

Version 3.2 November 2018

TP8100 Portable Radios – Analog

- ▶ **Portable Radio**
- ▶ **Options & Accessories**



PREFACE

Please read before using this product catalog.

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Scope:

This product catalog outlines the Tait product range.

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:

All sales and quotations for Tait products and services are subject to the current version of the Tait Standard Terms and Conditions for Supply. For a copy of the Terms and Conditions please contact your Tait representative

Confidentiality:

This product catalog contains information which is confidential and is solely for the use of the intended recipient. If you are not the intended recipient, be aware that any review, disclosure, copying, distribution, or use of the contents of this catalog is strictly prohibited. If you have received this in error, please destroy it and notify us immediately notices@taitradio.com

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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.

Rugged • Reliable • Waterproof

Uncompromised build quality and sleek mechanical design make this reliable and waterproof portable radio ideal for situations when only the toughest will do. The TP8100 is sure to suit as a standalone portable or within a wider system solution.



Frequency Band	TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1 136-174	✓	✓	✓	✓	✓
C0 174-225	✓	✓	✓	✓	✓
G2 350-400	✓	✓	✓	✓	✓
H5 400-470	✓	✓	✓	✓	✓
H6 450-530	✓	✓	✓	✓	✓
K6 806-870 ¹	✓	✓	✓	✓	✓
L3 896-941 ¹	✓	✓	✓	✓	✓

¹ - NON-ETSI Approved

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:88 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:04 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TPXXXX IS Accessories page.

For all enquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs.

Package Configurations

Use the options below to complete the TP8100 item codes shown on pages 5 to 14. For more configuration options, please refer to the TP8100 Portable configuration table on page 4.

For Example:

Replace characters in the item code to reflect the chosen options.

STANDARD PACKAGE	
TP8110-FFCY-XZ	Package with standard black front panel
TP8110W-FFCY-XZ	Package with colored front panel (red, yellow & orange)
NON-INCENDIVE PACKAGE	
TP8110-FFGY-XZ	Non-Incendive Package with standard black front panel
TP8110W-FFGY-XZ	Non-Incendive Package with colored front panel (red, yellow & orange)

Where:

Frequency Options (FF):

- B1 = 136-174MHz
- C0 = 174-225MHz
- G2 = 350-400MHz¹
- H5 = 400-470MHz
- H6 = 450-530MHz
- K6 = 806-870MHz¹
- L3 = 896-941MHz¹

¹ - NON-ETSI Approved

To order:

replace FF with the required frequency code

Where:

Package Options (X):

- 0 = None
- 2 = Man Down
- 3 = Encryption
- 7 = Non-Incendive (NI)
- 8 = Non-Incendive (NI) + Man Down
- 9 = Non-Incendive (NI) + Encryption

To order:

▶ replace X with the required option

Where:

Charger Plug Pack Options (Z):

- A = ANZ
- B = UK
- C = EUR
- D = US/CAD

To order:

▶ replace Z with the required option

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.
- ▶ Please contact your customer support representative for color availability.
- ▶ Please see pages 15-17 for full list of TP8100 radio features

Where:

Antenna Options (Y):

- A = 136-151MHz 17.0cm (6 3/4 in) Helical
- B = 150-162MHz 15.4cm (6 1/8 in) Helical
- C = 162-174MHz 14.7cm (5 3/4 in) Helical
- E = 400-470MHz 15.5cm (6 1/8 in) Whip
- F = 450-520MHz 14.0cm (5 1/2 in) Whip
- G = 400-470MHz 8.8cm (3 1/2 in) Helical
- J = 450-520MHz 7.6cm (3in) Helical
- L = 762-870MHz Helical (Stubby)
- M = 762-870MHz 1/2 in Whip
- N = 896-941MHz 1/4 in Whip
- P = 896-941MHz (1/2 in) Whip
- Q = 350-400MHz Helical
- R = 350-400MHz Whip
- S = 340-390MHz Helical
- T = 136-225MHz Tuneable
- V = 380-420MHz Whip
- W = 136-151MHz no Badge Helical
- Y = 400-470MHz no Badge Whip

To order:

▶ replace Y with the required frequency code

Where:

Front Panel Color Options (W):

- A = Red
- B = Yellow
- C = Orange

To order:

