



# THALES

Thales Defense & Security, Inc.

**2026 Products**



22605 Gateway Center Drive  
Clarksburg, MD 20871

CAGE Code 23386

# AN/PRC-148F IMBITR

TH340 (2M)

## Simultaneous 2-Channel Communications



The AN/PRC-148F IMBITR is a small, lightweight, rugged 2-channel radio that equips Warfighters with simultaneous narrowband and wideband secure Type-1 communications, enabling tactical command and control communications in a variety of challenging environments. The narrowband channel operates all legacy tactical waveforms including: VHF/UHF LOS, SINCGARS, HAVEQUICK, as well as commercial SATCOM. The Wideband channel operates the WREN-TSM™ and WREN-NB waveforms from TrellisWare® Technologies, Inc. TSM delivers superior voice and data communications across harsh multi-path and unpredictable dynamic areas, such as caves, on board ships, and urban operational settings. WREN-NB is a resilient waveform designed to operate in near-peer threat environments which combines resilient narrowband fast frequency hopping waveform with tactical MANET.

**ITAR Controlled**

# Technical Specifications

## Physical Parameters

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

**Width:** 2.65 inches (6.73 cm)

**Depth:** 1.79 inches (4.54 cm)

**Weight:** 2.26 pounds (1026 g) — radio and battery (1043 g)

## Environmental Specifications

**Operating Temperature:** -30° to +55° C

**Storage Temperature:** -30° to +71° C

**Immersion:** 2M

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

### Narrowband Channel

**Frequency Range:** 30 MHz–512 MHz

**Transmit Power:** Up to 5 watt in all frequencies, 10 watt in SATCOM

**Step Size:** 5 kHz and 6.25 kHz

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

MIL-STD-188-241-1/-2  
(SINCGARS — Standard/FH2E EOM)

L-TAC commercial SATCOM

MIL-STD-188-181C, -182B, -183B  
(SATCOM IW)

ANDVT (LPC-10, MELP)

AM/FM

HAVEQUICK I and II

Project 25

Over-The-Air-Cloning (OTAC) — NB only

Retransmission — NB only

AM Swept Tone Beacon

## 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:** Type 1 CNSA

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

**Occupied Bandwidth:** 1.2–20 MHz

Supports up to 8 hops for voice and data

Scalable to 800+ nodes in a single RF channel

Unicast, Multicast, Broadcast IP data support

Multiple simultaneous streaming videos

Position Location Information (PLI) support

## WREN-TSM

- SAB Security
- Infrastructure-less MANET
- High-speed wireless IP networking
- Self-Forming, self-healing
- Scalable to 800+ nodes
- Robust in harsh environments
- Fast, seamless network join/merge
- Instant adaptation to network topology change

## WREN-NB (Optional)









- Resilient long range narrowband waveform with ECCM capabilities
- Interoperable with Katana — NB at SBU Level
- Instantaneous bandwidth: 50 khz
- Frequency Hopping up to 200 Mhz
- Scalability up to 250 nodes in a single data network











Part Number	System Description	NSN #
PRC7351-BBSB-SYS	TSMX SAB System 2M Non-BFT	5820-01-715-8440
PRC7351-BBSB-INT	TSMX SAB System 2M Non-BFT (INTL)	
PRC7351-BBSB-SYS2	Hornet System 2M TSMX SAB Non-BFT	

