

# ta<sup>it</sup> AXIOM MOBILE

FREEDOM TO ROAM



Broadband Solutions for Critical Communications

MARCH 2023 VERSION 2

ta<sup>it</sup>  
communications

# Preface

## PLEASE READ BEFORE USING THIS PRODUCT CATALOG.

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### **SCOPE:**

This catalog describes the TAIT AXIOM Mobile, options and accessories.

Custom product and non-standard equipment is not listed. Please contact your Tait representative if you require information on any product not listed within this book.

### **PRODUCT STATUS:**

Every care has been taken to assure that the products meet the respective regulatory requirements. However, Tait does not warrant that all products meet specific country requirements.

If you have any questions regarding product suitability please contact your Tait representative.

### **TERMS AND CONDITIONS OF SALE:**

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### **UPDATE AND CHANGES:**

The information within the product catalog is subject to change without notice and shall not form part of any contract. This information is issued for guidance purposes only. Please note that not all frequency bands and power outputs are available in all markets.

## Introducing TAIT AXIOM

Tait has a reputation for highly flexible, highly reliable critical communications solutions. Our services can be delivered over whichever technology best meets each customer's needs:

- ▶ LMR (Land Mobile Radio)
- ▶ Broadband (Cellular, WiFi, Ethernet)
- ▶ Converged LMR and Broadband services

TAIT AXIOM is an ecosystem of workforce applications, workflow automations and business integrations that can be accessed by a worker regardless of network, device or location. This includes robust internetworking capabilities between TAIT AXIOM and LMR networks through which all forms of communication and varieties of data exchange can traverse the networks, providing our customers with operational convergence.

TAIT AXIOM Mobile is an intelligent vehicle area network with broadband connectivity and edge computing for applications and workflow automation.

# ta<sup>it</sup> AXIOM

## Broadband & Convergence Solutions

### APPLICATIONS AND SERVICES

#### WORKFORCE APPLICATIONS



Collaborate, coordinate and stay informed

#### WORKFLOW AUTOMATIONS



Automated edge computing processes

#### BUSINESS INTEGRATIONS



Gather, process and share data

### DEVICES

#### HANDHELDS



Multimedia comms for smart devices

#### WEARABLES



Compact, heads-up communication

#### MOBILES



Seamlessly switch between networks

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# taït AXIOM MOBILE

## FREEDOM TO ROAM

TAIT AXIOM Mobile is an intelligent vehicle area network with broadband connectivity and edge computing for applications and workflow automation.

Increase worker safety and productivity by enabling seamless movement between communications networks, and access to applications and workflows using an intelligent vehicle network and edge computing platform in a familiar mobile radio form factor.

### **Boost the Range of Your Productivity**

Turn your vehicle into a communications hotspot, boosting the range of connected portable devices and productivity for the people using them.

### **Keep Working Past the Network Edge**

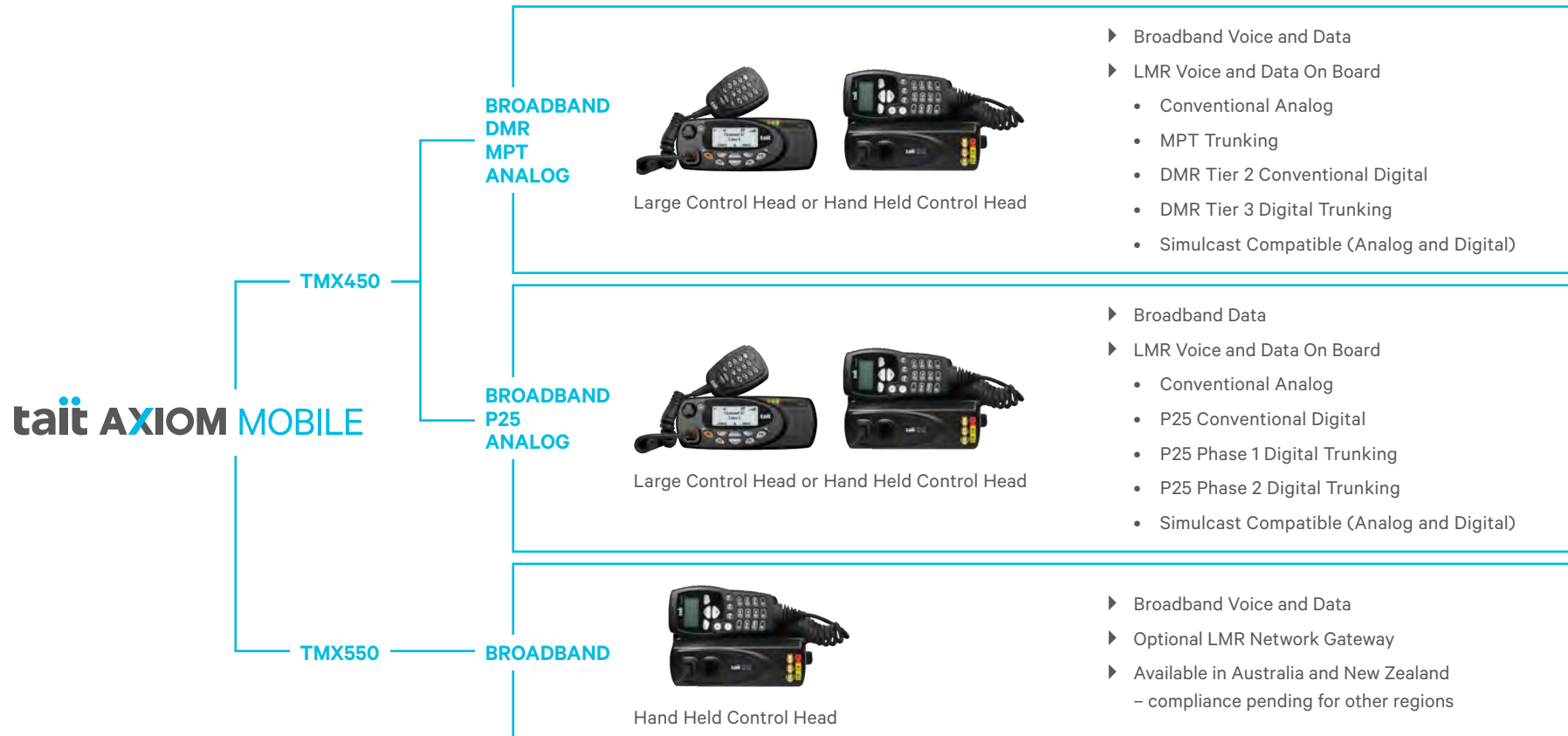
Ensure work continues, even outside the range of any communications, by hosting and processing workforce applications and their data locally.



## TAIT AXIOM Mobile Overview

TAIT AXIOM Mobile is an intelligent vehicle area network with broadband connectivity and edge computing for applications and workflow automation.

Increase worker safety and productivity by enabling seamless movement between communications networks, and access to applications and workflows using an intelligent vehicle network and edge computing platform in a familiar mobile radio form factor.



### SYMBOLS USED IN THIS DOCUMENT

● STANDARD

▲ OPTIONAL

■ ITEM CODE

Radio standards:



# TAIT AXIOM Mobile Selection Guide

## Highlighted Features

This comparison table is a brief overview of the options available for your fleet.

