

# TH5320/TH5325 **IMBITR Secure Team Radio**

Simultaneous  
2-Channel Communications





# TH5320/TH5325 IMBITR Secure Team Radio

The Thales TH5320/TH5325 solution, is a significantly enhanced version of the widely fielded PRC6809 radio. The TH5320/TH5325 offers all of the existing functionality 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° C

**Storage Temperature:** -33° to +71° C

**Immersion:** 20M/20M

### Waveforms/Modes of Operation Dependent on Configuration of Radio

#### TSM

- Infrastructure-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.

### Thales Defense & Security, Inc.

22605 Gateway Center Drive | Clarksburg, MD 20871

TF+1.800.914.0303 | P: +1.240.864.7643

solutions@thalesdsi.com | www.thalesdsi.com

Thales has a policy of continuous development and improvement and consequently the equipment may vary from the description and specification in this document. This document may not be considered as a contract specification. Graphics do not indicate use or endorsement of the featured equipment or service. Copyright © 2020 Thales



2148:042020:V1

TrellisWare is the registered trademark and TSM is the trademark of TrellisWare Technologies, Inc.

### TrellisWare Technologies, Inc.

16516 Via Esprillo, Suite 300 | San Diego, CA 92127

P: +1.858.753.1600 | F: +1.858.753.1640

www.trellisware.com | info@trellisware.com