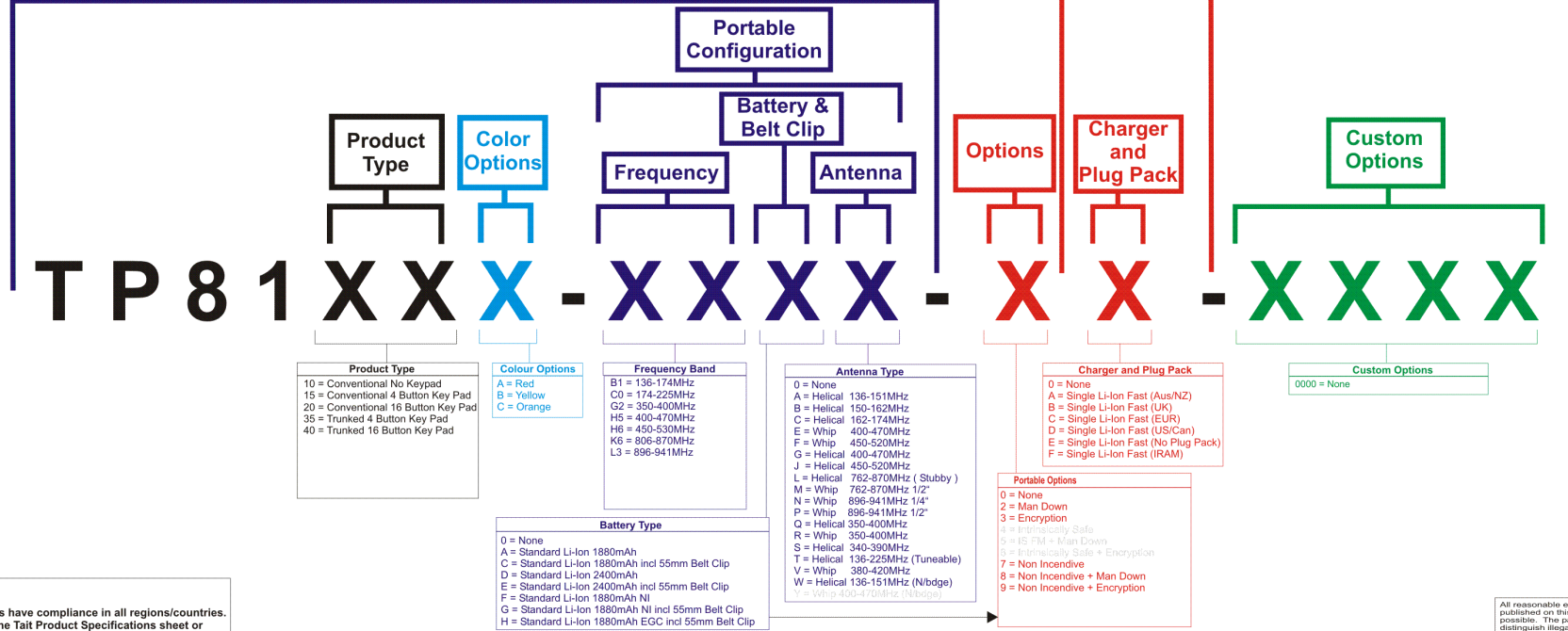
▶ replace W with the required option

Custom Number For TP8100 Ordering:- Radio Body and/or Battery Pack, Antenna plus Option (PCB), Charger, Custom Options

High Level Package Number For TP8100 Ordering:- Radio Body and Battery Pack, Antenna plus Option (PCB) and Charger

Radio Package Number For TP8100 Ordering:- Radio Body and/or Battery Pack, Antenna plus Option (PCB)

Radio Body Number For TP8100 Ordering:- Radio Body and/or Battery Pack and Antenna



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.

All reasonable efforts have been made to ensure all information published on this document is as accurate and up-to-date as possible. The paper configurator is a guide only, and doesn't distinguish illegal configurations. Use the online configurator to ensure the configuration is correct before placing an order on Ebay.

Example of: TP8140-H5CE-0C-0000

Product Type TP8140 = Trunked 16 Button Key Pad	(TP8140) TP8140 Trunked 16 Button Key Pad
Portable Configuration and Battery H5 = 400-470MHz, Frequency Band C = Standard Li-Ion, Battery with Clip	(T03-00006-CAAA) TP8140 Portable 400-470M 16Key Trunked (T03-00011-AAAA) TP8100 Battery - Standard Li-Ion 2000mAh (TPA-CA-201) TP8/TP9 Belt Clip 55mm (TPA-AN-011) TP8/TP9 Antenna 400-470MHz Whip
E = 400-470MHz, Whip Antenna	
Option (PCB) and/or Charger and Plug Pack 0 = Options (PCB) C = Single Li-Ion Charger Module and EUR Plug Pack,	(T03-00012-AAAA) TP8100 Single Fast Charger Li-Ion No Plug Pack (009-00016-00) PSU plug pack 12V 2A EU
Custom Option 0000 = Custom Option	



TP8110 – 16 Channels

Conventional

Standard package includes:

- ▶ 16 Channels
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ Voice inversion scrambler
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Repeater talk-around
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table on page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table on page 4

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.
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 4.
- ▶ ¹ – **NON-ETSI Approved**



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6 ¹	806-870 ¹	✓	✓	✓	✓	✓
L3 ¹	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - **NON-ETSI Approved.**

TP8115 – 128 Channels

Conventional

Standard package includes:

- ▶ 128 Channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Night use
- ▶ Repeater talk-around
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table on page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table on page 4

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- ¹ – **NON-ETSI Approved**



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8120 – 350 Channels

Conventional

Standard package includes:

- ▶ 350 Channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Night use
- ▶ PTT Redial
- ▶ Repeater talk-around
- ▶ SDM (Short Data Message)
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table on page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table on page 4

Note:

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- For more configuration options, please refer to the TP8100 Portable configuration table on page 4.
- ¹ – NON-ETSI Approved



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136–174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8110 – 16 Channels Non-Incendive

Conventional

Standard package includes:

- ▶ 16 Channels
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ Voice inversion scrambler
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Repeater talk-around
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table on page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table on page 4

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 Non-Incendive overview, please refer to page 18-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 4.
- ▶ ¹ – NON-ETSI Approved



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:1988 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:2004 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

For all enquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs

TP8115 – 128 Channels Non-Incendive

Conventional

Standard package includes:

- ▶ 128 Channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Night use
- ▶ Repeater talk-around
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4

Note:

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- ▶ For Non-Incendive overview, please refer to page 18-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 4.
- ▶ ¹ – **NON-ETSI Approved**



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - **NON-ETSI Approved.**

Cautionary Note

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TP8120 – 350 Channels Non-Incendive

Conventional

Standard package includes:

- ▶ 350 Channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Night use
- ▶ PTT Redial
- ▶ SDM (Short Data Message)
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4

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- ▶ For Non-Incendive overview, please refer to page 18-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 4.
- ▶ ¹ – NON-ETSI Approved



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

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Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

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TP8135 – 100 Preset Call

Trunked

Standard package includes:

- ▶ 100 Alphanumeric preset calls
- ▶ 10 Conventional channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction – two-shot moulding
- ▶ 3 Programmable function keys – including emergency key
- ▶ CTCSS on conventional channel
- ▶ DCS (Tx only) on conventional channel
- ▶ Key lock
- ▶ Night use
- ▶ PTT redial
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4

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- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 4.
- ▶ ¹ – NON-ETSI Approved



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8140 – 100 Preset Call

Trunked

Standard package includes:

- ▶ 100 Alphanumeric preset calls
- ▶ 10 Conventional channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CTCSS on conventional channel
- ▶ DCS (Tx only) on conventional channel
- ▶ Key lock
- ▶ Night use
- ▶ PTT redial
- ▶ SDM (Short Data Message)
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4

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- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 4
- ▶ ¹ – NON-ETSI Approved



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8135 – 100 Preset Call Non-Incendive

Trunked

Standard package includes:

- ▶ 100 Alphanumeric preset calls
- ▶ 10 Conventional channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CTCSS on conventional channel
- ▶ DCS (Tx only) on conventional channel
- ▶ Key lock
- ▶ Night use
- ▶ PTT redial
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4

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 Non-Incendive overview, please refer to page 18-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability

For more configuration options, please refer to the TP8100 Portable configuration table on page 4.