Part Number	Accessory Description	NSN #	Category
✓ 1100542-501	Earphone Kit R25	5965-01-507-3577	Audio
✓ 1100845-501	LR Remote HMI Kit	5895-01-699-2141	
✓ 1600469-14	Full Duplex Speaker Microphone	5965-01-699-2173	Audio
✓ ✓ 1600494-20	Holster Expandable Multicam	5895-01-679-8664	Holster
✓ ✓ ✓ 1600814-1	Antenna, 50" Blade 30-88MHz Filtered 20M	5330-00-167-5900	Antenna
✓ ✓ ✓ 1600842-11	LR Rechargeable Battery	6140-01-679-9214	Battery
✓ ✓ ✓ 1600944-1	TSMX L/S Band Antenna	5985-01-692-1003	Antenna
✓ ✓ ✓ 1600960-1	Antenna GPS	5985-01-692-1207	Antenna
✓ ✓ ✓ 1600960-2	Antenna GPS (Interchangeable with 1600960-1)	5985-01-719-8249	Antenna
✓ 3101377-501	Nett Warrior Data and Power Adapter	5995-01-679-7674	
✓ ✓ ✓ 3402339-1	Torque Tool, HUB	5120-01-699-3871	Spares
✓ ✓ ✓ 4103208-501	Unit Assy, IMBITR SAB 2M (Non-BFT)	5820-01-711-7653	RT
✓ 1600816-1	Antenna, 13" Whip Broadband 30-512 MHz Handheld Filtered 20M		
✓ ✓ ✓ 1600958-1	UHF Dipole Antenna, 225-450 MHz	5985-01-692-1237	Antenna

## Accessories

Part Number	NSN Number	Accessory Description	
1600814-1	5330-00-167-5900	Antenna, 50" Blade 30-88MHz Filtered 20M	
1600816-1	5985-01-669-7137	Antenna, 13" Whip Broadband, 30-512 MHz Handheld Filtered 20M	
1600944-1	5985-01-692-1003	TSMX L/S Band Antenna	
1600960-1	5985-01-692-1207	Antenna GPS	
1600960-2	5985-01-719-8249	Antenna GPS (interchangeable with 1600960-1)	Photo Not Available
1600958-1	5985-01-692-1237	UHF Diploe Antenna, 225-450 MHz	
1100524-501	5965-01-507-3577	Earphone Kit	
1600469-14	5965-01-699-2173	Full Duplex Speaker Microphone, Dual PTT	
3101351-501		Headset Kit, Dual PTT, 10-pin (includes 1600865-17 Headset, 1600865-21 V60 Dual PTT, and 1600865-24 10-pin download cable)	

3101351-502		Headset Kit, Dual PTT, 11-pin (includes 1600865-17 Headset, 1600865-21 V60 Dual PTT, and 1600865-27 11-pin download cable)	
1100845-501	5895-01-699-2141	Remote HMI Kit (includes 3501080-501 interface cable, 4103135-501 Remote Control Head, 4401184-1 Vest Clip, and hardware)	<i>Photo Not Available</i>
1600842-11	6140-01-679-9214	LR Rechargeable battery	
3101377-501	5995-01-679-7674	Nett Warrior Data and Power Adapter (includes 3101372-501 ASM3, 4103059-501 SIAM3)	
1600494-20	5895-01-679-8664	Holster, Expandable, Multicam	
3402339-1	5120-01-699-7674	Torque Tool, HUB	<i>Photo Not Available</i>
3600416-1	5935-01-669-4993	Keyfill Adapter 10-pin to 11-pin	
81553-001		Samsung Galaxy S20 Tactical Edition	
85761-001		Operator's Case Kit, S20, Tan	
857101-001		Samsung Galaxy S23 Tactical Edition	<i>Photo Not Available</i>
857001-001		Operator's Case Kit, S23, Tan	<i>Photo Not Available</i>
854072-001		Cable, Rugged USB-C EUD Sinking Host	
3101376-501	5995-01-679-8659	USB Programming Cable (Gleanair to USB-A)	
3501074-502	5995-01-697-1660	Cable Glenair Extension, 18"	

## Capabilities

### Key Features

- > Retains the Existing Narrowband AN/PRC-148 JEM Type 1 Capabilities and Waveforms
- > Wideband Channel Operating the Type 1 WREN-TSM Waveform for SAB or SBU Security Level
- > Future Advanced WREN-Narrowband (WREN-NB) Waveform
- > Embedded GPS
- > Optimized for RF Challenged Environments
- > Improved Narrowband Tx/Rx Co-site Performance Parameters
- > L-TAC Commercial SATCOM
- > 10W Burst Mode for SATCOM
- > Type-1 Certified Programmable Encryption Engine (AIM)
- > Rechargeable Lithium-Ion 7.0 Ah
- > Compliant with the Universal Battery Charger (UBC) Family of Tactical Chargers

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Specifications are subject to change without notice.

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052026:V1

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