● Standard feature

▲ Optional feature

\* Available in Australia and New Zealand - compliance pending for other regions

<sup>1</sup> Future release

<sup>2</sup> Large Control Head (LCH) only, Not available with Hand Held Control Head (HHCH)

<sup>3</sup> Standard for HHCH packages. Optional for LCH, TM9315 and TM9395.

<sup>4</sup> Requires GNSS receiver and antenna to be fitted

<sup>5</sup> Required GNSS antenna and DMR Node

<sup>6</sup> OTAP requires Tait EnableFleet

FEATURE		TMX450 DMR	TMX450 P25	TMX550 *
<b>ULTIMATE CONNECTIVITY</b>	Tait PTTToX Broadband voice calls (WiFi and Cellular)	▲		▲
	Tait TeamPTT/ESChat Broadband voice calls (WiFi and Cellular)			
	Broadband data (WiFi and Cellular)	▲	▲	▲
	Conventional Analog	●	●	
	MPT1327 Trunking	●		
	DMR Tier 2 Conventional Digital	●		
	DMR Tier 3 Digital Trunking	▲		
	P25 Conventional		▲	
	P25 Phase 1 Trunking		▲	
P25 Phase 2 Trunking		▲		
<b>USER INTERFACE OPTIONS</b>	Large Control Head (LCH)	▲	▲	
	Hand Held Control Head (HHCH)	▲	▲	●
	Menu navigation keys	●	●	●
	Programmable Function Keys LCH	4	4	
	HHCH	6	6	6 <sup>1</sup>
Full keypad (Keypad Mic or HHCH)	▲	▲	●	
<b>EXCEPTIONAL AUDIO</b>	Internal Speaker	3W <sup>2</sup>	3W <sup>2</sup>	●
	External Speaker	▲ 10W <sup>3</sup> or 15W	▲ 10W <sup>3</sup> or 15W	▲ 10W or 15W
<b>APPLICATIONS</b>	WiFi Hotspot and Ethernet Vehicle Area Network	▲	▲	▲
	AppBuilder Edge Computing and Workflow Automation	▲	▲	▲
	Location Services <sup>4</sup>	▲	▲	▲ <sup>5</sup>
	On Board Voice Recording	●	●	
	Broadband OTAP (Over The Air Programming) <sup>6</sup>	▲	▲	▲
<b>MACHINE INTERFACE</b>	Ethernet (RJ45)	2	2	2
	Serial (9 pin)	●	●	●
	Additional IO lines			6



HAND HELD CONTROL HEAD (HHCH)



LARGE CONTROL HEAD (LCH)  
WITH KEYPAD MICROPHONE



LARGE CONTROL HEAD (LCH) WITH  
STANDARD MICROPHONE

# TMX450 with DMR

## Freedom to Roam

Free your mobile workforce from the constraints of operating within a single communications network by making analog and digital radio, WiFi, Ethernet, and public and private cellular instantly available through an intelligent vehicle network that travels with them.

### FEATURES

- ▶ Ultimate Connectivity
  - 4G/LTE, 3G, 2G; Dual nano-SIM
  - WiFi 2.5/5 GHz
  - Ethernet
  - Onboard LMR (DMR Tier 2, Tier 3, MPT 1327, Conventional analog FM)
- ▶ Usability
  - 3W speaker built in to Large Control Head
  - 10W and 15W External Speaker Options for
  - Smartphone Control Head option
  - Four programmable function keys
  - Remote control head cable options available up to 9m (30ft)
  - A range of installation options and accessories are available
- ▶ Safety and Efficiency Features
  - Lone Worker
  - Programmable emergency key
  - Location Services option <sup>1</sup>
  - Tait GeoFencing<sup>1,2</sup> option for Location Controlled Workflow Automation
  - Send and receive text and status messages
  - DMR Encryption options
- ▶ On-board Computing and Applications
  - On-board Data storage
  - Voice Recorder
  - Application Builder <sup>2</sup>
  - Host Custom Applications <sup>2</sup>
- ▶ Tait EnableFleet Configuration Management options
  - Wired Connection for all operating modes
  - Over the Air Programming for configuration changes and software upgrades over DMR Tier 3 networks, WiFi or Cellular
- ▶ Personalize your radio:
  - HHCH Available in Black, Yellow, Red and Green
  - LCH Available in Black, Yellow, and Green

**Note:**

<sup>1</sup> Requires GNSS receiver and antenna to be fitted

<sup>2</sup> Optional software feature

**PERSONALIZATION**

COLOR







HAND HELD CONTROL HEAD (HHCH)



HAND HELD CONTROL HEAD (HHCH) REAR VIEW

# TMX550

## Work Smarter, Everywhere You Go

Coordinate your workforce, communicating more efficiently everywhere you go, using easily accessible nationwide cellular networks.

### FEATURES

- ▶ Ultimate Connectivity
  - 4G/LTE, 3G, 2G; Dual nano-SIM
  - WiFi 2.5/5 GHz
  - Ethernet
  - Optional LMR Network Gateway (DMR Tier 3)
- ▶ Usability
  - Speaker built in to Hand Held Control Head
  - 10W and 15W External Speaker Options
  - 180° OLED display
- ▶ Machine-to-Machine Interface
  - Standard 12 pin and 9 pin serial RS232 connections
- ▶ On-board Computing and Applications
  - On-board Data storage
  - Application Builder <sup>2</sup>
  - Host Custom Applications <sup>2</sup>
- ▶ Over the Air Programming for configuration changes and software upgrades via WiFi or Cellular using Tait EnableFleet Configuration Management System

