

Version 2.0 April 2017

## TP9361 Portable Radios, Intrinsically Safe – DMR, Analog

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- ▶ Portable Radios – Intrinsically Safe
- ▶ Options & Accessories



## Designed for maximum safety in the field and enhanced usability

Tait DMR is a highly reliable, modern, digital radio solution that is designed for mission critical environments. Tait DMR offers a digital communications solution based on the DMR Tier 3 trunking standard.

The TP9300 IS portables offer trunked DMR operation as well as full MPT 1327, and conventional FM functionality in one device. It can roam between DMR and MPT networks. The portable has inbuilt GPS and IP67 protection.

### Key Features:

- ▶ Intrinsically Safe portable designed to meet stringent international safety standards
- ▶ Future proof multi-mode portable (DMR, MPT 1327 and conventional analog FM)
- ▶ DMR standards compliance providing choice and interoperability
- ▶ Engineered for demanding environments with IP67 rating
- ▶ OTAP – (Over The Air Programming)
- ▶ Supporting worker safety with man down alerts and built in GPS positioning
- ▶ Text messaging and status calls to enhance your communications environment
- ▶ Crystal-clear audio quality
- ▶ Available in a range of models and configurable to suit your application
- ▶ Only available in IS blue

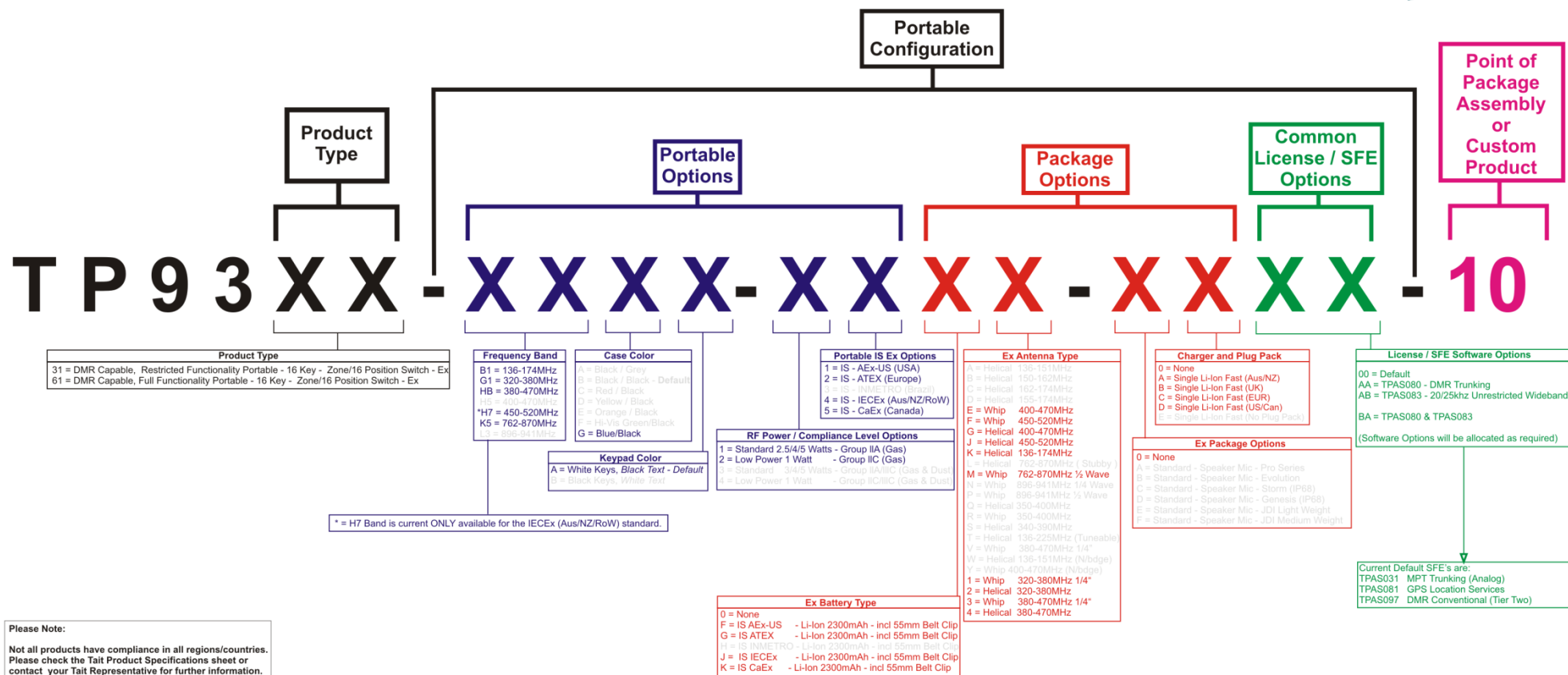
#### Note:

- ▶ Not all products have compliance in all regions/countries. Please check the Tait Product Specification sheet or contact your Tait Representative for further information.
- ▶ A non-encrypted version (TP9331) is also available. Please contact your Tait Representative for further information.



# TP9300 Ex

## Product Codes for Commercial Packages



**Please Note:**  
Not all products have compliance in all regions/countries.  
Please check the Tait Product Specifications sheet or contact your Tait Representative for further information.

### Example of: TP9361-K5GA-12GM-0CAA-10

Product Type  
TP9361 = Ex DMR Portable Crypto Capable with 16 Button Keypad (T03-22112-KBDA) TP93 Ex FullCrypto 762-870MHz 16Key 16 Select End Stop Channel Zone Knob GPS Blue WHTK

**Portable Configuration**  
K5 = 762-870MHz  
G = Blue/Black  
A = White Key/Black Text  
1 = Standard (IIA/Gas)  
2 = ATEX

**Frequency Band**  
Case Color  
Keypad Color  
Compliance Level Option  
IS - ATEX (Europe Standard)

**Package Options**  
G = Li-Ion 2300mAh - Belt Clip  
M = Whip 762-870MHz  
0 = None  
C = Single Li-Ion Fast (EUR)

**Battery Type**  
Antenna Type  
Microphone / Headset Options  
Charger and Plug Pack Type

(T03-22001-ABAA) (TPA-AN-022) TP9300 Battery - EXIS ATEX - Li-Ion 2300mAh c/w Belt Clip TP8/TP9 Antenna 762-870MHz Whip 1/2

(T03-00012-AAAA) (009-00016-00) TP8/TP9 Single Fast Charger Li-Ion Plug Pack EUR

**Common License / SFE Options**  
AA = DMR Trunking

**Point of Package Assembly or Custom Product**  
10 = TEL Built Package Assembly Point or CustomProduct



## TP9361 - 16Key

### Standard package includes:

- ▶ TP9360 Radio
- ▶ Antenna
- ▶ Li-Ion IS Battery
- ▶ Belt Clip
- ▶ Manual
- ▶ Single IS Charger and Plug Pack

### Options:

- ▶ IS Ex Compliance option
  - Choose the IS Compliance from the TP9300 Ex Portable configuration table on page 3
- ▶ Battery
  - Choose the Battery from the TP9300 Ex Portable configuration table on page 3
- ▶ Charger & Plug Pack
  - Choose the Charger & Plug Pack from the TP9300 Ex Portable configuration table on page 3

### Features:

- ▶ DMR Tier 3 Trunking
- ▶ LCD display
- ▶ Alphanumeric keypad
- ▶ Internal GPS
- ▶ Man Down
- ▶ Lone Worker
- ▶ IP67 Certified (1 metre water for 30 minutes)
- ▶ MIL-Standard 80C, D, E, F & G
- ▶ Programmable emergency key
- ▶ 3 Programmable function keys
- ▶ Side mounted accessory connector
- ▶ Two-shot moulding for extra durability



### Note:

- ▶ Not all products have compliance in all regions/countries. Please check the Tait Product Specification sheet or contact your Tait Representative for further information.
- ▶ For more configuration options, please refer to the TP9300 Portable configuration table on page 3

Frequency Code	Frequency Band	TP9361 16Key
B1	136-174MHz	✓
G1	320-380MHz	✓
HB	380-470MHz	✓
H7 <sup>1</sup>	450-520MHz	✓
K5	762-870MHz	✓

