

### 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(MHz)	VHF: 136-174 UHF: 400-420 440-470 450-470 350-390
Channel Capacity	16
Channel Spacing(KHz)	25 /12.5
Operating Voltage(V)	7.4
Battery	1200mAh (Li-ion)
Battery Life (5-5-90 Duty Cycle)	More than 9 hours
1200mAh Li-Ion battery	More than 9 hours
1300mAh Ni-MH battery	More than 14 hours
2000mAh Li-Ion battery	
Frequency Stability(ppm)	± 2.5
Operating Temperature(°C)	-20~ +50
Antenna Impedance( Ω )	50
Dimensions (H×W×D)(with battery, without antenna)(mm)	119×55×33
Weight (with antenna & batter y)(g)	270g (TC-610) 275g (TC-610P)

### Transmitter

RF Power Output	5W/2W(VHF) 5W/2W(UHF)
Modulation	F3E
Spurious and Harmonics	-36dBm<1GHz -30dBm>1GHz
FM Noise	40/35dB
Audio Distortion	≤5 %

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

### Receiver

Sensitivity	0.25/0.28 μ V
Selectivity	70/60dB
Intermodulation	≥65dB
Spurious Response Rejection	≥70dB
S/N	45/40dB
Rated Audio Power Output	800mW
Rated Audio Distortion	≤5%