### Note:

<sup>1</sup> Requires GNSS antenna

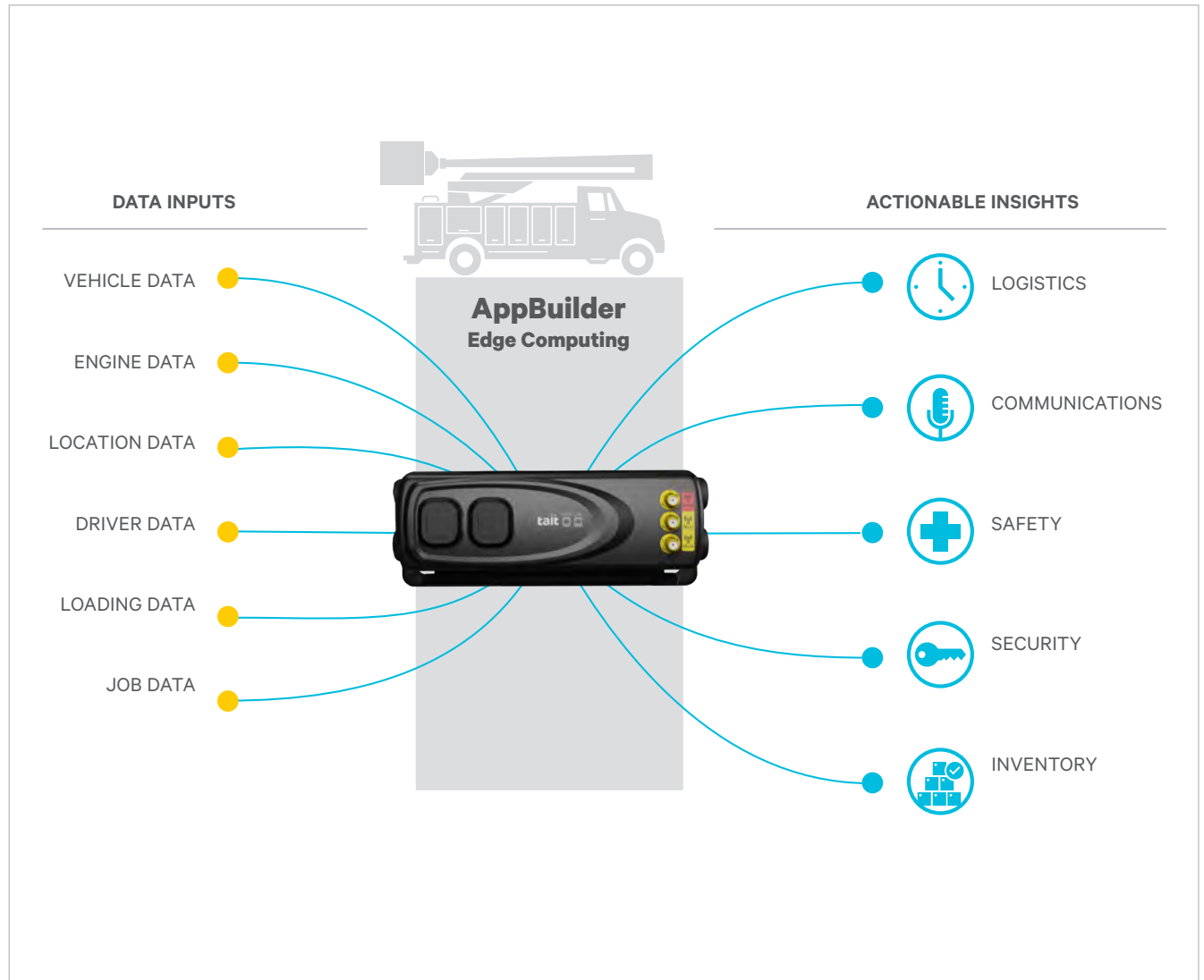
<sup>2</sup> Optional software feature, future release

## Workflow Automation

### Application Builder

Powered by Node-RED, the AppBuilder is designed to easily program and control TAIT AXIOM Mobile functions and interaction with the range of devices, networks and applications you have available. You can build your own custom applications to operate just the way you need to, or ask Tait to develop an application for you.

AppBuilder is currently supported on TMX450, future release for TMX550.



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Behaviors Interface



Workflows (Node) Interface

### TAIT AXIOM MOBILE APPBUILDER

### CREATE CUSTOM APPS FOR YOUR ORGANIZATION

A significant capability of TAIT AXIOM Mobile is provided by the Tait AppBuilder application. A flexible, purpose-designed tool, which allows channel partners, integrators and customers to easily design simple applications that are able to control radio functions and connectivity. It is essentially a “build your own application” tool.

Simply put, based on an event or chain of events, the TAIT AXIOM Mobile can be programmed to deliver an action(s) based on a workflow designed to deliver a customers required outcome.

Possible applications are vast, and examples include Weather Alerts for operator safety, Broadcast alerts such as lightning proximity, Electronic Signage Control management, Event Detection, Task Dispatching, MQTT Integration, Store and forward data collection, Vehicle blackbox, and many more!

AppBuilder is also being used for Alarm Handling, Device Control, Serial Port integration, Geo-location, and Geo-fencing applications.

You can create AppBuilder applications as behaviors or workflows that define how an interface or capability is used, and how its inputs and outputs are used. Behaviors and workflows can be executed side by side, and can be accessed via TAIT AXIOM Mobile web user interface.

### LICENSING STRUCTURE

- ■ **TAPP010 AppBuilder Run Time Licence** – 1 license per device needed to run workflows or behaviours. Custom applications created require x1 run time licence per each device the application is to run on. Flows or behaviours cannot be viewed or edited, which protects the developer’s work.
- ■ **TAPP020 AppBuilder Developer Licence Tier 1** – This licence allows applications to be developed based on Behaviours, and is limited to ‘Terminal only’ based features.
- ■ **TAPP030 AppBuilder Developer Licence Tier 2** – Removes all licensing limitations - This license allows applications to be developed using Behaviors and/or Workflows, allows Terminal based features and access to the Database module, SYSLOG Server and Network Capability module. This license also allows Workflows and Behaviors to execute like the Run-time License does, however the Workflows and Behaviors can be viewed and changed by anyone with access to the device.

AppBuilder is currently supported on TMX450, future release for TMX550.

## Highly Flexible Device Configuration

TAIT AXIOM Mobiles are designed for broadband connection agility:

- ▶ Cellular – 4G/LTE, 3G, 2G – Connect up to two cellular networks with ability to install two Nano SIM cards.  
TAIT AXIOM Mobile can be ordered as a package that includes Cellular, WiFi and Ethernet.

- ▶ WiFi – 2.5/5 GHz – Utilize your campus Wireless Local Area Network (WLAN).