Note: <sup>1</sup> - IECEx + ATEX only

## TP9300 - Features Comparison

OPERATION MODE	DMR Tier 2 Conventional	DMR Tier 3 Trunking
Radio Network Features	TP9361	TP9361
Trunked Channels		1000
Conventional Channels	1500	
Zones	26	Max.1000
Scan Groups	300	
Advanced hunt routines		✓
Manual site select		✓
Multiple network capability		✓
Repeater talkaround		
Digital Simplex	✓	
Transmit Lockout	✓	✓
Transmit Low Power	✓	✓
Transmit Timer	✓	✓
Voting	✓	
Scanning	✓	
CTCSS (Continuous Tone Controlled Squelch System)		
CTCSS on conventional channel (Trunked)		
CTCSS on traffic channel (Trunked)		
DCS (Digitally Coded Squelch)		
MDC1200 (En/Decode)		
Multiple SELCALL Networks		
Programmable Group Tone		
Programmable User Defined SELCALL Tone Set		
SELCALL (Selective calling)		
Type 99 Decode		
Call types		
Workgroups		Max.1000
Talk Groups	TBC	1500
Broadcast group call		✓
Conference group call	✓	✓
Group Calls	✓	✓
Individual Calls	✓	✓
Interfleet Calls		✓
PABX calls (Private Automatic Branch Exchange)		✓
Preset Calls		✓
Priority Call	✓	✓

OPERATION MODE	DMR Tier 2 Conventional	DMR Tier 3 Trunking
Call types - continued	TP9361	TP9361
Priority Call - 3 Level Priority		✓
PSTN calls (Public Switched Telephone Network)		✓
Status messages	✓	✓
Automatic call back		✓
Dynamic regrouping		✓
Join busy group	✓	✓
Monitor Function		✓
Nuisance Delete from group	✓	✓
Call Alerts	✓	✓
OACSU (Off Air Call Setup)	✓	
Radio Check.	✓	✓
SDM (Short Data Message)		✓
All Identity Call	✓	✓
PATCS Push and Talk Call Setup	✓	
Data		
CCDI (Computer Controlled Data Interface)	✓	
FFSK		
Radio Access Protocol (RAP) (Map27)		✓
Packet Data	✓	✓
Safety and Security		
Internal GPS	✓	✓
Transmit GPS During Voice Calls		✓
GPS over SDM		✓
Lone Worker	✓	✓
Man Down	✓	✓
Programmable Emergency Key	✓	✓
Emergency Call	✓	✓
Stun & Revive (Remote)	✓	✓
Remote monitor (enables Microphone and Transmitter remotely)	✓	
Encryption, Single key 56 Bit DES.	✓	✓
Voice Inversion Scrambler		
User Interface		
LCD Display	✓	✓
4 Programmable Function Keys - including Emergency Key	✓	✓
Side-tone generation		
Alphanumeric Presets		100
Programmable Channel Selector	✓	✓

OPERATION MODE	DMR Tier 2 Conventional	DMR Tier 3 Trunking
User Interface - continued	TP9361	TP9361
Programmable 3 way Zone Switch (optional)	✓	✓
Alphanumeric Labels	✓	✓
ANI (Automatic Number Identification)	✓	✓
Audible Indicator Control	✓	✓
Auto Noise Reduction (ANR)		
Auto Quiet Timer		
Backlight Control	✓	✓
Busy Channel Lockout (Also known as Transmit Inhibit)	✓	
Call Diversion		✓
Call in absence indicator		✓
Call Queuing		✓
Call time limit display		✓
Caller ID	✓	✓
Channel Presets		✓
Deferred Calling		
DTMF (Dual Tone Multi Frequency) (Encode)		
Key Beeps / Confidence Tones / Audible Indicators	✓	✓
Key Lock	✓	✓
LCD Contrast Adjust	✓	✓
Network name		✓
Programmable Group Membership	✓	
PTT Redial		✓
Squelch override		
Status labels	✓	✓
Talker ID	✓	✓
Trunked Channel Display		✓
Go ahead tone	✓	✓
Physical Features		
IP67 Certified	✓	✓
Military Standard 810 C, D, E, F & G	✓	✓
Side Mounted Accessories Connector	✓	✓
Two-shot Moulded Construction	✓	✓



