

THR9 Ex Intrinsically Safe TETRA Handportable Radio



The robust and modern THR9 Ex TETRA handportable radio delivers high performance and utmost usability and security in mission critical voice and data communication in circumstances where intrinsically safe products are mandatory. With IP65 classification and ATEX/IEC certification both for gas and dust, the THR9 Ex has the best protection against physical and environmental exposure in explosion-prone areas.

The display of the THR9 Ex is largest on the market, providing valuable information for the users in the changing situations in the field. The new Lifeguard feature – the advanced man down solution – offers enhanced safety for the user. Lifeguard recognises if the radio stops moving or remains horizontal for a certain period which might mean that the user is injured or has fallen down. In that case the radio triggers an automatic alarm and sends its coordinates to a predefined destination.

THR9 Ex comes with a 2000 mAh battery which ensures excellent operation time even for most intensive communication. The extensive range of ATEX certified accessories includes both robust and lightweight audio devices for varying needs.

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THR9 radio fulfils 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

Explosion-proof certification

ATEX and IEC-Ex approval with

II 2G Ex ib IIC T4 Gb for gas

II 2D Ex ib IIC T90°C Db IP6X for dust

Frequency Bands

380 – 430 MHz

Power Class

EN300392-2 compliant, power class 4

Receiver class A

RF power control, 4 steps of 5dB

Size

Weight: 360 g

Dimensions: 133 x 58 x 40 mm

Durability

Water, dust, and shock resistant according to IP65 classification

Display

Full-colour QVGA display

Up to 262144 colours with 240 x 320 pixels

Display reverse 180 degrees

Display texts in more than 20 languages

Support for Latin, Arabic, Greek,

Chinese and Korean

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

Messaging

Status and text messages

Flash messages

Predictive text input (T9)

Unit alert (selective alert)

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 (time, distance, status message)

Position sending during red key calls and public emergency calls

Waypoints, waypoint guidance

Showing caller's distance and direction

during a call (Where are you)

NMEA routing to serial port

Support for ETSI location information

protocol for TETRA (phase 2)

Call Types

Phone calls TETRA network

Phone calls to public network

Express and group calls in TETRA networks

TETRA emergency calls

Public emergency calls (e.g. to 112)

Group Communication

Up to 3000 talk groups

Up to 200 talk group folders

Up to 400 groups per folder

Dynamic Group Number Assignment

(up to 24 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 1500 DMO groups

500 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

Security

Lifeguard – the advanced solution for man down alarm

Authentication

Security classes:

Class 1: Clear

Class 2: SCK

Class 3: DCK/CCK

PIN/PUK 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 IP Packet Data

AT-command interface for applications

Java MIDP 2.0 platform

XHTML colour browser

Other Features

Voice feedback

Configurable main menu and fast menu

Tx Inhibit

Speed dialling (one touch dialling)

Functional number keys

DTMF tone dialling

Any key answer

Remote controlling through SDS or status

Secondary control channel

Vibrating alert

Duplex call barring

Multiple network support

Interfaces

Side connector for audio and data

Bottom connector for charging, car kit and programming

Internal smart card slot

Connector for external antenna (car kit)

Battery

Li-Ion BLN Ex-2, 2000 mAh