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# TC-610/610P

Cost Effective  
Professional Radio

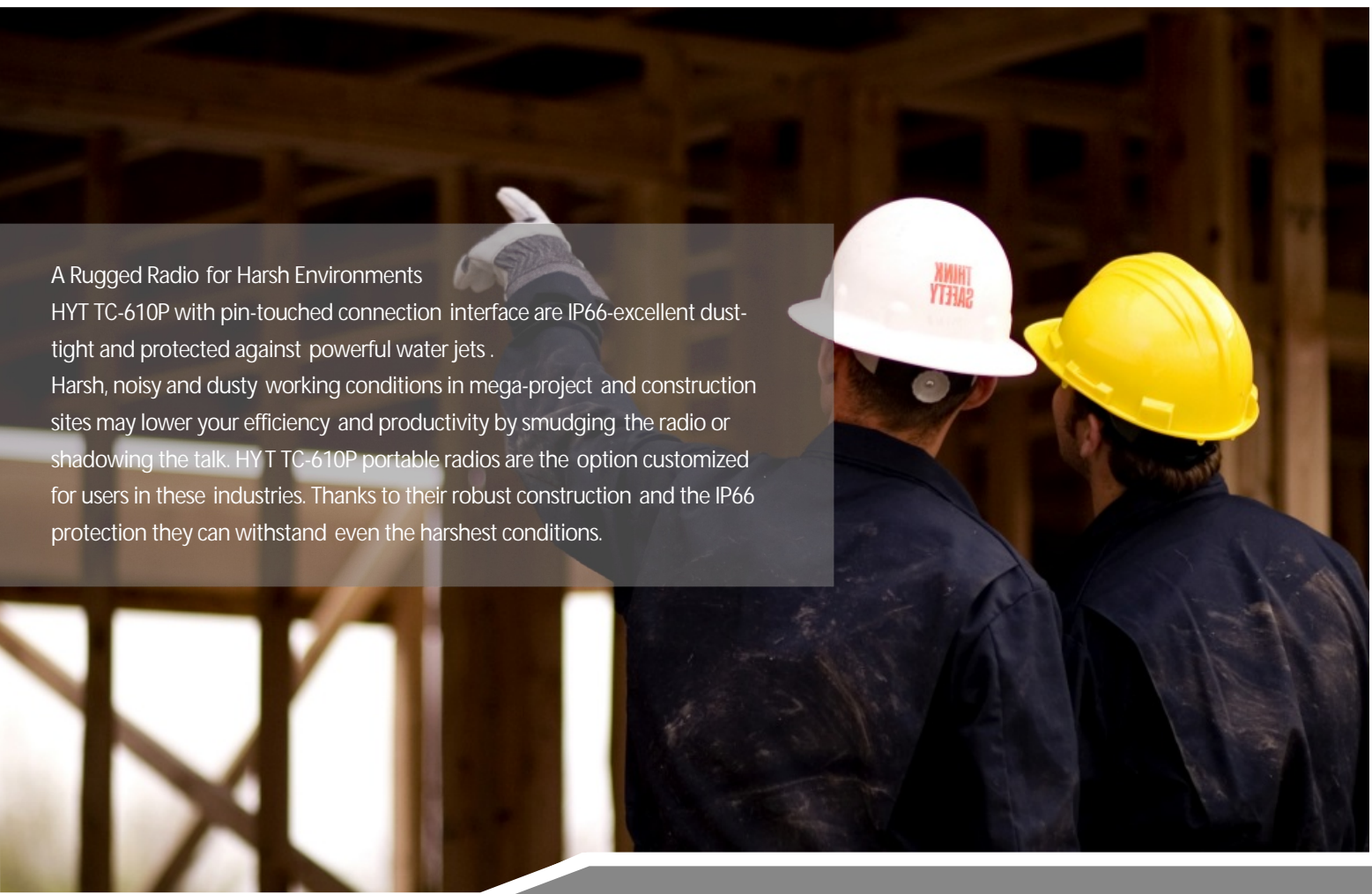


- Dust/Water Protection Class IP66
- Powerful Audio and Wide Communication Range
- LED Battery Gauge
- The Patent Structural Design

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Hytera Communications Corporation Limited





A Rugged Radio for Harsh Environments  
HYT TC-610P with pin-touched connection interface are IP66-excellent dust-tight and protected against powerful water jets .  
Harsh, noisy and dusty working conditions in mega-project and construction sites may lower your efficiency and productivity by smudging the radio or shadowing the talk. HYT TC-610P portable radios are the option customized for users in these industries. Thanks to their robust construction and the IP66 protection they can withstand even the harshest conditions.

# TC-610/610P

## Super Features

**Dust/Water Protection Class IP66**  
In harsh, noisy, dusty and wet working conditions such as construction sites, generally your radio is apt to be smudged. But the TC-610P series will bring you reliable communication and high productivity in these working conditions, and the IP66-excellent protection with pin-touched connection interface allows you to wash off mud and dust on your radio. Other radios with poor waterproof performance may not work after you expose them to water.

**Double Injection Molding**  
The TC-610P series employ double injection molding, which is a technique with high difficulty coefficient and high risk. Owing to this superior technique, the radio is comfortable to handle, rugged and durable.

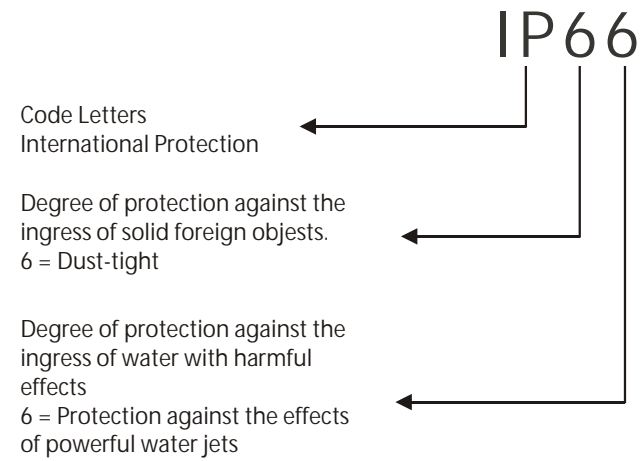
**Powerful Audio and Wide Communication Range**  
A powerful speaker with a diameter of 45mm (36mm for speakers of common radios) ensures superb clear, crisp sound, even in noisy environments. High transmit power (5W for UHF frequency band) accommodates wide communication coverage.

**LED Battery Gauge**  
Non-display radios generally have no battery power indicator. The TC-610P series allow you to simply press one button to illuminate the tri-color LED battery gauge, which indicates battery strength levels for more effective power management.

**Proprietary Structural Design**  
The battery latch structure of TC-610P series radios is another patent owned by HYT. It delivers secure connection between the battery and the radio, as well as simple operation.

## Professional Two-way Radio

The IP Code is a designation that indicates the level or amount of protection. The IP Code designation consists of the letters IP (International Protection) followed by two numerals – example:



• IP66 water protection ensures the radio to be protected against a water jet for one minute. The diameter of the water jet is 40 mm.

## Main Features

**High/Low Power Switchable**  
By simple pressing one button, users can switch to low power when communicating within limited range coverage or switch to high power when further distance is required. High transmit power optimizes range coverage while low transmit power conserves battery consumption, all at the user’s control.

**Programmable 12.5kHz/25kHz Channel Spacing**  
The feature enables flexibility and easy migration of channel spacing requirements when the need arises, with no need to buy new radios.

**Monitor**  
Allows users to monitor the activity on the current channel. The feature is especially helpful for receiving a weak signal.

**Battery Save**  
The Battery Save feature is automatically activated once no activity on the channel and no operation performed, for extended operation time.

**Low Battery Alert**  
Alert users to recharge the battery should the battery level run low.

**TX Admit**  
Prevent users from “talking over” each other by restricting the user from transmitting if activity is detected on the channel.