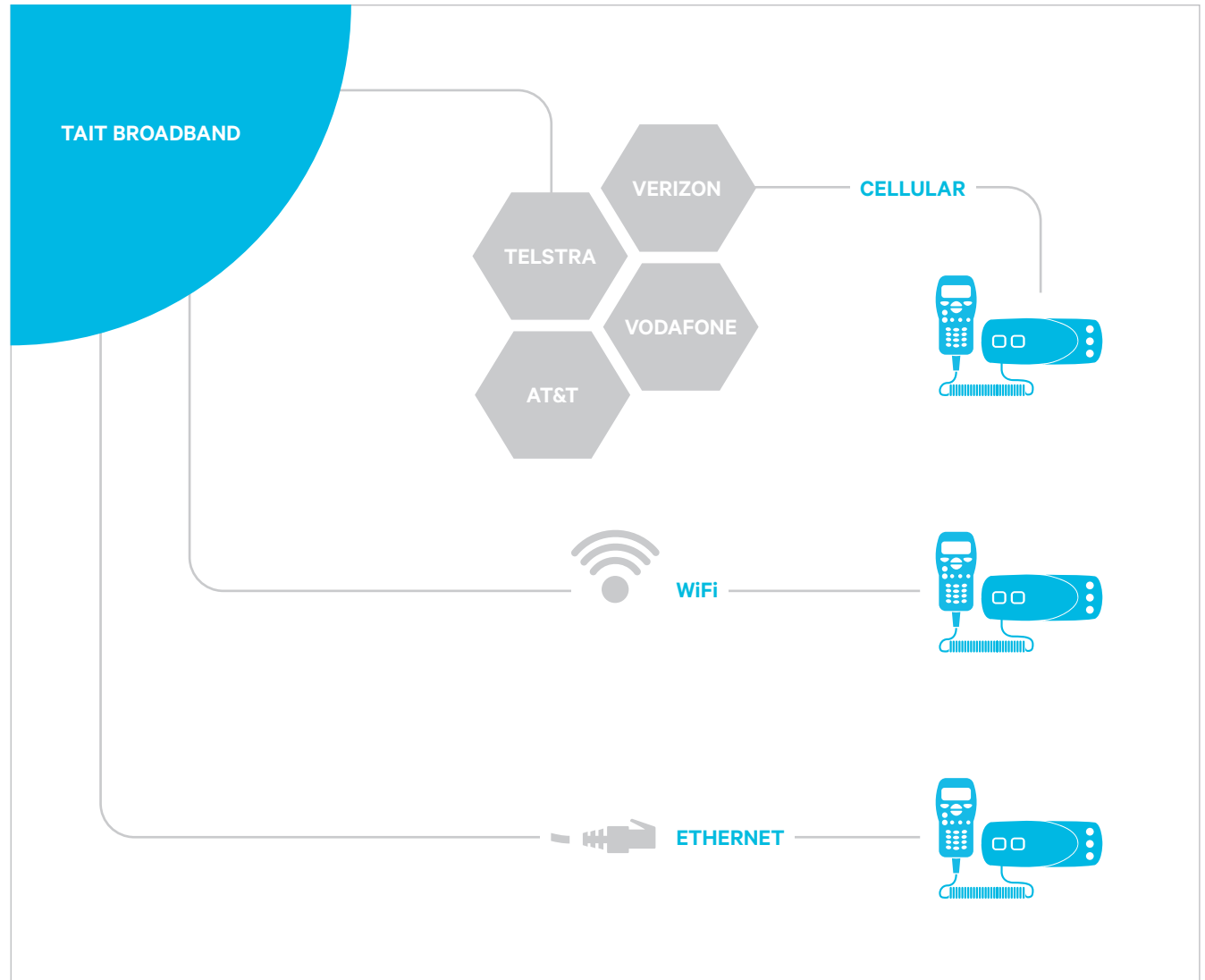
WiFi connections are very cost effective for communication in specific locations, but if used for continuous traffic, we recommend using a network separated from your usual IT network.

TAIT AXIOM Mobile can be ordered as a package that includes only WiFi and Ethernet (if cellular connectivity is not required).

- ▶ Ethernet – For desktop installations ethernet connection to your campus Local Area Network (LAN) is the simplest cost effective way to communicate without the need to install WiFi or Cellular antennas.

Ethernet connections are excellent, but your IT department must ensure that firewalls and other security provisions are cared for.

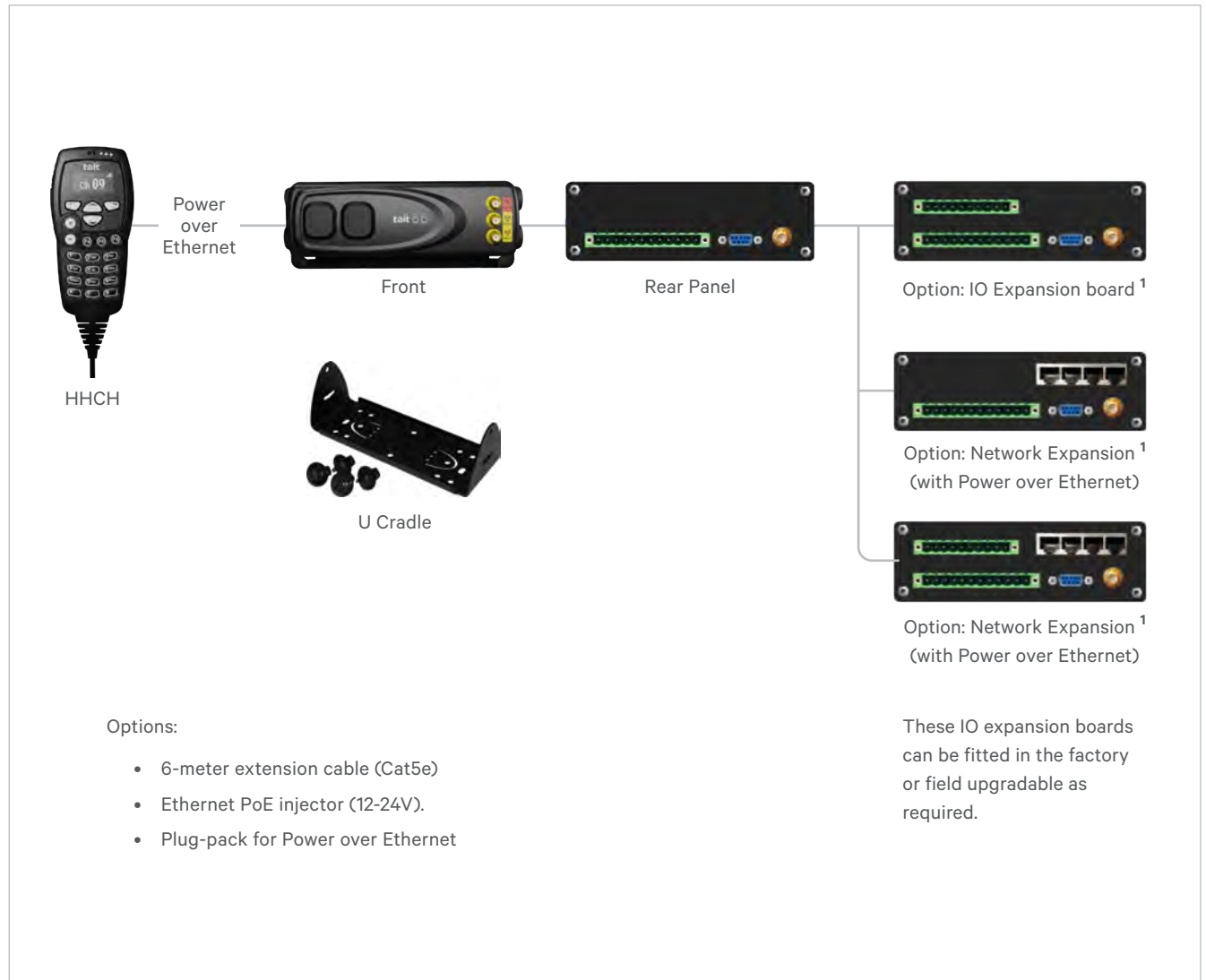
TAIT AXIOM Mobile can be ordered as a package that includes only Ethernet (if cellular or WiFi connectivity is not required).



