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

Applicable MIL-STD	810C Methods	810C Procedures	810D Methods	810D Procedures	810E Methods	810E Procedures	810F Methods	810F 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

FM-Approved Intrinsically Safe Model – I.S. Class I, II, III, Division 1, Group C, D, E, F, G, T3C. For more information on the TC-700EX's FM Certification got to www.hytamerica.com

General

Frequency Range(MHz)	VHF: 136-174 UHF: 350-390* 440-490 400-470 450-520
Channel Capacity	16
Channel Spacing(KHz)	25 /20/12.5
Operating Voltage(V)	7.4
Battery	1700mAh (Li-ion)
Battery Life (5-5-90 duty cycle)	About 14 Hours
Frequency Stability(ppm)	±2.5
Operating Temperature	-22℉ ~ 140℉; -4℉ ~ 122℉ (700EX)
Antenna Impedance	50Ù
Dimensions(LxWxH)(with battery, without antenna)	4.80 in. x 2.16 in. x 1.38 in.; 4.80 in. x 2.16 in. x 1.50 in. (700EX)
Weight (with antenna & battery)	11.15 oz.; 15.03 oz. (700EX)

**Frequencies marked with an asterisks(*) are not FCC compliant and are sold for export only by HYT America.*

Transmitter

RF Power Output	5W/2W/1W (VHF) 4W/2W/1W (UHF); 3.5W/1W (700EX)
Modulation	16K₣3E/11K₣3E
Spurious and Harmonics	-36dBm<1GHz -30dBm>1GHz
FM Noise	45/40dB; 40/34dB (700EX)
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	1W; 0.5W (700EX)
Rated Audio Distortion	≤10%; ≤5% (700EX)

FCC Approved Bands: (136-174MHz)
FCC ID Number: R74TC-700V

FCC Approved Bands: (400-490MHz)
FCC ID Number: R74TC-700U

FCC Approved Bands: (400-470MHz)
FCC ID Number R74TC-700U7

FCC Approved Bands: (450-520MHz)
FCC ID Number R74TC-700U8

FCC Approved Bands: (136-174MHz)
FCC ID Number: R74TC-700EV

FCC Approved Bands: (440-490MHz)
FCC ID Number: R74TC-700EU2

FCC Approved Bands: (400-470MHz)
FCC ID Number: R74TC-700EU7

ISO9001:2000 *Certificate* NO:**FM** 61540

Your Local Dealer

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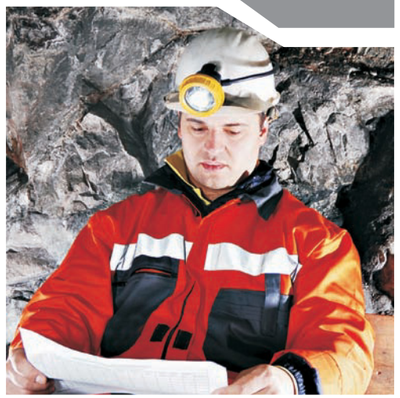
The advanced provider of professional wireless communication

HYT AMERICA, INC.

TC-700

Professional Two-way Radio



- **WIDE-BAND COVERAGE**
- **HIGH-QUALITY AUDIO OUTPUT**
- **SAFETY ASSURANCE**
- **HYT HDC2400™ and HDC1200 Signalling**
- **FM-Approved Intrinsically Safe Model Available**

FM APPROVED

www.hytamerica.com

Super Functions

Wide-Band Coverage
Allows users the flexibility to select their frequency for use in their respective work environment.

Powerful Audio Output
HYT's voice compander audio enhancement and a powerful 1W speaker (with a diameter of 1.6 inches) ensure superb clear, crisp sound, even in noisy environments.

Safety Assurance
Safety and security are critical factors for modern organizations. The TC-700's Lone worker, Man Down (optional) and Emergency Siren features are designed to assure your safety in case of emergencies or accidents.

Built-in Scrambler
Maintaining private and secure communications is increasingly important, with potentially sensitive information flowing back and forth. This feature provides enhanced security for your important communications.

IP54 Rated Water and Dust Protection
Water and dust protection rated IP54, meaning that dust does not enter in sufficient quantity to interfere with the satisfactory operation of the equipment, and that splashes of water against enclosure from any direction shall have no harmful effects.

Professional Two-way Radio

Channel Annunciation
The feature enables radio to report the current channel number when power on or switching channel, enabling user channel recognition without looking at the radio.

HYT HDC2400™ and HDC1200 Signalling
HYT HDC2400™ signaling system allows features including Identification, Calling Timer, Voice Storage, Retrieve Record, Individual Call, Group Call, Broadcast, Stun/Kill & Revive, Status Inquiry, Short Message and Data Transmission. (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.

Lone Worker
The 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.

Whisper
The Whisper feature means that even the quietest message can be transmitted and understood. This is an essential feature for environments where discreet communication is necessary.

FM APPROVED

Intrinsically Safe Model Available

TC-700

TC-700 Series
Packed with cutting-edge technology and HYT innovations, the TC-700 Series voice compander audio enhancement and a powerful 1W speaker ensure superb clear, crisp sound, even in noisiest environments. Its sleek, ergonomic design makes it easy to hold and carry.

Due to the TC-700's ruggedness and durability it is considered one of the most dependable radios on the market, while its affordable pricing make it an attractive option for any organization looking for a cost-effective wireless communication solution.

