

# TP8100 Intrinsically Safe Specifications



Tait TP8100 Intrinsically Safe (IS) portable radios are essential for organizations serious about mobile communications in hazardous environments.

- Clearly identifiable with an IS logo marked on the radio front panel and battery.
- Front panels are available in yellow, orange and red, in addition to the standard black.
- Tough enough to withstand the harshest environments; engineered to exceed IP67 sealing: zero dust ingress and immersible in one meter of water for 30 minutes.
- Swipe contacts, battery-only or battery-on radio charging, desktop fast chargers provide efficient battery management.
- All Tait TP8100 IS portables are comprehensively approved by Factory Mutual in the categories outlined below.

All standard TP8100 specifications apply to the IS radios. Please see the full TP8100 specifications.

## FM Approved\*

### IS, Class I, II, III, Division 1, Groups C, D, E, F, G, T4

IS	Intrinsically Safe
Class I	Gas/Petroleum, flammable gases or vapors present (Group C, D)
Class II	Combustible or conductive dusts are present (Group E, F, G)
Class III	Ignitable fibres or flyings are present (no group classifications)
Division 1	The substance referred to by Class is present
Group C	Ethyl and Ethylene or gases of equivalent hazard
Group D	Gasoline, acetone, ammonia, methanol, natural gas, propane or gases of equivalent hazard
Group E	Combustible metal dusts, aluminium, magnesium and their commercial alloys or other combustible dusts that present similar hazards in connection with electrical equipment.
Group F	Combustible carbonaceous dusts, carbon black, charcoal, coke or coal dusts
Group G	Flour dust, grain, wood, plastic and chemicals
T4	Maximum service temperature 135°C

### NI, Class I, Division 2, Groups A, B, C, D, T4

NI	Non-Incendive
Class I	Gas/Petroleum, flammable gases or vapors present (Group A, B, C, D)
Division 2	The substance referred to by class is present only in abnormal conditions, such as a container failure or system breakdown.
Group A	Acetylene
Group B	Hydrogen, fuel and combustible process gases containing > 30% hydrogen by volume
Group C	Ethyl and Ethylene or gases of equivalent hazard
Group D	Gasoline, acetone, ammonia, methanol, natural gas, propane or gases of equivalent hazard.
T4	Maximum service temperature 135°C

### S, Class II, III, Division 2, Group E, F, G

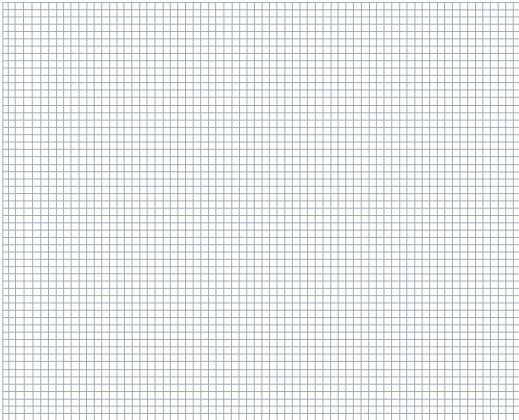
S	Special Protection
Class II	Combustible or conductive dusts are present (Group E, F, G)
Class III	Ignitable fibres or flyings are present (no group classifications)
Division 2	The substance referred to by class is present only in abnormal conditions, such as a container failure or system breakdown.
Group E	Combustible metal dusts, aluminium, magnesium and their commercial alloys or other combustible dusts that present similar hazards in connection with electrical equipment.
Group F	Combustible carbonaceous dusts, carbon black, charcoal, coke or coal dusts
Group G	Flour dust, grain, wood, plastic and chemicals

\* Factory Mutual Approval means these radios are certified for use in hazardous environments in the United States. In other countries, ensure your use of the Tait IS portable in your work environment does not breach your local restrictions.

## General

Model	TP8110, TP8115, TP8120, TP8135, TP8140		
Frequency range	136-174MHz 174-225MHz 350-400MHz 400-470MHz 450-530MHz 806-870MHz 896-941MHz		
Channel spacing	12.5kHz, 20kHz, 25kHz		
Transmitter power	<b>VHF</b> 1W, 2.5W, 5W	<b>UHF</b> 1W, 2.5W, 4W	<b>800/900MHz</b> 1W, 2W, 3W
Operating temperature	-22°F to 140°F (-30°C to 60°C)		
Environmental	MIL-STD 810 F** High/Low temperature Humidity Blowing/Dripping Rain Blowing Dust Vibration Shock Salt Fog Transit Drop Protection to IP67		
Servicing	These radios can be serviced only at FM approved service centres. Contact your local dealer for details.		
Color options	The TP8100 IS portables are available in yellow, orange and red, in addition to the standard black.		

\*\* ALSO MEETS EQUIVALENT SUPERSEDED MIL-STD 810 C, D AND E.



ISO 9001  
ISO 14001



Tait is your complete supplier of radio communications equipment offering mobile, portable and infrastructure solutions. Tait is renowned for its flexibility, responsiveness and commitment to producing innovative world-class mobile radio communications products.

Specifications are subject to change without notice and shall not form part of any contract. They are issued for guidance purposes only. Please note that not all frequency bands are available in all markets.

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AUTHORIZED DEALER