## TMX550 Configuration Overview

### Additional Options

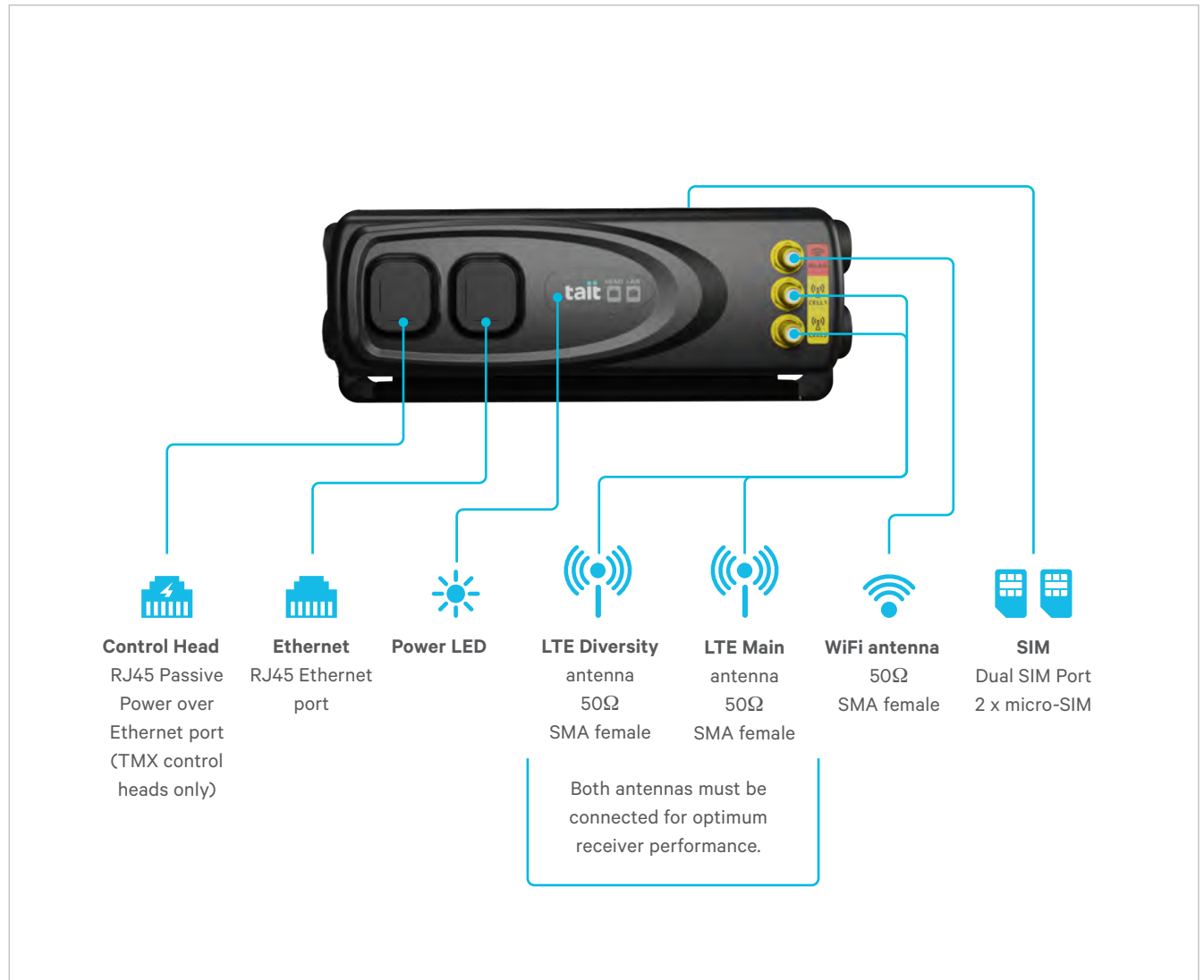
- ▶ Optional Handsfree Microphone
- ▶ Optional additional PTT button and Microphone
- ▶ Optional Remote Speaker
- ▶ Optional External Rugged Speaker
- ▶ Optional Ignition Sense Cable



<sup>1</sup> Future release

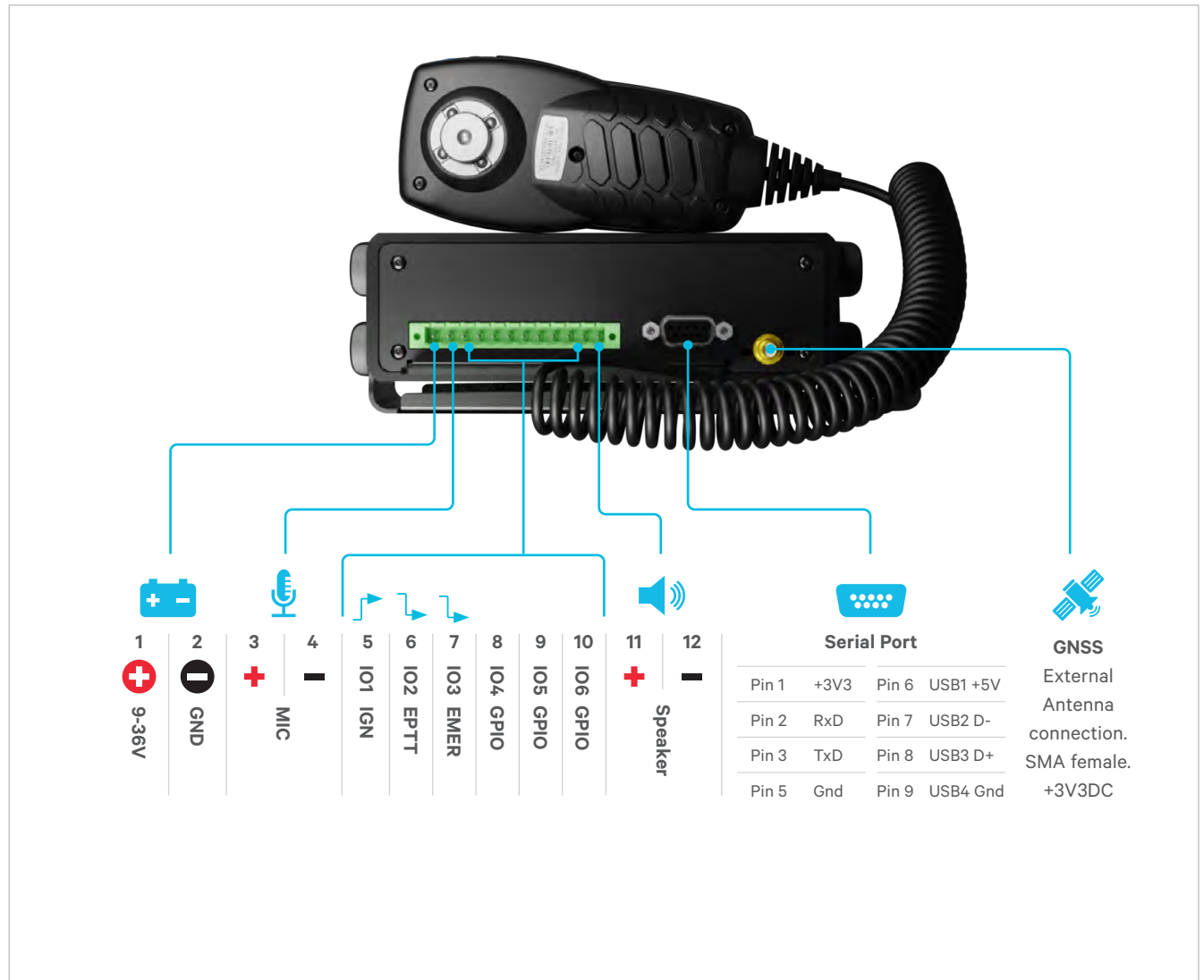
## TMX550 Front Interface

The three antenna ports are terminated with 500mm cables, right angle connects to help manage cabling.