TC-700EX : Intrinsically Safe Model
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 must be designed and constructed to be totally safe. HYT's FM-Approved Intrinsically Safe TC-700 model gives users the communications they need without compromising safety.

Other versions of the TC-700 include Patrol Radios (for use with the Patrol System) and a version with the ManDown feature.

Additional Features

FM-Approved Intrinsically Safe Model Available
"Intrinsically Safe" is a fire safety rating given to the equipment by the Factory Mutual Research Corporation. This TC-700EX is considered safe to use in certain combustible atmospheres.

Additional Safety Features For IS Model:

Encapsulation / Casting Compound prevents the ignition of the surrounding explosive atmosphere.

A specialized structural design that prevents the battery and radio unit from accidental separation, which can ignite a spark causing hazardous results in combustible environments.

FM-approved accessories are available and are listed below the regular accessories.

Man Down (Optional Feature for Regular TC-700 & IS Model)
When feature enabled, a defined emergency procedure is activated if the radio is horizontally or inversely positioned for a certain length of time. Place the radio vertically to disable the emergency.

Accessories

Standard Accessories

UHF / VHF Antenna · MCU Rapid-rate Charger CH10L07 · Li-ion Battery (1700mAh) BL1703
Spring Belt Clip BC08 (compatible with BL1703) · Strap RO04
Switch Power (100-240V) PS1009 (for use with different power cords in different countries and areas)

TC-700EX Std. Accessories

Li-ion Battery(1700mAh) BL1703-EX · Power Cable
Rapid-rate Charger for Li-ion Battery CH10L11-EX · Belt Clip with Metal Holder BC09
Switching Power PS1009 · Strap RO04

Optional Accessories

Li-Ion battery pack (2100mAh) BL2102
Ni-MH battery (1800mAh) BH1801

MCU rapid-rate multi-unit charger for Li-ion/Ni-MH batteries MCA03

Six-unit switching power PS7001
Vehicle Adapter CHV09

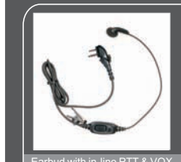
Noise-Cancelling Remote Speaker Microphone (Antenna Applicable) SM13M2

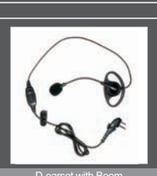
Noise-Canceling Remote Speaker Microphone (IP56) SM13M1

Remote Speaker Microphone SM08M3

Receive-only Earpiece with Transparent Acoustic Tube (for use with remote speaker microphone) ESS08

Receive-only Earbud (for use with remote speaker microphone) ESS07


Earbud with in-line PTT & VOX ESM11
Earbud with on-MIC PTT & VOX ESM12


D-earset with Boom Microphone & VOX EHM16
D-earset with in-Line MIC & VOX EHM15

Light Weight, Behind-the-Head Earpiece with in-Line PTT & VOX ECM11
Light Weight, Single-Muff Headset with in-Line PTT & VOX ECM12

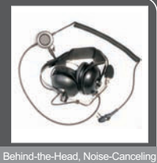
FM-Approved Accessories

Li-ion Rapid-Rate Multi-Unit Charger MCL07-EX

Remote Speaker Microphone SM08M1-EX

Earbud with In-Line PTT ESM01-EX

Light Weight, Throat-Vibrating Earpiece ELM01
Ear Canal Bone Induction Earpiece EBM01


Behind-the-Head, Noise-Canceling Headset ECM14
Noise-Canceling Headset ECM13

3-Wire Surveillance Earpiece with Transparent Acoustic Tube (black/beige) EAM16 / EAM15
Earpiece with on-MIC PTT & VOX & Transparent Acoustic Tube EAM12
2-Wire Surveillance Earpiece with VOX & Transparent Acoustic Tube (black) EAM13

Other Accessories
- Chest Pack LCBN13
- Leather Carrying Case for TC-700 (Swivel) (Thin Battery / Thick Battery) LCBN41/ LCBN42
- Leather Carrying Case for TC-700EX (Non-Swivel) LCBN57
- Received Only Earbud (Remote Speaker MIC Used Only) ESS01
- 2-wire Earpiece with Wireless Earphone and Neck Loop EWM03
- Spring Belt Clip BC09 (Compatible with BH1801 & BL2102)
- Programming Cable (COM port) PC19
- Programming Cable (USB port) PC26
- Universal PC programming Cable Kit PC08

Safety Check
Should the user not respond to a safety check signal from the dispatch center or another authorized radio, a defined emergency procedure is activated.

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

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

Emergency
Press the Emergency key to emit emergency alarm, or send ENI (Emergency Number Identity) / background tone to a pre-defined person or the dispatch center (selectable via programming software).

Auto Contact
Helpful in high-demanding communication environments, such as rescue work. When enabled, radio beeps when moving out of range.

Rental Feature
The Rental feature enables the setting of the time period that a radio will be rented. The radio will be disabled once the time elapses.

Software Upgradeable (optional)
Allows new functions add-in to accommodate future updates.

PC Tuning
Enables remarkable ease of maintenance.

Patrol Record (optional)
Patrol system allows for real-time monitoring of personnel rounds and consists of the TC-700 radio supporting the patrol record feature, patrol point TX-90, control center TM-800, patrol management software, data transmission cable.

Recommended Applications

- Security
- Firefighters
- Public Utilities
- Education
- Manufacturing
- Petrochemical (700EX)
- Property Management
- Construction Sites
- Hotel
- Police
- Mining (700EX)