**Time-out Timer**  
The feature allows for more efficient use of channels by limiting the amount of time of each transmission.

**PC Programmable**  
You are able to customize the features of each radio for each user.

**Wired Clone**  
Easily copy the features of one radio to another.

**CTCSS/CDCSS**  
Set up workgroups/users with unique CTCSS/CTCSS to prevent unwanted conversations on the same frequency.

**Selectable Squelch Level (1-9)**  
Helps minimize interference from undesired weak signals and helps weak signals be heard.

**Channel Scan**  
The channel scan feature enables the radio to continuously scan each channel in the scan list for activity. Simply press a side function button to activate scanning. When activity is detected on a channel the scan process will stop and you will hear the transmission.



**Voice Operated Transmit (VOX)**  
Enjoy the convenience of hands-free operation when used with optional accessories.  
**2-Tone Decode (for TC-610P optional)**  
Allows you to receive Select Call, Alert Call, and Alert Call w/Voice.  
**HDC1200 PTT ID (for TC-610P optional)**  
Enables the transmission of caller ID and allows user to identify incoming callers.

**ATIS**  
ATIS is an automatic identification device compliant with special technology regulations. This feature may be enabled by your dealer for specific areas.  
**DOS (Data Operated Squelch)**  
Helps to eliminate noise that occurred at the receiver.

## IMPORTANT

1. TC-610/610P series are NOT submersible! Never immerse the radio in water.
2. KEEP the radio's accessory jack cover attached when the speaker-microphone is not in use. Water may get into the radio when the cover is not attached.

## Recommended Applications

- Construction sites
- Hotel
- Ports
- Stocking
- Property management

## Accessories

Standard Accessories	Li-Ion Battery (1200mAh) BL1204 MCU Rapid-rate Charger (for Li-Ion/Ni-MH Batteries) CH10A03	Switching Power (Varies from different countries and areas) Belt Clip BC12	Antenna Strap RO03
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Optional Accessories

MCU Multi-unit Rapid-rate Charger (for Li-Ion/Ni-MH Batteries) MCA02

Li-Ion Battery (2000mAh) BL2001  
Ni-MH Battery (1300mAh) BH1303

Six-unit Switching Power PS7001  
Vehicle Adapter CHV09

Universal Nylon Chest Pack (Black) LCBN13  
Leather Carrying Case (non-swivel) LCBN56

Audio Accessories TC-610P: Contact Pin Accessory Jack TC-610: 2-Pin Accessory Jack

Earbud with in-Line PTT ESN05(TC-610P) / ESM11(TC-610)  
Earbud with on-MIC PTT ESN06 / ESM12(TC-610)

Behind-the-Head Noise-Canceling Headset ECN09(TC-610P) / ECM14(TC-610)  
Heavy Weight Noise-Canceling Headset ECN08(TC-610P) / ECM13(TC-610)

Light-weight Single-muff Headset ECN07(TC-610P) / ECM12(TC-610)  
Light-weight Behind-the-head Earpiece ECN06(TC-610P) / ECM11(TC-610)

Earpiece with on-MIC PTT & Transparent Acoustic Tube EAN04(TC-610P) / EAM12(TC-610)  
2-wire Surveillance Earpiece with Transparent Acoustic Tube (black) EAN07(TC-610P) / EAM13(TC-610)  
3-Wire Surveillance Earpiece with Transparent Acoustic Tube EAN02(TC-610Pblack) / EAN06(TC-610Pbeige) / EAM16(TC-610.black) / EAM15(TC-610.beige)  
2-Wire Earpiece with Wireless Receiver and Neck Loop EWN03(TC-610P) / EWM03(TC-610)

Light Weight, Throat-Vibrating Earpiece ELN02(TC-610P) / ELM01(TC-610)  
Ear Canal Bone Induction Earpiece EBN01(TC-610P) / EBM01(TC-610)

Remote Speaker Microphone SM08N1(TC-610P) / SM08M3(TC-610)  
Receive-only Earbud (for use with remote speaker microphone) ESS07  
Receive-only Earpiece with Transparent Acoustic Tube (for use with remote speaker microphone) ESS08

Noise-Canceling Remote Speaker Microphone (IP50) SM13N5(TC-610P) / SM13M1(TC-610)  
Noise-Canceling Remote Speaker Microphone (Antenna Applicable) SM13N4(TC-610P) / SM13M2(TC-610)

D-earset with Boom Microphone EHN08(TC-610P) / EHM16(TC-610)  
D-earset with in-line Microphone EHN07 / EHM15(TC-610)

✦ Programming Cable (COM port) PC18(TC-610P) / PC19(TC-610)  
Programming Cable (USB to Serial Port) PC25(TC-610P) / PC26(TC-610)