## TMX550 Rear Interface










- ▶ Optional Handsfree Microphone
- ▶ Optional additional PTT button and Microphone
- ▶ Optional Remote Speaker
- ▶ Optional External Rugged Speaker
- ▶ Optional Ignition Sense Cable



## TMX550 Ordering Guide

There are 4 steps to configuring and ordering your TMX550. The following pages explore the details of the options available.

1. Platform Options
2. Additional Interface Options
3. Control Head Options
4. Ancillaries

1 SELECT A PLATFORM	2 SELECT ADDITIONAL INTERFACE OPTIONS	3 SELECT A CONTROL HEAD	4 SELECT ANCILLARIES
Ethernet Only  <b>TMX551</b>	4 port RJ45 Router (1 x PoE)  <b>TMX500-E4</b> <sup>1</sup>	Handheld Control Head  <b>TMXHH01</b>	Cables
Ethernet and WiFi  <b>TMX552</b>	10 pin Connector IO  <b>TMX550-E3</b> <sup>1</sup>		Speakers
Ethernet and WiFi, <b>Asia Pacific</b> LTE  <b>TMX553</b>	4 port RJ45 Router and 10 pin Connector IO  <b>TMX500-E5</b> <sup>1</sup>		Antennas
Ethernet and WiFi, <b>Euro</b> LTE  <b>TMX554</b>			
Ethernet and WiFi, <b>North America, FirstNet</b>  <b>TMX556</b>			

<sup>1</sup> Future release



## TMX550 Ordering Guide

### 1. Platform Options

2. Additional Interface Options
3. Control Head Options
4. Ancillaries

### TMX500



- Cellular Dual SIM, Dual Antennas WiFi 2/5GHz
- PoE (Power over Ethernet) Port
- Ethernet Port

#### Platform Features:

- Dual SIM
- 2 & 5 GHz WiFi
- Dual antennas for LTE
- PoE (Power over Ethernet) Port
- Ethernet Port

*Power, ignition leads and fuses are not supplied.*

*Control heads are always packed and sold separately.*

#### Ethernet Only

 **TMX551**

#### Ethernet and WiFi

 **TMX552**

#### Ethernet and WiFi, Asia Pacific LTE

 **TMX553**

Bands 1, 3, 5, 8, 28

#### Ethernet and WiFi, Euro LTE

 **TMX554**

Bands 1, 3, 7, 8, 20

#### TMX556 Ethernet and WiFi, North America, FirstNet

 **TMX556**

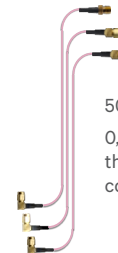
Bands 2, 4, 5, 12, 13, 14, 66, 71



Platform Body



U-Cradle & Screws to securely mount the platform device body



500mm right angle SMA  
0, 1 or 3 cables to suit the selected antenna configuration



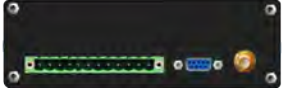


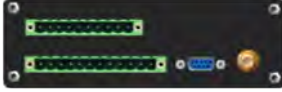

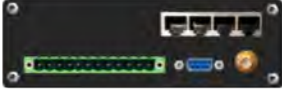



Quick User Guide & Safety and Compliance Guide



12 Pin Connector

## TMX550 Ordering Guide

1. Platform Options
2. Additional Interface Options
3. Control Head Options
4. Ancillaries

INTERFACE			
	<b>12 pin P12 – Most common connections &amp; IO</b>	Gnd, Batt, Ignition, External PTT, Emergency, Mic, Speaker, IO4,5,6	Standard
Standard Rear Interface	<b>Serial RS232 – External GPS and USB connection, Power out</b>	Serial: TxD, RxD, +5V USB D+,D- Gnd Vcc	Standard
	<b>Internal GNSS Receiver</b>  <b>TMX500-E1</b>	GPS Ant, +3V3	Standard
	<b>10 pin Connector IO</b>  <b>TMX500-E3</b>	ADC & DAC, CAN bus, Line In & Line Out, Accel / Gyro, GPIO	Option <sup>1</sup>
	<b>4 port RJ45 Router (1 x PoE)</b>  <b>TMX500-E4</b>	Router with PoE Port, 3 x Ethernet	Option <sup>1</sup>
	<b>4 port RJ45 Router and 10 pin Connector IO</b>  <b>TMX500-E5</b>		Option <sup>1</sup>

<sup>1</sup> Future Release


## TMX550 Ordering Guide


1. Platform Options
2. Additional Interface Options
- 3. Control Head Options**
4. Ancillaries

Hand Held Control Heads (HHCH) offer flexibility in installations where space is at a premium.

The mic can be hung wherever a hook can be mounted.

**HANDHELD CONTROL HEAD**



**Handheld Control Head**  **TMXHH01**

**Features:**

- OLed Alphanumeric display, auto dimmable, extraordinary viewing
- Speaker built in – for loud and clear Communications
- Keypad – (Channel Dialing, Driver Authentication)
- IP54 Ingress protection
- Curly Cord 900mm – stretches to approximately 1800mm
- Extendable with 6 meter extension (option)
- PoE Interface making extreme remoting easy
- Supplied with mic hook
- 5 Color Options for easier fleet identity

## Control Head Color Options

The TMX450 Large Control Head (LCH) and Hand Held Control Head (HHCH) are available in a range of colors for easy identification.

Options are available to personalize colors for each user or group's needs. This table shows the models available in each color.

- ▶ Choose colors that are high-contrast to the environment they will be used in
- ▶ Use different colors to identify talkgroups or teams
- ▶ Select colors to match company branding
- ▶ Use a range of colors to identify radios with different access rights, encryption, broadcast rights, etc






			
TMX450 LCH TMX450 HHCH TMX550 HHCH	TMX450 HHCH	TMX450 LCH TMX450 HHCH	TMX450 LCH TMX450 HHCH

## TMX550 Ordering Guide

1. Platform Options
2. Additional Interface Options
3. Control Head Options
4. Ancillaries



FEATURE	STANDARD EXTERNAL SPEAKER	RUGGED EXTERNAL SPEAKER
For use with with TMX450 25W mobile and TMX550	■ ■ T02-00004-0204	■ ■ T02-00004-0206
For use with with TMX450 30-50W mobile and TMX550	■ ■ T02-00004-0205	■ ■ T02-00004-0207
Power Output	10W	15W
Physical Dimensions	135mm x 75mm x 60mm (W x H x D) 5.3" x 3.0" x 2.4" (W x H x D)	150mm x 120mm x 60mm (W x H x D) 5.9" x 4.7" x 2.4" (W x H x D)
Environmental – Ingress Protection (IP) rating	None – only for installation inside vehicle cabins	Waterproof – IP67
Wire two speakers in parallel?	No	Yes

FEATURE	STANDARD SPEAKER	EXTERNAL SPEAKER OPTIONS
TMX450 Large Control Head	3W Internal to the Control Head	Standard 10W External Speaker 15W Rugged External Speaker
TMX450 Hand Held Control Head	10W External Speaker	Standard 10W External Speaker 15W Rugged External Speaker
TMX550 Hand Held Control Head	Internal to Control Head	Standard 10W External Speaker 15W Rugged External Speaker

## TMX550 Ordering Guide

1. Platform Options
2. Additional Interface Options
3. Control Head Options
4. Ancillaries

### Rugged External Speaker

This Rugged External Speaker delivers class-leading high quality audio, ideal for high noise environments such as emergency services, mining, and transport. Built for critical communication, this speaker has been tailored to enhance voice intelligibility, and has an optimized voice frequency response to cut through unwanted background noise. This speaker is mounted externally to the radio body, and can be mounted inside the vehicle cabin, or outside.



