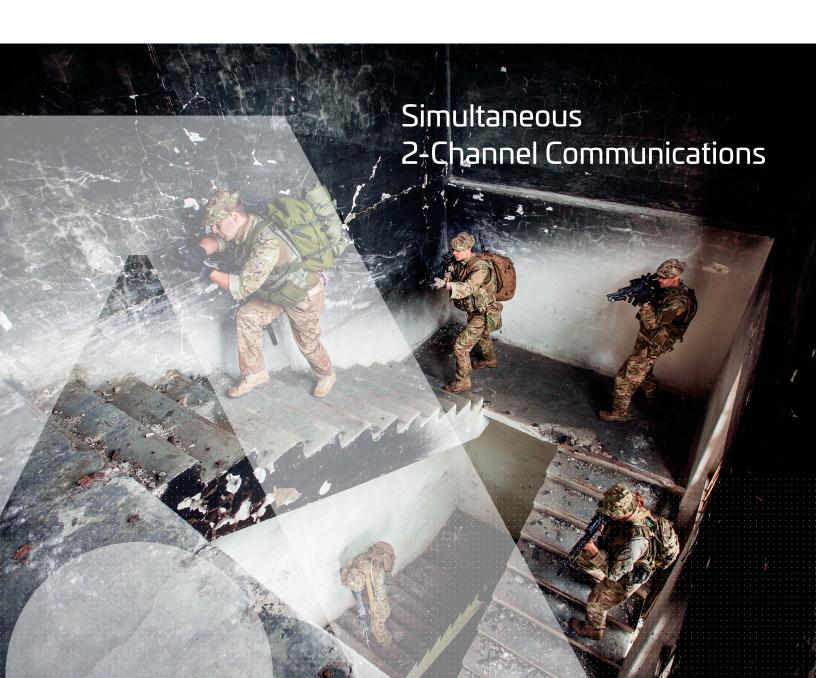


TH5320/TH5325 IMBITR Secure Team Radio



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The Thales TH5320/TH5325 solution, is a significantly enhanced version of the widely fielded PRC6809 radio. The TH5320/TH5325 offers all of the existing functionally of the current PRC6809 radio with the addition of the TrellisWare® TSM™ wideband networking waveform capability. Within a single, small, lightweight, rugged package, the user is provided simultaneous narrowband and wideband communications capabilities necessary to support tactical command and control communications in a variety of challenging radio operating environments.

The robust TSM waveform provides superior voice and data communications across harsh multipath and highly dynamic environments, such as shipboard, caves and urban operational settings.



Technical Specifications

Key Features

- ➤ Embedded GPS
- ➤ Improved Narrowband Performance Over PRC6809
- ➤ Improved Narrowband Tx/Rx Co-site Performance Parameters
- ➤ AES 256 Encryption
- ➤ Rechargeable Lithium-Ion 7.0 Ah
- ➤ Compliant with the Universal Battery Charger (UBC) Family of Tactical Chargers

Physical Parameters

Length:

8.50 inches (21.59 cm) (with battery attached, excluding antennas) (2M version)

8.65 inches (21.97 cm) (with battery attached, excluding antennas) (20M version)

Width: 2.65 inches (6.73 cm)

Depth: 1.75 inches (4.45 cm)

Weight: 2.30 pounds — Radio and Battery (1043 g)

Environmental Specifications

Operating Temperature: -31° to $+55^{\circ}$ C

Storage Temperature: -33° to $+71^{\circ}$ C

Immersion: 20M/20M

Waveforms/Modes of Operation Dependent on Configuration of Radio

TSM

- Infrastucture-less MANET
- High-speed wireless IP networking
- · Self-Forming, self-healing
- Scalable to 200+ nodes
- Robust in harsh environments
- Fast, seamless network join/merge
- Instant adaptation to network topology change

AM/FM

Over-The-Air-Cloning (OTAC) — NB only

Situational Awareness

Retransmission — NB only

Project 25 - NB only

Narrowband Channel

Frequency Characteristics

Frequency Range: 30 MHz-512 MHz

Transmit Power: Up to 5 watt

in all frequencies

Step Size: 5 kHz and 6.25 kHz

Channel Bandwidth: 5 kHz, 12.5 kHz, 25 kHz (8.33 kHz future waveform)

Wideband Channel

Transmit Power: Up to 2 watt

Operating Frequencies: L-UHF:

225-450 MHz, U-UHF: 698-970 MHz,

L/S Bands: 1250-2600 MHz

Network Throughput: up to 16 Mbps

Encryption Security: AES-256

Dedicated PTT Voice Channels: supports up to 32 talk groups, AMR 5.9 or MELPe

Occupied Bandwidth: 1.2–40 MHz

Net entry time <1 sec

Supports up to 8 hops for voice and data

Scalable to 200+ nodes in a single RF channel

Unicast, Multicast, Broadcast IP data support

Multiple simultaneous streaming videos

Position Location Information (PLI) support

with Cursor-on-Target (CoT)

OTA Remote Control

Specifications are subject to change without notice.

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