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:1988 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:2004 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

For all enquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs

TP8140 – 100 Preset Call Non-Incendive

Trunked

Standard package includes:

- ▶ 100 Alphanumeric preset calls
- ▶ 10 Conventional channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push To Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CTCSS on conventional channel
- ▶ DCS (Tx only) on conventional channel
- ▶ Key lock
- ▶ Night use
- ▶ PTT redial
- ▶ SDM (Short Data Message)
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 23-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 4

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 Non-Incendive overview, please refer to page 18-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 4.



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:1988 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:2004 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

For all enquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs.

TP8100 – Features Comparison

RADIO FEATURES	TP8110	TP8115	TP8120	TP8135	TP8140
Number of Conventional Channels	16	128	350	10	10
Number of Alphanumeric Presets				100	100
24 Character LCD Display		✓	✓	✓	✓
Colored Front Panel Option	✓	✓	✓	✓	✓
Encryption Options Board	✓	✓	✓	✓	✓
Economy Mode	✓	✓	✓	✓	✓
Fast Charger	✓	✓	✓	✓	✓
GPS Capability (External Speaker Mic) <i>Note: Requires customised firmware, please contact your Tait customer support representative</i>	✓	✓	✓	✓	✓
Non-Incendive (Optional)	✓	✓	✓	✓	✓
IP67 Certified	✓	✓	✓	✓	✓
Large PTT Button	✓	✓	✓	✓	✓
Li-Ion Battery as Standard	✓	✓	✓	✓	✓
Lone Worker	✓	✓	✓	✓	✓
Long Shift Life (11-14hrs, dependent on battery)	✓	✓	✓	✓	✓
Man Down (Optional)	✓	✓	✓	✓	✓
MEPS Approved Plug Pack	✓	✓	✓	✓	✓
Military Standards 810 C, D, E and F	✓	✓	✓	✓	✓
Multi View Indicator LED	✓	✓	✓	✓	✓
Multi Way Charger (Optional)	✓	✓	✓	✓	✓
Programmable Channel Selector	✓	✓	✓	✓	✓
Programmable Emergency Key	✓	✓	✓	✓	✓
Shared Accessories with other Tait Portables	✓	✓	✓	✓	✓
Side Mounted Accessories Connector	✓	✓	✓	✓	✓
Stainless Steel Antenna Connector	✓	✓	✓	✓	✓
Swipe Battery Contacts	✓	✓	✓	✓	✓
Two-shot Moulded Construction	✓	✓	✓	✓	✓
Voice Inversion Scrambler	✓	✓	✓	✓	✓
3 Programmable Function Keys - including Emergency Key	✓	✓	✓	✓	✓
Alphanumeric Labels			✓		✓
ANI (Automatic Number Identification)	Tx only	✓	✓		
Audible Indicator Control	✓	✓	✓	✓	✓
Auto Noise Reduction (ANR)	✓	✓	✓	✓	✓
Automatic call back				✓	✓
Auto Quiet Timer Countdown Select	✓	✓	✓		
Background search sequence				✓	✓
Busy Channel Lockout (Also known as Transmit Inhibit)	✓	✓	✓		
Call Diversion	✓	✓	✓	✓	✓

TP8100 – Features Comparison

RADIO FEATURES	TP8110	TP8115	TP8120	TP8135	TP8140
Call in absence indicator				✓	✓
Call Queuing		✓	✓	✓	✓
Call time limit display				✓	✓
Caller ID		✓	✓		
CCDI (Computer Controlled Data Interface)	✓	✓	✓		
Channel Presets	✓	✓	✓	✓	✓
Conventional Channel Operation	✓	✓	✓	✓	✓
CTCSS (Continuous Tone Controlled Squelch System)	✓	✓	✓		
CTCSS on conventional channel (Trunked)				✓	✓
CTCSS on traffic channel (Trunked)				✓	✓
DCS (Tx only)				✓	✓
DCS (Digitally Coded Squelch)	✓	✓	✓		
Deferred Calling	✓	✓	✓		
DTMF (Dual Tone Multi Frequency)	✓	✓	✓		✓
Dynamic power control				✓	✓
Dynamic regrouping				✓	✓
Emergency Mode Auto Alert	✓	✓	✓		
Emergency Mode Auto Radio Reset	✓	✓	✓		
Emergency Mode Key-press Options	✓	✓	✓		
FFSK	✓	✓	✓		
Free Format Sequences	✓	✓	✓		
G-Star Signalling (Encode)	✓	✓	✓		
Join busy group				✓	✓
Key Beeps / Confidence Tones / Audible Indicators	✓	✓	✓	✓	✓
Key Lock	✓	✓	✓	✓	✓
LCD Contrast Adjust		✓	✓	✓	✓
MDC1200 (En/Decode)	✓	✓	✓		
Manual site select				✓	✓
Monitor Function	✓	✓	✓	✓	✓
Multiple network capability				✓	✓
Multiple SELCALL Networks	✓	✓	✓		
Network name				✓	✓
Night use		✓	✓	✓	✓
Nuisance Delete	✓	✓	✓		
Programmable Bandwidth	✓	✓	✓	✓	✓
Programmable Group Membership		✓	✓		
Programmable Group Tone	✓	✓	✓		
Programmable User Defined SELCALL Tone Set	✓	✓	✓		
PTT Redial			✓	✓	✓

