equipped with a solid belt clip or a carrying case.

With an easy and reliable battery connection mechanism and two battery options, one with an extended capacity, the radio can keep even the heaviest radio users in contact throughout their shift.

The robust side connector is dedicated to audio accessories such as lightweight headsets or a robust speaker microphone, as well as for data. The radio's bottom connector is used for charging, for data connection and programming.

THR9i radios can be managed using the smart Taqto® terminal management tool which allows several radios to be updated and re-configured simultaneously.



The following accessories are available for the THR9i radio:

#### Audio accessories

- 3-wire surveillance earpiece with transparent acoustic tube HDS-1
- Earpiece with on-MIC PTT & transparent acoustic tube HDS-2
- D-earset HDS-8
- Earbud with in-line PTT HDS-4
- Remote Speaker Microphone SPM-4
- Earpiece with transparent acoustic tube (3,5 mm jack connector for use with speaker mic) HDS-5
- D-earset with 3,5 mm jack connector for use with speaker mic HDS-6
- Earbud with 3,5 mm jack connector for use with speaker mic HDS-7

#### Batteries and charging

- Premium battery BLN-5i (1900 mAh Li-Ion)
- Heavy duty battery BLN-6 (4600 mAh Li-Ion)
- 1-slot desktop charger DKC-1
- 6-slot desktop charger DKC-6 for 6 radios + 6 spare batteries
- Travel charger ACP-12
- Mobile charger LCH-12



#### Carrying accessories

- Leather carrying case LCC-1
- Belt clip BCH-9
- Leather strap LTS-9

#### Car

- Car Kit CARK-9
- Handset HSU-1T

#### Data

- USB data cable DLR-9U
- Data cable for carkit DLR-3T



## THR9i TETRA handportable radio

Cassidian TETRA Terminals fulfill 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 and  
TETRA Speech codec (ACELP) according to EN 300 395

### Frequency Band

- 380 – 430 MHz
- 445-446 MHz (DMO), 450-470 MHz (TMO and DMO)

### Power Class

- Compliant with EN300392-2 power class 4
- Receiver class A
- RF power control, 4 steps of 5 dB

### Size

- Weight: 282 g
- Dimensions: 133 x 58 x 31 mm

### Durability

- Water, dust and shock resistant according to IP65 classification

### Display

- Full-color QVGA display
- Up to 262144 colors with 240 x 320 pixels
- Display backlight off by single key press
- Display reverse (180 degrees by single key press)
- Display texts in more than 25 languages
- Support for Latin, Arabic, Greek, Chinese, Cyrillic, Bulgarian and Korean character set

### Keypad / controls

- Alphanumeric keypad
- 4 navigation keys, 3 selection keys
- HI/LO key for loudspeaker control
- Power-on key, volume keys, red function key, duty key, fast menu key, group selector, back key

### GPS receiver

- Sensitivity -152 dBm
- Cold start accuracy (open sky)\*
  - 5 meters (50% confidence level)
  - 10 meters (95% confidence level)
- GPS activity indicator
- 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

\*measured at -130 dBm

- Waypoints, waypoint guidance
- Showing caller's distance and direction during a call ("Where are you" feature)
- Saving own or caller's waypoint with one key press for Waypoint guidance
- NMEA routing to serial port, future SW update required
- Network-based terminal assisted positioning
- Support for ETSI location information protocol for TETRA (LIP)

### Call Types

- Phone calls in TETRA networks
- 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 3 000 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 1500 DMO groups
- 500 DMO channels
- DMO gateway support
- Support for DMO 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 and 2b
- DMO status messages
- ETSI TETRA type 1A DMO repeater operation (option)
- Re-broadcast of group and emergency groups calls on configured DMO groups

### Messaging

- Status messages
- Text messages with concatenation
- Situation indicators to a predefined address
- Flash messages
- Predictive text input T9\*\*
- Unit alert

\*\* for most languages

### Security

- Life guard - an advanced man down alarm
- Authentication
- Mutual authentication
- Air Interface Encryption (AIE) security classes:
  - Class 1: Clear
  - Class 2: SCK
  - Class 3: DCK/CCK
- Phone and Security code
- Temporary disable/enable (Stun)
- Permanent disable (Kill)
- Alert for out of network coverage
- Support for smart card based end-to-end encryption (option)

### Wireless Data

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

### Interfaces

- Side connector for audio accessories and data
- Bottom connector for charging, carkit, programming and data
- Internal smart card slot
- Connector for external antenna (for carkit)

### Other Features

- Voice feedback
- Configurable main menu
- Configurable fast menu
- Configurable function keys
- Transmission barring (Tx inhibit)
- Speed dialing (one-touch dialing, locations 2-9)
- DTMF tone dialing
- Any key answer
- Duplex call barring
- Multiple network support
- Aliasing
- Clock synchronisation with network and/or GPS time
- Vibration alert

### Battery

Li-Ion 1900 mAh (premium battery) and 4600 mAh (heavy duty battery)

Estimated values for 1900 mAh battery:

Up to 15 h (5/5/90)  
Up to 12,5 h (10/30/60)  
Up to 22,5 h (standby)

Estimated values for 4600 mAh battery:

Up to 36 h (5/5/90)  
Up to 32,5 h (10/30/60)  
Up to 48 h (standby)

Note: GPS usage affects the above mentioned times.

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