

**Applicable MIL-STD-810C/D/E/F**

Applicable MIL-STD	810C Methods Procedures	810D Methods Procedures	810E Methods Procedures	810F Methods Procedures
Low Pressure	500.1 1	500.2 1,2	500.3 1,2	500.4 1
High Temperature	501.1 1,2	501.2 1,2	501.3 1,2	501.4 1,2
Low Temperature	502.1 1	502.2 1,2	502.3 1,2	502.4 1,2
Temp. Shock	503.1 1	503.2 1	503.3 1	503.4 1
Solar Radiation	505.1 1	505.2 1	505.3 1	505.4 1,2
Rain	506.1 2	506.2 2	506.3 1,2	506.4 1,2
Humidity	507.1 2	507.2 2,3	507.3 2,3	507.4 1
Salt Fog	509.1 1	509.2 1	509.3 1	509.4 1
Dust	510.1 1	510.2 1	510.3 1	510.4 1
Vibration	514.2 8,10	514.3 1	514.4 1	514.5 1
Shock	516.2 1,2,5	516.3 1,4	516.4 1,4	516.5 1,4

**General**

Frequency Range	VHF: 136-174 MHz UHF: 400-470 MHz,450-520 MHz
Channel Capacity	16
Channel Spacing	25 /20/12.5 KHz
Operating Voltage	DC7.4V
Battery	1700mAh (Li-Ion)
Battery Life (5-5-90 duty cycle)	12 Hours
Frequency Stability	±2.5ppm
Operating Temperature	-20°C→+50°C
Antenna Impedance	50Ω
Dimensions HxWxD (with battery, without antenna)	4.80 X 2.17 X1.50 in.
Weight (with antenna & battery)	15.03 oz.

**Transmitter**

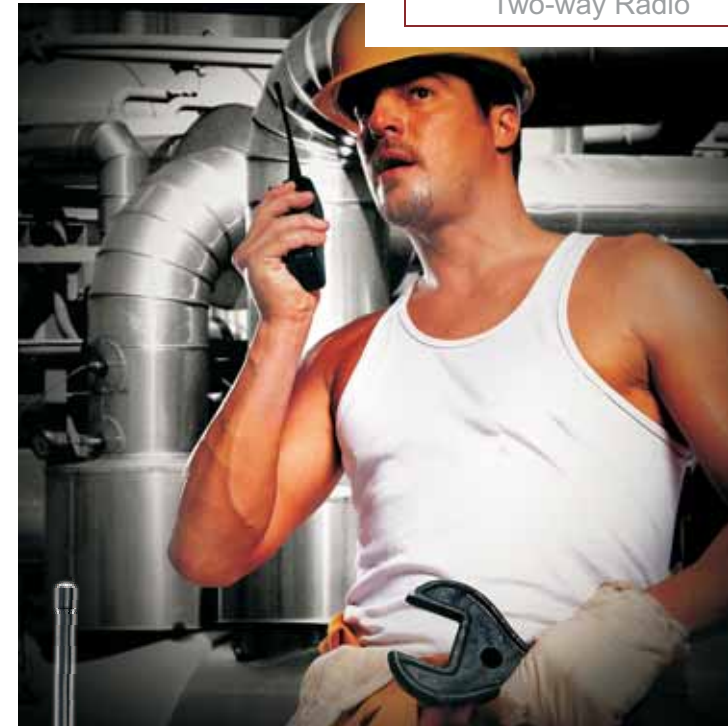
RF Power Output	UHF: 4/2/1W, VHF: 5/2/1W
Modulation	16KϕF3E/11KϕF3E
Spurious and Harmonics	-36dBm<1GHz±-30dBm>1GHz
FM Noise	45/40 dB
Audio Distortion	≤5%

All Specifications are tested according to TIA/EIA-603, and subject to change without notice due to continuous development.

**Receiver**

Sensitivity	0.25/0.35μV
Selectivity	70/60dB
Intermodulation	65dB
Spurious Response Rejection	70dB
S/N	45/40dB
Rated Audio	0.5W
Rated Audio Distortion	≤5%

**Intrinsically Safe**  
Two-way Radio



**TC-700 Ex PLUS**



**Protection**  
**Productivity**  
**Customizable**  
**Safety**  
**Quality & Reliability**  
HDC1200 and HDC2400™ Signalling



**FC CE**

ISO9001:2000 Certificate NO:FM 61540

**HYT America, Inc.**

320 International Parkway, Sunrise, FL 33325  
Tel:800-845-1230 Fax:954-846-1672  
Web: www.hytamerica.com

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Your Local Dealer



# THE CHOICE

for professionals in hazardous environments

## FM-APPROVED TC-700 Ex PLUS

**Intrinsically safe** - Radios for use in the potentially explosive environments of oil and gas installations, such as tankers or drilling platforms, or in gas-laden atmospheres encountered by the emergency services are designed and constructed to be totally safe.