TP8100 – Features Comparison

RADIO FEATURES	TP8110	TP8115	TP8120	TP8135	TP8140
Quiet interrogation	✓	✓	✓		
Quiet mode				✓	✓
Repeater talk-around	✓	✓	✓		
Scanning	✓	✓	✓		
Scanning/User programmable scan	✓	✓	✓		
SDM (Short Data Message) Transmit			✓		✓
SDM (Short Data Message) Receive		✓	✓	✓	✓
SELCALL (Selective calling)	✓	✓	✓		
Separate Rx alert/ring patterns	✓	✓	✓		
Side-tone generation	✓	✓	✓		
Short menu key		✓	✓	✓	✓
Squelch override	✓	✓	✓		
Status labels		✓	✓	✓	✓
Status labels - Control	✓	✓	✓		
Stun & Revive (Remote)	✓	✓	✓	✓	✓
Talker ID (MPT)				✓	✓
Transmit Lockout	✓	✓	✓		
Transmit Low Power	✓	✓	✓	✓	✓
Transmit Timer	✓	✓	✓	✓	✓
Trunked Channel Display				✓	✓
Type 99 Decode	✓	✓	✓		
Voting	✓	✓	✓		
Zones 15,20	✓	✓	✓		
CALL TYPES	TP8110	TP8115	TP8120	TP8135	TP8140
Advanced hunt routines				✓	✓
Broadcast group call				✓	✓
Conference group call				✓	✓
Emergency Call	✓	✓	✓	✓	✓
Group Calls	✓	✓	✓	✓	✓
Inter-fleet calls				✓	✓
PABX calls (Private Automatic Branch Exchange				✓	✓
Preset Calls	✓	✓	✓	✓	✓
Priority Call	✓	✓	✓	✓	✓
Programmable trunked ring patterns				✓	✓
PSTN calls (Public Switched Telephone Network)				✓	✓
Status calls				✓	✓
Top Mounted Programmable Emergency Call	✓	✓	✓	✓	✓

NON-INCENDIVE (NI)

Overview

For greater safety in hazardous locations the Non-Incendive TP8100 portables are available with internationally recognized Factory Mutual™ approvals. Both trunked and conventional portables in the TP8100 series can be supplied with NI features for use in hazardous environments. Manufactured to comply with internationally recognized Factory Mutual™ (FM™) Approvals, the TP8100 is classed NI (Non-Incendive). Like the rest of the TP8100 series, the NI model is built to IP67 dust and water resistance standards, and is designed for the operation in harshest of environments. A full range of FM™ approved accessories is also available, including rugged speaker-mics and noise cancelling headsets.

Tait Communications has the following Factory Mutual™ approval for the TP8100 NI portable product range:

- ▶ Non-Incendive - for use in:
 - Class I
 - Division 2
 - Groups A, B, C & D with a temperature rating of T4 Ta=40°C
 - Class II & III
 - Division 1 or 2h
 - Groups E, F & G with a temperature rating of T4 Ta=40°C
 - Indoor & outdoor
 - IP67 Hazardous (classified) locations

Temperature Rating Code

Identifications Code	Maximum Temperature (°C)	Identification Code	Maximum Temperature (°C)
T1	450	T3A	180
T2	300	T3B	165
T2A	280	T3C	160
T2B	260	T4	135
T2C	230	T4A	120
T2D	215	T5	100
T3	200	T6	85

Note:

- ▶ Compliance shall be verified by measurement based on the highest temperature which may be attained in service under the most adverse conditions (but within rated values) by any part or surface of the equipment. The most adverse conditions include overloads and fault conditions recognized in the specific standard for the Type of Protection concerned.

Non-Incendive (NI)

Background

▶ What is Non-Incendive?

- Electrical equipment that is incapable of releasing sufficient electrical or thermal energy under **normal operating conditions** only which cause ignition of a specific hazardous mixture and air. This rating is required for equipment to be used in **Division 2** environments.

Non-Incendive approvals are classified by classes, divisions, groups and a temperature rating. These can be defined as follows:

▶ Class:

- this can be defined as relating to the industry type in which the equipment will operate. Classes range from Class I to Class III, where Class I is for such industries as petroleum/gas/oil etc., Class II is for such industries as heavy engineering (iron-ore, magnesium, coke, coal, charcoal, etc.) and the food industry (starch, grain processing, e.g. flour mills etc.) Class III is for industries dealing with fibres.

▶ Division:

- this can be defined as relating directly to the proximity of the risk. That is, if the hazardous mixture is in direct contact with the environment (Division 1, closer proximity) or is it enclosed within a container or system, or ventilated (Division 2, further proximity).

▶ Group:

- this is the type of atmosphere and ranges from Group A through to Group G. Group A covers atmospheres containing Acetylene gas and Group B covers atmospheres containing Hydrogen gas. These are both very unstable and explode at low temperatures. Group C covers vapours of Ethylene and Group D covers Propane vapour atmospheres. Group E includes atmospheres containing various types of metal dust, Group F has coal dust, and Group G contains grain dusts.

▶ Temperature rating:

- Temperature rating alone is probably the most important factor for NI hand-portables. The temperature rating is a maximum temperature (°F / °C) and an associated identification code. The temperature rating means that where any hazardous mixture explodes/combusts at less than the stated maximum temperature, then the hand-portable cannot be used in this environment. If units do not meet the temperature requirement then there is no basis for supplying radios regardless of whether or not the units meet the other standards i.e. class, division and group.
- It is important to note that Tait does not wish to advise the customer what ratings they would need for their work environment, as liability becomes an issue here. There are a number of publications which detail combustion thresholds of hazardous mixtures and the customer should research this themselves.

Non-Incendive (NI)

What Tait can offer

Tait Communications currently have both the following Factory Mutual™ Approval for the TP8100 Series NI product range (all bands and variants):

- ▶ Approved as Non-Incendive for use in Class I, Division 2, Groups A, B, C & D with temperature rating of T4 Ta=40°C
- ▶ Approved as suitable for use in Class II & III, Division 1, Groups E, F & G; temperature class T4 Ta=40°C; indoor & outdoor, IP67 hazardous (classified) locations.

What this means:

- ▶ Class I, Division 2 - This is a location in which:
 - (a) volatile flammable gasses are handled, processed or used, but in which the hazardous liquids, vapours or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in case of abnormal operation of equipment;
 - OR
 - (b) in which hazardous concentration of gases or vapours are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operation of the ventilating equipment;
 - OR
 - that is adjacent to a Class I, Division 1 location, and to which hazardous concentrations of such gases or vapours might occasionally be communicated unless such communication is prevented by adequate positive-pressure ventilation from a source of clear air, and effective safe-guards against ventilation failure are provided.
- ▶ Groups A, B, C, D, E, F & G: These are various atmospheres for which the Tait hand-portables are approved to operate in, in conjunction with the above information and are rated as follows:
 - Group A atmospheres containing acetylene gas
 - Group B atmospheres containing hydrogen gas
 - Group C atmospheres containing ethylene vapours
 - Group D atmospheres containing propane vapours
 - Group E atmospheres containing metal dusts
 - Group F atmospheres containing carbonaceous dusts
 - Group G atmospheres containing organic dusts
- ▶ Temperature T4 Ta=40°C
 - Where any hazardous mixture explodes at less than 40°C, Tait hand-portables are not approved to operate in these environments.