## Software Licenses

ITEM CODE	DESCRIPTION
TPAS080	SFE Key - DMR Trunking (Digital) (93)
TPAS090	SFE Key - Data Services (93)
TPAS094	SFE Key - Unrestricted Dist. DES Encryption (9335/9340)
TPAS095	SFE Key – DES Encryption (9355 / 9360)
TPAS083	SFE Key - 20/25khz Unrestricted Wideband (TP91/93/94) <i>Note: Required only if Wide Band (WB) is being added to a Narrow Band (NB) radio. Not available to USA customers</i>

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your Tait Representative for further details



## Batteries & Chargers

ITEM CODE	DESCRIPTION
<b>Batteries</b>	
T03-22001-AAAA	TP93/94 Battery – ExIS IIA Li-Ion 2300mAh AEx
T03-22001-AACA	TP93/94 Battery – ExIS IIC Li-Ion 2300mAh AEx
T03-22001-ABAA	TP93/94 Battery – ExIS IIA Li-Ion 2300mAh ATEX
T03-22001-ABCA	TP93/94 Battery – ExIS IIC Li-Ion 2300mAh ATEX
T03-22001-ADAA	TP93/94 Battery – ExIS IIA Li-Ion 2300mAh IECEEx
T03-22001-ADCA	TP93/94 Battery – ExIS IIC Li-Ion 2300mAh IECEEx
T03-22001-AEAA	TP93/94 Battery – ExIS IIA Li-Ion 2300mAh CaEx
T03-22001-AECA	TP93/94 Battery – ExIS IIC Li-Ion 2300mAh CaEx
<b>Battery Belt Clip</b>	
TPA-CA-201	TP8/9 Belt Clip 55mm
<b>Chargers</b>	
T03-22011-BABA	TP93/94 Single Charger AEx/CaEx Plug Pack
T03-22011-BDCA	TP93/94 Single Charger IECEEx/ATEX Plug Pack EU
T03-22011-BDDA	TP93/94 Single Charger IECEEx/ATEX Plug Pack UK
T03-22011-BDFA	TP93/94 Single Charger IECEEx/ATEX Plug Pack ANZ
T03-22011-CABA	TP93/94 Ex 6-Way Charger AEx/CaEx US Cable
T03-22011-CDCA	TP93/94 Ex 6-Way Charger IECEEx+ATEX EU Cable
T03-22011-CDDA	TP93/94 Ex 6-Way Charger IECEEx+ATEX UK Cable
T03-22011-CDFA	TP93/94 Ex 6-Way Charger IECEEx+ATEX ANZ Cable
<b>Plug Packs</b>	
009-00014-01	PSU Plug Pack 12V 2A Aus/NZ
009-00015-01	PSU Plug Pack 12V 2A UK
009-00016-01	PSU Plug Pack 12V 2A EU
009-00017-01	PSU Plug Pack 12V 2A US

### T03-22001-A\*AA

TP93/94 Battery – ExIS IIA Li-Ion  
2300mAh

### TPA-CA-201

TP8/9 Belt Clip  
55mm

### T03-22011-B\*\*A

TP93/94 Charger Single Desktop

### T03-22011-C\*\*A

TP93/94 Ex 6-Way Charger

### T03-22001-A\*CA

TP93/94 Battery – ExIS IIC Li-Ion  
2300mAh



## Audio Accessories

Only the listed IS approved accessories shall be used with TP9361 IS radios. Use of any other accessory voids the IS approval.