#### RUGGED EXTERNAL SPEAKER



TM Rugged External Speaker 15W for 25W Radio ■ ■ **T02-00004-0206**

TM Rugged External Speaker 15W for 30-50W Radio ■ ■ **T02-00004-0207**

#### Features:

- 15W power output – delivers high quality intelligible audio, perfect for work in noisy environments.
- Built for critical communication
  - Tait Tough glass-fibre reinforced nylon housing and strong metal bracket, perfect for environments with high vibration
  - IP67 Waterproof and dustproof rating
  - Suitable for exterior mounting, designed to withstand the elements
  - Water shedding grille
  - Twin neodymium magnets for high efficiency and loud audio
  - Max input 20W, fully compatible with Tait mobile radios
  - 2 x Rugged External Speakers can be installed in parallel (higher impedance prevents overloading the output of Tait mobile radios)
- Speaker angle can be easily adjusted then fixed in place to prevent rotation
- Speaker can be cleaned with a damp cloth and can withstand household detergents
- Easy installation
  - Package includes a 5m extension cable with a quick connector at each end

**Size:** W 150mm (5.9"), H 120mm (4.7"), D 60mm (2.4")

**Weight:** 560g

**Operating temperature:** -30°C to +80°C

#### For use with:

TM9300, TM9400, TM8000, TM9100, TAIT AXIOM Mobile

## TMX550 Ordering Guide

1. Platform Options
2. Additional Interface Options
3. Control Head Options
4. Ancillaries

### Speakers

The right speakers can help you do your job more safely and effectively. If your team operates in a particularly noisy environment, there are a range of speaker options to make sure that important voice calls and alert tones can be heard loud and clear inside the vehicle, or outside.

#### EXTERNAL SPEAKER



TM External Speaker 10W for 25W Radio

 **T02-00004-0204**

TM External Speaker 10W for 30-50W Radio

 **T02-00004-0205**

#### Features:

- 10W Power Output
- This speaker is mounted externally to the radio body, and can be mounted inside the vehicle cabin (not intended for outdoor use)
- Size: 135mm (5.3") x 75mm (3.0") x 60mm (2.4") (W x H x D)

#### For use with:

TM9300, TM9400, TM8000, TM9100, TAIT AXIOM Mobile

#### HORN SPEAKER KIT



TM Horn Speaker Kit 112dB SPL for 25W Radio

 **T02-00004-0201**

TM Horn Speaker Kit 112dB SPL for 30-50W Radio

 **T02-00004-0202**

#### Features:

- Can be mounted externally on the vehicle – allows radio traffic to be heard when personnel are outside the vehicle
- Connects to the radio's speaker out terminals
- Supplied with a 20ft (6m) extension cable and a flying lead

#### For use with:

TM9300, TM9400, TM8000, TM9100, TAIT AXIOM Mobile









*Note: The Horn Speaker and External Speaker cannot be used simultaneously. If it is desired to switch audio between the Horn Speaker and a Remote Speaker, use a double-pole double-throw switch with a current rating  $\geq 2A$ .*

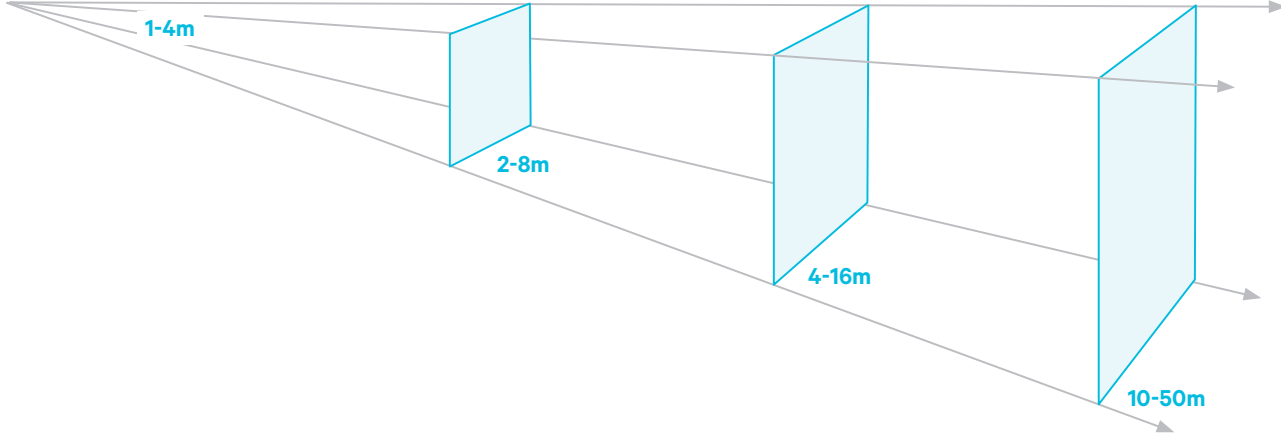
## TMX550 Ordering Guide

1. Platform Options
2. Additional Interface Options
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### Speakers (continued)

The right speakers can help you do your job more safely and effectively. If your team operates in a particularly noisy environment, there are a range of speaker options to make sure that important voice calls and alert tones can be heard loud and clear inside the vehicle, or outside.

			
<b>HandHeld Control Head</b> Max Rated Power 3W	<b>TM External Speaker</b> Max Power 10W 1 Watt @ 1 Meter 88.5dB <sub>SPL</sub> Level at Max Power 99.5dB <sub>SPL</sub>	<b>TM Rugged External Speaker</b> Max Power 15W 1 Watt @ 1 Meter 94dB <sub>SPL</sub> Level at Max Power 105.8dB <sub>SPL</sub>	<b>Horn Speaker Kit</b> Max Power 10W 1 Watt @ 1 Meter 112dB <sub>SPL</sub> Level at Max Power 122dB <sub>SPL</sub>
 <b>TMXHH01</b>	 <b>T02-00004-0204</b>	 <b>T02-00004-0206</b>	 <b>T02-00004-0201</b>

The diagram illustrates the coverage areas for different speaker types. It shows four trapezoidal shapes representing the sound field of a speaker at various distances. The ranges are labeled as follows:

- 1-4m:** The narrowest coverage area, representing the HandHeld Control Head.
- 2-8m:** A wider coverage area, representing the TM External Speaker.
- 4-16m:** An even wider coverage area, representing the TM Rugged External Speaker.
- 10-50m:** The widest coverage area, representing the Horn Speaker Kit.

## TMX550 Ordering Guide

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### Microphones

Remote Microphones can be installed for easy use while driving, enabling the driver to keep their hands on the steering wheel without having to reach for a microphone and hold it to their mouth while driving.