Non-Incendive (NI)

Accessories

The TP8100 NI range of portables are only approved to be Non-Incendive when used in conjunction with the NI approved accessories and FM™ Approved battery packs.

- ▶ Batteries:
 - T03-24011-AAAA TP8100 Battery - Li-Ion 1800mAh
 - T03-24011-ABAA TP8100 Battery -Li-Ion 1800mAh complete with Belt Clip

Note: If a customer has a requirement to charge their batteries within a hazardous environment, we cannot supply our chargers as these are NOT FM™ Approved.

- ▶ Audio Accessories & Antennas
 - Please contact your Tait customer services representative.

▶ This certificate is issued for the following equipment:

- T03-2400n-abcd, TP8100 Portable Radio
- NI / I / 2 / ABCD / T4 Ta=40°C, IP67
- S / II / III / 2 / EFG, IP67

- n = software function / user interface: 1, 2, 3, 4, 5, 6
- a = Frequency Band: B, C, D, E, F, G, H
- b = Customer Variants: A-Z
- c = Internal Options: A
- d = Color: A, B, C, D

▶ Special Conditions of Use:

1. When used with Tait Communications battery pack (P/N T03-20011-AAAA).
2. The specific accessories & antenna options that may be used with the radios above are listed within the Tait Communications service manuals part number MPC-00003-xx.

Non-Incendive (NI)

Disclaimer

The following classification and rating details are only meant to be a guide for quick reference and Tait Communications makes no claims to the accuracy of the items in the appendix below:

- ▶ Group A atmospheres - Atmospheres containing Acetylene gas.
- ▶ Group B atmospheres - Atmospheres containing Hydrogen gas.
- ▶ Group C atmospheres - Chemical (Ethylene based)
 - Acetaldehyde
 - Diethylamine
 - Ethyl mercaptan
 - Tetrahydrofuran
 - Crotonaldehyde
 - Diethyl ether
 - Hydrogen sulphide
 - Epichlorohydrin
 - 2-nitropropane
 - (UDMH 1, 1-dimethyl
 - Hydrogen cyanide
 - n-butyraldehyde
 - Carbon monoxide
 - Ethyl sulphide
 - Unsymmetrical dimethyl hydrazine)
 - Allyl alcohol
 - Morpholine
 - Ethylenimine
 - Cyclopropane
 - Ethylene
- ▶ Group D atmospheres - Chemical (Propane based)
 - Acetic acid
 - Acetone
 - Acrylonitrile
 - Ammonia
 - Benzene
 - Butane
 - Soproene
 - Isopropyl ether
 - Mesityl oxide
 - Methane (natural gas)
 - Methanol (methyl gas)
 - Toluene
 - Vinyl acetate
 - Vinyl chloride
 - Xylenes
 - Ethylene diamine
 - Ethylene dichloride
 - Ethylene glycol monomethyl ether
 - Gasoline
 - Heptanes
 - Propane
 - Hexanes
 - 1-propanol
 - 2-propanol
 - Propylene
 - Styrene
 - Ethanol (ethyl alcohol)
 - Ethyl acetate
 - Ethyl acrylate (inhibited)
 - 2-methyl-2-propanol
 - Petroleum naphtha
 - Pyridine
 - Octanes
 - Pentanes
 - 1-pentanol (amyl alcohol)
 - 2-butanol (secondary butyl alcohol)
 - n-butyl acetate
 - Isobutyl acetate
 - di-isobutylene
 - Ethane 3-methyl-1-butanol
 - Methyl ethyl ketone
 - Methyl isobutyl ketone
 - 2-methyl-1-propanol

For classification of areas involving ammonia atmosphere, see Safety Code for Mechanical Refrigeration (ANSI/ASHRAE 15-1978) and Safety Requirements for the Storage and Handling of Anhydrous Ammonia (ANSI/CGA G2.1-1972).

A Saturated hydrocarbon mixture boiling in the range of 20-135N C (68-275NF). Also known by the synonyms benzene, ligroin, petroleum ether or naphtha.

- ▶ Group E atmospheres - Atmospheres containing metal dust, including aluminium, magnesium and their commercial alloys, and other metals of similarly hazardous characteristics.
- ▶ Group F atmospheres - Atmospheres containing carbon black, charcoal or coke dusts which have more than 8 percent total volatile material (carbon black per ASTM D1620, charcoal, coal and coke dust per ASTM D271) or atmospheres containing these dusts sensitized by other materials so that they represent an explosion hazard.
- ▶ Group G atmospheres - Atmospheres containing flour, starch, grain or combustible plastics or chemical dusts.

Note: Explanation of the above classes, divisions and atmospheres can be found in Article 500 of the United States National Electrical Code.

Encryption

For organizations that value the confidentiality of their information, Tait can now offer our TP8100 portable radios fitted with Midian™ encryption modules.

There are two levels of encryption depending on your customer's requirements:

- ▶ voice inversion encryption
 - protects against casual listeners and is cost-effective
- ▶ rolling code / frequency-hopping encryption
 - protects against more determined listeners

Applications

From a small company's competitive advantage through essential government information, we can now offer an encryption solution suitable for many different types of companies.

- ▶ Public and private safety, Law enforcement, Government department, Security company, Service provider, Health service, Event management, Commercial business, Security company, Service provider & Media.

Specifications

Encryption modules can be fitted to TP8100 portable radios either when the product is first built, or as a simple upgrade to existing equipment provided the radio was purchased 'encryption ready'.

Tait can provide consultation and system design to ensure the complete integration of your encryption solution. For specifications on encryption module types, please see the encryption white paper, under the documentation section of the encryption resource CD.

Important

The sale of certain encryption products is subject to export controls. It is imperative that you consult with your local Tait Representative prior to offering any encryption product to a customer.

Encryption Type

For organizations that require confidentiality of their information, Tait offers TP8100 portable radios fitted with Midian™ encryption modules. These can be fitted at all frequencies. Please contact your Representative who will help you with an encryption solution from Tait.