Please contact your Tait customer support representative if you require an audio accessory that is not shown here

ITEM CODE	DESCRIPTION
<b>Speaker Microphone</b>	
T03-22008-AAAA	TP93/94 Ex Speaker Microphone Storm IP68 Emergency-Button 2.5mm-Jack
<b>Ear Piece</b>	
T03-22008-CAAA	TP93/94 Ex Earphone In-Ear 2.5mm
<b>Headsets</b>	
T03-22008-BAAA	TP93/94 Ex Headset Heavy-Duty Overhead
T03-22008-BABA	TP93/94 Ex Headset Heavy-Duty Behind-Head
<b>Replacement Part</b>	
TPA-AA-214	Earpiece Quick Disconnect Acoustic Tube – Set of 5



## Carry Accessories

ITEM CODE	DESCRIPTION	
Carry Cases		
T03-22007-0001	TP93/94 Ex Carry Case Heavy Duty Leather D-Stud Belt Loop	
T03-22007-0002	TP93/94 Ex Carry Case Heavy Duty Leather Spring Clip	
T03-22007-0003	TP93/94 Ex Carry Case Heavy Duty Leather Belt Loop	
T03-22007-0004	TP93/94 Ex Battery Carry Case Heavy Duty Leather	
T03-22007-0005	TP93/94 Ex Battery Carry Case Heavy Duty Leather D-Stud Belt Loop	
T03-22007-0006	TP93/94 Ex Battery Carry Case Heavy Duty Leather Spring Clip	
T03-22007-0007	TP93/94 Ex Battery Carry Case Heavy Duty Leather Belt Loop	
Accessories		
TPA-CA-201	TP8/9 Belt Clip 55mm	
TPA-CA-208	TP8/9 Belt Clip Adaptor for 55mm Belt Clip	Requires TPA-CA-201
T03-00038-0022	TP8/9 Belt Loop For D-Stud 55mm	
T03-00038-0023	TP8/9 Spring Clip For D-Stud 40mm	

**Note:** A Battery Carry Case must be used to carry a spare battery into a Hazardous Area.

**T03-00038-0022**  
Belt Loop For D-Stud 55mm



**T03-00038-0023**  
Spring Clip For D- Stud 40mm



**TPA-CA-208**  
Adaptor for 55mm Belt Clip



## Carry Accessories

**T03-22007-0001**

Ex Carry Case Heavy  
Duty Leather D-Stud Belt  
Loop



**T03-22007-0004**

Ex Battery Carry Case  
Heavy Duty Leather



**T03-22007-0002**

Ex Carry Case Heavy  
Duty Leather Spring Clip



**T03-22007-0005**

Ex Battery Carry Case  
Heavy Duty Leather D-  
Stud Belt Loop



**T03-22007-0003**

Ex Carry Case Heavy  
Duty Leather Belt Loop



**T03-22007-0006**

Ex Battery Carry Case  
Heavy Duty Leather  
Spring Clip



**T03-22007-0007**

Ex Battery Carry Case  
Heavy Duty Leather Belt  
Loop



## Antennas

ITEM CODE	DESCRIPTION
<b>Antennas</b>	
TPA-AN-011	TP8/9 Antenna 400-470MHz Whip
TPA-AN-012 <sup>1</sup>	TP8/9 Ant 450-520MHz whip
TPA-AN-013	TP8/9 Antenna 400-470MHz Helical
TPA-AN-015	TP8/9 Ant 450-520MHz Helical
TPA-AN-022	TP8/9 Antenna 762-870MHz ½ Wave Whip
TPA-AN-034	TP8/9 Antenna 136-174MHz Helical
TPA-AN-035	TP93/94 Ant:320-380MHz 1/4 wave whip
TPA-AN-036	TP93/94 Ant:320-380MHz Helical
TPA-AN-037	TP93/94 Antenna 380-470MHz 1/4 wave whip
TPA-AN-038	TP93/94 Antenna 380-470MHz Helical

Note: <sup>1</sup> - Not approved for use with carry case T03-22007-0003 in FCC jurisdictions.

## Programming Leads

ITEM CODE <sup>2</sup>	DESCRIPTION
T03-22009-AAAA	TP93/94 Programming Adaptor AEx/ CaEx
T03-22009-ADAA	TP93/94 Programming Adaptor IECEX / ATEX

Note: <sup>2</sup> - Only IS programming adapters can be used when programming Intrinsically Safe Portables, also required for loading encryption keys via Tait Keyfill Device.