Remote microphones are installed in proximity to the drivers normal head position.

- ▶ Handsfree microphone for use with radios programmed for voice operation (VOX) that will transmit when voice is detected
- ▶ Remote PTT + microphone installs a PTT button on the steering wheel or within easy reach.

#### HANDSFREE MICROPHONE



#### TM Handsfree Microphone TDMA

 **T02-00005-ADAA**

##### Features:

- Uses a remote electret microphone to replace the usual rugged microphone. The rugged microphone can still be used and provide hookswitch operation, if required
- Can be used for voice-operated transmission (VOX), if supported by the radio, or combined with an alternative PTT switch
- Connects to the radio's auxiliary connector

##### For use with:

TM9300, TM9400, TM8000, TM9100, TMX450

#### HANDSFREE MICROPHONE + REMOTE PTT



Handsfree Microphone



Remote PTT

#### TM Remote PTT + Microphone TDMA

 **T02-00005-ADCA**

##### Features:

- Uses a remote electret microphone to replace the usual rugged microphone. The rugged microphone can still be used and provide hookswitch operation, if required
- Remote PTT button can be placed on a steering wheel or within easy reach
- Connects to the radio's auxiliary connector

##### For use with:

TM9300, TM9400, TM8000, TM9100, TMX450



## TMX550 Ordering Guide

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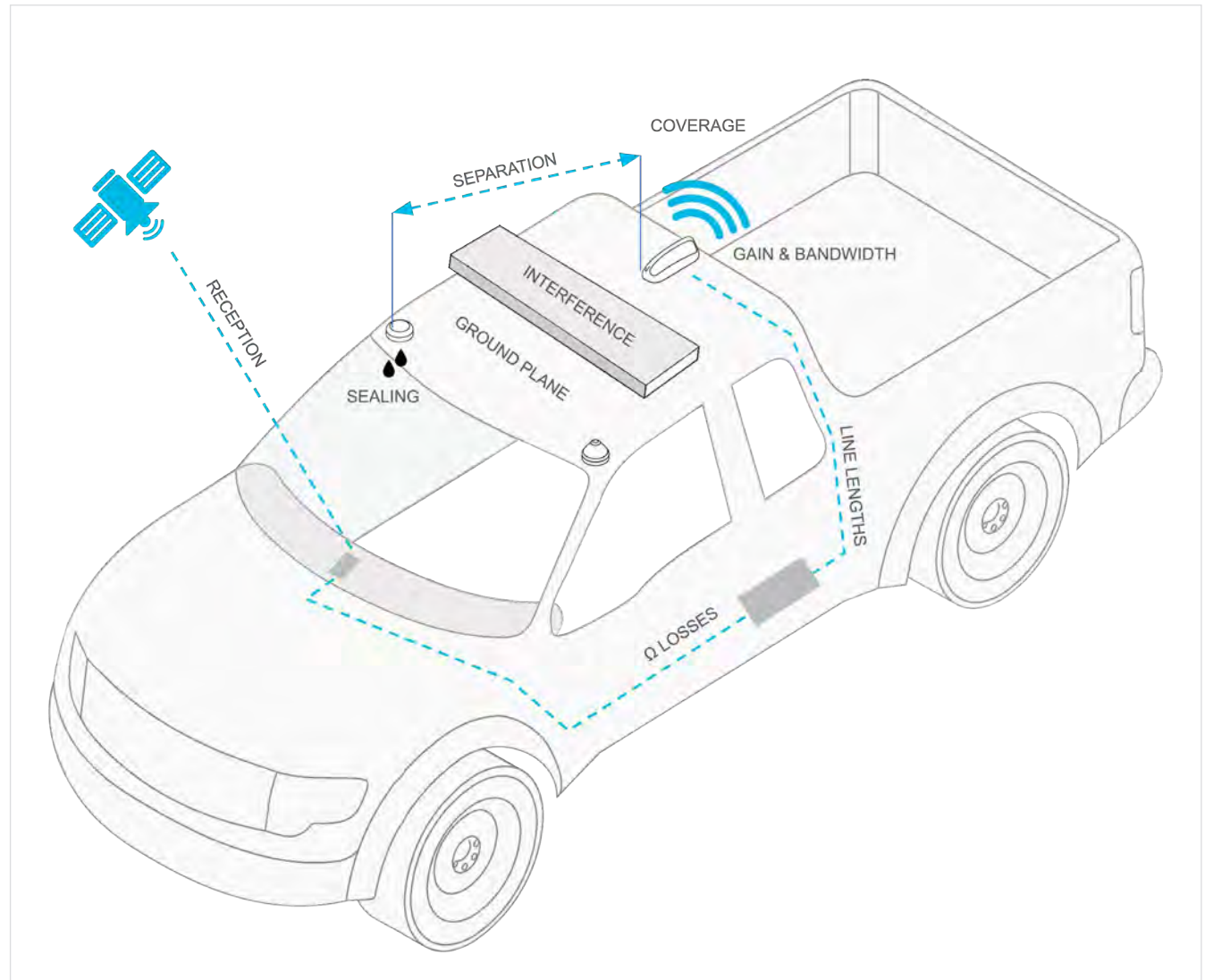
### Antennas

The most important consideration during the installation of a TAIT AXIOM Mobile solution is the selection and placement of antennas.

Antennas can be placed on the dash, on windows or on the vehicle roof. The performance, costs, and the impact on the vehicle differ with every solution. The spacing of antennas and the appropriate use of inline filters must be considered to ensure that one part of the system does not interfere with other parts.

Tait offer a number of antenna, filter and cabling components to help with these installations.

- ▶ Good antenna systems will make or break your system.
- ▶ Things to be considered for vehicle antenna design:
  - ▶ Antenna gain and bandwidth.
  - ▶ Antenna cable losses and length.
  - ▶ Antenna ground plane.
  - ▶ Device position with respect to antenna locations.
  - ▶ Device position with respect to power source.
  - ▶ Antenna relative position in multi-antenna installations, blocking and intermod.
- ▶ Vehicle – holes in roof, sealing.
- ▶ Coverage geography and performance demands.
- ▶ Physical interference – Rooftop ladders, materials, lights etc.



## TMX550 Ordering Guide

1. Platform Options
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### Antennas (continued)

#### MULTIBEARER ANTENNA



Multi-Bearer

KIT UVe Ant-Multi-Element Ext No Adptr

■ ■ T05-00031-0003

#### Features:

- **Multi-Bearer Antenna** are compliant for the WiFi and Cellular TAIT AXIOM Mobile. These antenna kits contain an antenna element and cable for 2.4GHz and 5GHz WiFi bands, and an additional antenna element and cables (with RX diversity, and downlink MIMO support) for cellular.

#### STANDARD



WiFi Only

Antenna

■ ■ T05-00031-0004

#### Features:

- **WiFi Only Antenna** are suitable where only WiFi is going to be utilized on TAIT AXIOM Mobile. Increases WiFi coverage that can be achieved compared with the internal WiFi antenna. This antenna operates in both the 2.4GHz and 5GHz bands.



[www.taitcommunications.com](http://www.taitcommunications.com)