Types of encryption offered by Tait

There are two levels of Encryption depending on the requirements;

1. Voice Inversion Encryption which protects against casual listeners, and
2. Rolling Code / Frequency Hopping Encryption which protects against more determined listeners.

FEATURES	MIDIAN™ TVS-2
Encryption method	Hopping
Hopping rate	6-12/Sec
OTAP	No
Codes available	Trillions
Codes selectable	4
Coded/Clear TX	Manual select
Coded/Clear RX	Automatic
Inter-operability	-
Current drain	9Ma
CTCSS supported	Yes

FEATURES	MIDIAN™ TVS-2
Selcall	Yes
FFSK	Yes
Radio Enable/Disable	No
Change Encrypt codes	Yes
ANI	Yes
Emergency	Yes
Status	Yes
Change ANI/Group/Fleet	Yes
Force Coded/Clear	Yes

Frequently Asked Questions

What does a Tait encryption unit look like?

Tait encryption units are small circuit modules that fit inside our radios, and change the way speech is heard - garbling the transmitted audio, and reconstructing the received audio. Externally it is not evident that encryption is fitted to a radio.

How does the encrypted audio sound without a decrypter?

It still has the fluctuating volume of a speech signal, but like a totally foreign language with completely different phonetics - totally incomprehensible.

How easy is it to understand when decrypted?

There are some background noises but the main intelligibility of the speech is largely unaffected.

Do I need to replace all my radios?

Not necessarily. Your existing Tait radios may be able to be fitted with encryption.

Encryption Questionnaire

Encryption is a highly technical business. This questionnaire has been designed to help determine the system aspects of any encryption sale, and how they affect the equipment and services needed in order to ensure a satisfactory solution for your company and Tait. We ask that you complete this questionnaire before any orders are placed so that Tait can help fit you with the best possible solution. Please contact your Tait Representative for further information.

▶ **Company Name:** _____

Name:

▶ **Contact Email:** _____

Contact phone:

1. Who do you wish to protect your voice communications from?

- Casual listener
- Technically equipped listener
- Highly technical and determined eavesdropper

2. How many portable radios will require encryption in this application? Total number: _____

3. Will all radios require encryption functionality?

- Full fleet
- Partial fleet

4. Are all conversations to be encrypted or only a selection?

5. Are all radios assigned to individuals or available from a pool resource?

6. Are radio users to be responsible for enabling/disabling encryption or is the encryption module required to process this automatically?

7. Do the radios need to have a selection of encryption codes available or just one code?

8. If multiple encryption codes are required, are these to be available to the radio user via the radio user interface, or controlled via a central dispatcher?

9. Is the customer a current user of voice encryption? If yes, what is the type of encryption currently being used? Please specify brand and level of encryption.

10. What type of radio network (Conventional, Single-site MPT Trunked, Multi-site MPT Trunked) is being utilized in this application by these users? Please describe.

11. What other signalling will be used on this system (e.g. DTMF, PSTN, etc.)?

12. Does the radio use ANI and if so, pre or post PTT?

13. Is CTCSS/DCS used, and if so, at what hertz/code?

14. Please describe which assignable key will support encryption. Enable/disable and if it is a short or long press.

15. Who will be responsible for implementing the encryption solution (e.g. setting audio levels, etc.)

16. What audio accessories, if any, are to be used with the terminal equipment (e.g. speaker mics, headsets, etc.)?

17. Who will be responsible for training the end user?

18. What level of encryption is required?

- Midian™ TVS-2 TAIT
- Encryption ready

Intrinsically Safe Accessories

ITEM CODE	DESCRIPTION
Battery	
T03-20011-AAAA	TP81 Battery – Li-Ion 1880mAh IS

Audio Accessories




















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

ITEM CODE	DESCRIPTION
Speaker Microphones	
T03-00119-ABAA	TP81 Speaker Microphone Profile 2.5mm-Jack
T03-00045-DMAA	TP81/93/94 Speaker Microphone Genesis IP68 Emergency-Button
T03-00045-ERAA	TP31/33/81/93 Speaker Microphone Light-Weight 3.5mm-Jack
T03-00045-FRAA	TP31/33/81/93 Speaker Microphone Medium-Weight 3.5mm-Jack
T03-00045-JFAA	TP81/93/94 Speaker Microphone Evolution Emergency-Button 2.5mm-Jack
T03-00045-KFAA	TP81/93/94 Speaker Microphone Storm IP68 Emergency-Button 2.5mm-Jack
T03-10119-AAAA	TP81 Speaker Microphone Evolution GPS Emergency Button 2.5mm-Jack
	Requires custom radio firmware. Contact your Tait customer support representative
Ear Pieces	
T03-00053-0451	Earphone In-Ear 2.5mm
T952-055	Earhanger 2.5mm
T03-00120-AAAD	Eartube In-Ear 2.5mm
T03-00120-AAAE	Eartube In-Ear 3.5mm
T03-00120-BAAD	Earhook 2.5mm
T03-00120-BAAE	Earhook 3.5mm
T03-00120-FAAD	Eartube Earhook 2.5mm
T03-00120-FAAE	Eartube Earhook 3.5mm
T03-00120-GAAD	Earhook Transparent Hi-Volume 2.5mm
T03-00120-GAAE	Earhook Transparent Hi-Volume 3.5mm
T03-00120-HAAD	Earphone Transparent D-Ring Hi-Volume 2.5mm
T03-00120-HAAE	Earphone Transparent D-Ring Hi-Volume 3.5mm
Adaptors	
T03-00119-XAAA	TP81 Accessory Adaptor Hirose-6-Pin
T03-00119-XBAA	TP81 Accessory Adaptor 7.5mm