HYT's FM-approved professional portable radios give team members instant access to one or many colleagues at the touch of a button, without compromising safety, and allow constant contact should a critical situation need resolving.

### SUPER FEATURES

#### Protection

Encapsulated components prevent the ignition of the important components. Prevents the ignition of the surrounding explosive atmosphere.

#### Productivity

A rechargeable 1700mAh Li-Ion Ex-battery provides up to 14 hours of use, more than enough for a standard work shift.

#### Customizable

The intrinsically safe TC-700 Ex PLUS is supported by a range of FM-approved audio accessories including, remote speaker microphone and earpieces tailored to the requirements of today's radio users.



#### Safety

Press the highly visible Emergency button to initiate the defined emergency communications procedure.

Providing even greater safety for employees in hazardous environments, the TC-700 Ex PLUS provides a mandown optional feature. This feature automatically summons assistance when the radio falls over for a predetermined time period.

The lone worker feature provides added security and safety for individuals who work remotely from their team. Should a user not respond to a regular warning tone then a defined emergency procedure is activated.

**Safety Check:** Should the user not respond to a safety check signal then a defined emergency procedure is activated.

Additional safety features include a specially designed structure that prevents the battery and radio unit from accidental separation, thus cause hazard results.

#### Quality & Reliability

HYT's voice compander audio enhancement delivers superb clear and crisp sound, no matter the environment.

When discretion is key, the Whisper feature means that even the quietest message can be transmitted and understood.

#### HDC2400™ and HDC1200 Signalling

HYT HDC2400™ signalling system allows features including Identification, Calling Timer, Voice Storage, Retrieve Record, Individual Call, Group Call, Broadcast, Stun/Kill & Revive, Status Inquiry, (Some are features of dispatch center.)

Compatible with MDC1200, the HDC1200 Signalling allows functions including PTT ID Encode, Emergency Encode, Radio Check Decode, Stun/Kill & Revive, Individual Call, Group Call, Broadcast, etc.

### MAIN FEATURES

#### Built-in Scrambler

The scrambler feature provides enhanced security for your important public safety and private security communications.

#### Channel Annunciation

The feature enables radio to report the current channel number when power on or switching channel, offering you notable convenience.

#### Power on Self-Test

The radio itself checks radio status automatically when power on, and emits alert if an error occurs (e.g. CPU error or EEPROM error), allows the user to early detect unit faults.

### CERTIFICATION

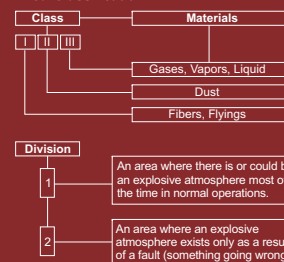
#### FM-approved Intrinsically Safe

I.S. Class I, II, III, Division 1, Group C, D, E, F, G, T3C

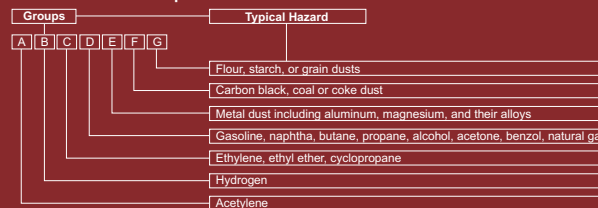
#### Intrinsically Safe Classification

"Intrinsically Safe" is a fire safety rating given to the equipment by the Factory Mutual Research Corporation. When equipment is given this rating, it is considered safe to use in certain flammable or combustible atmospheres. Flammable atmospheres have been categorized by Class, Division, and Group as described below:

#### Area Classification



#### Classification Of Atmospheres



#### Temperature Class

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

### ACCESSORIES



Optional Accessories

Standard Accessories

#### Battery Power Indicator

Upon press of the function key, the radio sounds a tone to indicate the current battery level of very low, low, satisfactory, or high respectively.

#### Embedded Message & Serial Number

The radio's memory can store messages including service and programming records, for remarkable ease of maintenance and service; the feature also makes a unit identifiable by Serial Number.

#### Auto Contact

The feature is especially helpful in high-demanding communication environments, such as climbing, exploration, and rescue work. When feature enabled, the radio will automatically emit alert tone if the user is out of communication range.

#### Stun/Kill & Revive

Provides enhanced security to prevent unauthorized use of lost or rental units, by remote inhibition of either transmit or transmit/receive. A stunned radio will return to operational use after receiving the revive code.

**2-Tone/5-Tone Encode & Decode** (Signalling system is radio dependent. 5-Tone models and 2-Tone models are available.)

#### DTMF Encode

The encode function offers DTMF paging code assignable at a per channel basis.