Audio Accessories – Continued

ITEM CODE	DESCRIPTION	
Headsets		
TPB-AA-201	TP81 Headset Light-Weight Earphone Boom-Microphone Finger-PTT	
TPB-AA-202	TP81 Headset Light-Weight Behind-Head Boom-Microphone Finger-PTT	
T03-00046-FAAA	TP81/93/94 Headset Heavy-Duty Overhead	
T03-00046-FEAA	TP81/93/94 Headset Heavy-Duty Behind-Head	
T03-00046-GEAA	TP81/93/94 Headset Hurricane II Behind-Head	
TPA-AA-211	TP81/91 Headset Breeze Behind-Head Hirose-6-Pin	Require T03-00119-XAAA
T03-00120-CBBA	TP81/91 Headset Light-Weight Overhead Hirose-6-Pin	
T03-00120-EEBA	TP81/91 Headset Heavy-Duty Overhead Hirose-6-Pin	
Surveillance Kits		
TPB-AA-203	TP81 Covert Kit Earhook Lapel-Microphone-with-PTT	
TPB-AA-204	TP81 Covert Kit Eartube-In-Ear Lapel-Microphone-with-PTT	
T03-00047-AAAA	TP81/93/94 2 Wire Surveillance Kit	
TPA-AA-213	TP81/91 3 Wire Surveillance Kit Hirose-6-Pin Beige	Require T03-00119-XAAA
TPA-AA-221	TP81/91 2 Wire Surveillance Kit Hirose-6-Pin Black	
Throat Microphones		
T03-00120-AFEA	TP81/91 Throat Microphone Hirose-6-Pin	Requires T03-00119-XAAA
T03-00120-AFEG	TP81 Throat Microphone 7.5mm	Requires T03-00119-XBAA
Skull Microphone		
T03-00120-KGAA	TP81/91 Skull Microphone Hirose-6-Pin	Requires T03-00119-XAAA
Connector Kit		
TPB-AA-005	TP81 Accessory Connector Kit	
Replacement Parts		
TPA-AA-214	Earpiece Quick Disconnect Acoustic Tube - Set of 5	Replacement parts for T952-051, T03-00047-AAAA, TPA-AA-213 & TPA-AA-221
TPA-AA-215	Flexible Open Ear Insert - Left Ear Small	
TPA-AA-216	Flexible Open Ear Insert - Left Ear Medium	
TPA-AA-217	Flexible Open Ear Insert - Left Ear Large	
TPA-AA-218	Flexible Open Ear Insert - Right Ear Small	
TPA-AA-219	Flexible Open Ear Insert - Right Ear Medium	
TPA-AA-220	Flexible Open Ear Insert - Right Ear Large	


Audio Accessories – Continued


	TPB-AA-101 Speaker Microphone Light-Weight 3.5mm-Jack		T03-00120-AAAE Eartube in-ear 3.5mm		T03-00120-GAAE Earhook Transparent High Volume 2.5mm
	TPB-AA-102 Speaker Microphone Medium-Weight 3.5mm-Jack		T03-00120-FAAE Eartube Earhook 3.5mm		T03-00120-HAAE Earphone Transparent D-ring High Volume 3.5mm
	T03-00045-ERAA Speaker Microphone Light-Weight 3.5mm-Jack		T03-00120-BAAE Earhook 3.5mm		
	T03-00119-ABAA Speaker Microphone Profile 2.5mm-Jack		T952-055 Earhanger 2.5mm		T03-00120-BAAD Earhook 2.5mm
	T03-00045-JFAA Speaker Microphone Evolution Emergency-Button 2.5mm-Jack		T03-00053-0451 Earphone in-ear 2.5mm-Jack		T03-00120-GAAD Earhook Transparent High Volume 2.5mm
	T03-00045-KFAA Speaker Microphone Storm IP68 Emergency-Button 2.5mm-Jack		T03-00120-AAAD Eartube in-ear 2.5mm		T03-00120-HAAD Earphone Transparent D-Ring High Volume 2.5mm
	T03-00045-DMAA Speaker Microphone Genesis IP68 Emergency-Button		T03-00120-FAAD Eartube Earhook 2.5mm		


Audio Accessories – Continued




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T03-00046-FAAA
Headset Heavy-Duty
Overhead
- 

T03-00046-FEAA
Headset Heavy-Duty
Behind-Head
- 

T03-00046-GEAA
Headset Heavy-Duty
Behind-Head
- 

TPB-AA-201
Headset Light-Weight
Earphone Boom-
Microphone Finger-
PTT
- 

TPB-AA-202
Headset Light-Weight
Behind-Head Boom-
Microphone Finger-
PTT
- 

TPB-AA-203
Covert Kit Earhook
Lapel-Microphone-
with-PTT
- 

TPB-AA-204
Covert Kit Eartube-In-
Ear Lapel-Microphone-
with-PTT
- 

T03-00047-AAAA
TP81/93/94 2 Wire
Surveillance Kit

Audio Accessories – Continued



T03-00119-XAAA
Accessory Adaptor Hirose-6-pin



TPA-AA-211
Headset Breeze Behind-Head
Hirose-6-Pin



T03-00120-CBBA
Headset Light-Weight Overhead
Hirose-6-Pin



T03-00120-EEBA
Headset Heavy-Duty Overhead
Hirose-6-Pin



TPA-AA-213
3 Wire Surveillance Kit Hirose-6-Pin
Beige



TPA-AA-221
2 Wire Surveillance Kit Hirose-6-Pin
Black

Many third party audio accessories with a Hirose-6-Pin male connector.



T03-00119-XBAA
Accessory Adaptor
7.5mm

Many third party audio accessories with a 7.5mm male connector.

Batteries & Chargers

ITEM CODE	DESCRIPTION
Batteries	
T03-00011-AAAA	TP81/93/94 Battery - Standard Li-Ion 1880mAh
T03-00011-CAAA	TP81/93/94 Battery - Performance Li-Ion 2400mAh
Belt Clips	
TPA-CA-201	TP8/9 Belt Clip 55mm
TPA-CA-208	TP8/9 Belt Clip Adaptor for 55mm Belt Clip Requires TPA-CA-201
Chargers	
T03-00012-AAAA	TP81/93/94 Charger Single Fast Li-Ion no Plug Pack
T03-00012-ABAA	TP81/93/94 Charger Single Fast Li-Ion ANZ Plug Pack
T03-00012-ACAA	TP81/93/94 Charger Single Fast Li-Ion UK Plug Pack
T03-00012-ADAA	TP81/93/94 Charger Single Fast Li-Ion EU Plug Pack
T03-00012-AEAA	TP81/93/94 Charger Single Fast Li-Ion US/CAN Plug Pack
T03-00013-AAAA	TP81/93/94 Charger Multi Li-Ion No Mains Cable
T03-00013-ABAA	TP81/93/94 Charger Multi Li-Ion Wall Kit ANZ Mains Cable
T03-00013-ACAA	TP81/93/94 Charger Multi Li-Ion Wall Kit UK Mains Cable
T03-00013-ADAA	TP81/93/94 Charger Multi Li-Ion Wall Kit EU Mains Cable
T03-00013-AEAA	TP81/93/94 Charger Multi Li-Ion Wall Kit US/CAN Mains Cable
T03-00014-AAAA	TP81/93/94 Vehicle Charger Battery Only
T03-00014-BAAA	TP81/93/94 Vehicle Charger
TA3004-01 ¹	TP81/93/94 Transportable Multicharger Orange
TA3004-02 ¹	TP81/93/94 Transportable Multicharger Silver

¹ Aus/NZ Compliance only. Contact CSD for availability and pricing in other regions



T03-00011-AAAA

Standard Li-Ion
1880mAh Battery



T03-00012-AAAA

Charger Single Fast Li-Ion
no Plug Pack



T03-00014-AAAA

TP81/93/94 Vehicle
Charger Battery Only



T03-00014-BAAA

TP81/93/94 Vehicle
Charger



TA3004-01

TP81/93/94
Transportable
Multicharger Orange

Antennas

ITEM CODE	DESCRIPTION
TPA-AN-034	TP8/9 Antenna 136-174MHz Helical
TPA-AN-001	TP8/9 Antenna 136-225MHz Helical Tuneable
TPA-AN-002	TP8/9 Antenna 136-151MHz Helical
TPA-AN-003	TP8/9 Antenna 150-162MHz Helical
TPA-AN-004	TP8/9 Antenna 162-174MHz Helical
TPA-AN-019	TP81 Antenna 340-390MHz Helical
TPA-AN-017	TP81 Antenna 350-400MHz Helical
TPA-AN-018	TP81 Antenna 350-400MHz ¼ Wave Whip
TPA-AN-027	TP8/9 Antenna 380-420MHz Helical
TPA-AN-013	TP8/9 Antenna 400-470MHz Helical
TPA-AN-011	TP8/9 Antenna 400-470MHz ¼ Wave Whip
TPA-AN-015	TP8/9 Antenna 450-520MHz Helical
TPA-AN-012	TP8/9 Antenna 450-520MHz ¼ Wave Whip
TPA-AN-028	TP8/9 Antenna 762-870MHz Helical
TPA-AN-022	TP8/9 Antenna 762-870MHz ½ Wave Whip
TPA-AN-024	TP81 Antenna 896-941MHz ¼ Wave Whip
TPA-AN-025	TP81 Antenna 893-941MHz ½ Wave Whip

TPA-AN-003

Antenna 150-162MHz
Helical



TPA-AN-004

Antenna 162-174MHz
Helical



TPA-AN-022

Antenna 762-870MHz
½ Wave Whip



Carry Cases

ITEM CODE	DESCRIPTION
Heavy Duty Leather	
T03-00133-ABBA	TP81 Carry Case Heavy Duty Leather 4Key D-Clip Belt Loop
T03-00133-ABCA	TP81 Carry Case Heavy Duty Leather 16Key D-Clip Belt Loop
Soft Leather	
T03-00133-BABA	TP81 Carry Case Soft Leather 4Key Use Battery Belt Clip
T03-00133-BACA	TP81 Carry Case Soft Leather 16Key Use Battery Belt Clip
Nylon	
T03-00133-CBBA	TP81 Carry Case Nylon 4Key D-Stud Belt Loop
T03-00133-CBCA	TP81 Carry Case Nylon 16Key D-Stud Belt Loop
T03-00133-CCBA	TP81 Carry Case Nylon 4Key Belt Loop
T03-00133-CCCA	TP81 Carry Case Nylon 16Key Belt Loop
Accessories	
T03-00038-0034	TP8/9 Shoulder Strap for Carry Case Heavy Duty Leather For use with T03-00133-ABBA & T03-00133-ABCA
TPA-CA-201	TP8/9 Belt Clip 55mm
TPA-CA-208	TP8/9 Belt Clip Adaptor for 55mm Belt Clip Requires TPA-CA-201
TPA-CA-206	TP81/91 Belt Loop for D-Clip 55mm
TPA-CA-207	TP81/91 Belt Loop for D-Clip 75mm
T03-00038-0022	TP8/9 Belt Loop for D-Stud 55mm
T03-00038-0023	TP8/9 Spring Clip for D-Stud 40mm



T03-00133-ABBA - Carry Case
Heavy Duty Leather 4Key D-Clip Belt Loop



T03-00133-BACA - Carry Case
Soft Leather 16Key Use Battery Belt Clip



T03-00133-CBBA - Carry Case
Nylon 4Key D-Stud Belt Loop



T03-00038-0034 - Shoulder Strap
For Carry Case Heavy Duty Leather



TPA-CA-201
Belt Clip
55mm



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



TPA-CA-206
Belt Loop for D-Clip
55mm



TPA-CA-207
Belt Loop for D-Clip
75mm



T03-00038-0022
Belt Loop for D-Stud 55mm



T03-00038-0023
Spring Clip for D-Stud 40mm

Programming & Service Accessories

ITEM CODE	DESCRIPTION
T950-001	USB 1.1 to Serial DB9 Adaptor
T03-00011-FAAA	TP81/93/94 DC Service Adaptor
T03-00118-0101	TP81/93/94 Programming Adaptor Note: Included in the T03-00118-5101 programming kit
T03-00118-5101	TP81 Programming Kit
T03-00118-0601	USB to RJ11 Programming Cable
T03-00118-0201	TP81/93/94 Calibration Adaptor
T03-00118-0202	TP81/93/94 Calibration Low Pass Filter
TOPA-SV-024	Terminals Calibration Box
T03-00118-5301	TP81 Assembly Tool Kit
TPA-SV-006	TP8/9/TM8/9/TB7 Radio Programming Lead - Serial PC to RJ12 Note: Included in the T03-00118-5101 programming kit
TOPA-SV-006	TP RF Service Lead
T03-00040-0001	TP81/TP93/TP94 Service Kit – (Includes T03-00011-FAAA, T03-00118-0101, T03-00118-0202, T03-0118-0601, T03-00118-5301, TOPA-SV-006, TOPA-SV-024)