





# **PT580H**

# **Highlights**

# Performance Through Innovation

PT580H has a globally patented Industrial design with antenna in the middle position, providing Omnidirectional antenna pattern for better coverage performance. Antenna used in PT580H is a patented design which is short in length and having GPS antenna integrated. Separated by the antenna, the two knobs of the portable radio stand apart from each other, which reduces accidental activation when changing volvme achannel.

## **User Friendly Interface**

PT580H's compact and large textured keys provide an excellent tactile feeling. The large TFT color display enables you to access pertinent information with ease, even under bright sunlight. As many as 20 programmable keys are configurable for quick access through one button operations.

# $Reliable\,Through\,Design$

PT580H is designed to comply to TETRA ETSI Standard, MIL-STD- 810 C/D/E/ F/G, IP67 Dust & Water Protection and Hytera ALT Test simulating over years usage. These tests ensure PT580H will stand up to the toughest conditions and environment.

#### **Versatile Services**

In addition to voice and data communication services, PT580H also allows users to customize various functions, including GPS, Encryption, Man-Down, etc.

## Instant and Seamless Communication

PT580H enables quick access to TETRA networks and roaming services. Additionally, PT580H provides powerful interoperability with base stations and terminals of different manufacturers.

## High RF output power

PT580H gets a RF output power up to 3W (Launch adjustable power); effectively enlarges signal coverage, including basement and in-door area.









# **Features**

#### **Operation Mode**

- Trunking Mode Operation (TMO): communications over TETRA network (semiduplex and full duplex mode)
- Direct Mode Operation (DMO): direct communications between terminals without network intervention (semiduplex mode)

#### Voice Services

#### Group Call

- ► Standard Group Call
- ▶ Priority Group Call
- ► Emergency Group Call
- ► Broadcast Call
- ▶ Late Entry
- ► Talking Party Identification
- ► DGNA Service
- ► Group Call Scan
- ► Talk Group Management

## **Security Services**

- Authentication
- ▶ Air Interface Encryption TEA 1, TEA 3, TEA 4
- ► E2EE (End-to-End Encryption) Security Services ★ -E2EE Encryption Module
- -Multiple Algorithm Support
- ► PIN/PUK Code Access
- ► Security Class 1, 2, 3
- Ambient Listening
- ▶ Discreet Listening
- Stun/Kill
- ► Configure Information Protection

#### Data / Message Services

- ► Short Data Service (SDS) -- Type1, Type2, Type3, Type4, TL Data
- Status Message
- Packet Data Service (PEI)
- One Button-trigger Status Massage
- Long SDS Receiving
- ► Further Developing Interface Reserved
- ► At Command (PEI)

#### Ergonomic Design Feature -

- ▶ Patented 65mm/95mm Integrated GPS Antenna
- ▶ Unique ID with Antenna in the middle Position to provide Omni-directional Antenna Pattern
- ► Easy Accessible Rotary Knob with Distanced Position Gap
- ► Easy Operation and Configurable Keypad/Controls -Dual Colors Tactile PTT Button
- -Alphanumeric Kevpad
- -Emergency Button
- -4-ways Navigation Key
- -20 Programmable Shortcut Keys
- ▶ High Definition and User Friendly Display
  - -160 x 128 pixels LCD with 65,536 colors
  - -Adjustable Display Brightness
  - -Screen Invert
- -12+ Languages (English, Simplified Chinese, Korean, Russian, Spanish, German, French, Farsi, Catalan, Malay, Arabic, Traditional Chinese (including Traditional Chinese display and phonetic input method))
- -Tri-color LED Indicator
- -Date and Time Display/ Calendar Display





Double color PTT noticeable & enhanced safety



Protect the screen & keypad



#### Individual call

- ► Standard Half Duplex Individual Call
- ▶ Standard Full Duplex Individual Call (TMO)
- ▶ Priority Individual Call
- ► Emergency Individual Call
- ► Calling Identification
- ► Pre-emption Priority Call

#### Telephone Call (PSTN/PABX)

- ► Full Duplex Telephone Call
- ► DTMF
- ► Calling Identification
- ▶ Pre-emption Priority Call

#### **Advanced Features**

- ► Provides Java Application Platform
- ► WAP Browser\*
- ▶ Over The Air Programming (OTAP)\*
- ► GPIO Program\*
- ► Circuit Mode Data\*

#### **User Safety**

- ► Emergency Button
- Man Down
- Keypad Lock

Out of Network Alarm

- Multimode GPS Application
- ► Low Battery Alarm
- ► Vibration Informing
- ► Emergence Call Red Screen

## **Global Positioning Service**

- ► Built-in and Fully Integrated GPS
- Position Information Transmission during Emergency Call
- ► Time Synchronization and Calibration
- ▶ Multimode GPS Application (time trigger, distance trigger, time & distance trigger)
- ► Remote Enable/Disable
- ► Support Lip Protocol
- ▶ Position Information Display
- ► High Quality Audio Design
- -Upper Microphone for Half Duplex Call
- -Lower Microphone for Duplex Call
- -Earpiece for Duplex Call
- -Build-in Loud Speaker
- ► Lockable Accessory Side-Connector
- ► Selectable Ringing Profile
- Selectable Menu (via CPS)
- Network status display
- ► Screen Background Changable (via CPS)

\* Realized in Version 6.0



# **Specifications**

General RF Specifications Environmental	Frequency Bands	350-400MHz/380-430MHz 410-470MHz/806-870MHz	
	Dimensions (HxWxD)	127.5 x 54.5 x 35.5mm	
	Weight	367g	
	Battery	1800mAh Li-lon battery	
	Battery Life (5/5/90 Duty Cycle)	>16hours	
	Operating Voltage	7.4V	
	RF Channel Bandwidth	25KHz	
	RF Power Output	3W/1.8W (for 806-870MHz)	
	RF Power Level Accuracy	± 2dB	
	Receiver Class	ETSI EN 392-2/396-2 Class A & Class B	
	RX Static Sensitivity	-112dBm (typical -116dBm)	
	RX Dynamic Sensitivity	-103dBm (typical -105dBm)	
	Maximum Audio Power Output	1W	
	Operating Temperature	-25 ~+65	
	Storage Temperature	-40 ~ +85	
	Humidity	ETS 300 019 (95%)	
	Water and Dust Protection	IEC60529, IP67	
	Drop, Shock & Vibration	MIL-STD- 810 C/D/E/ F/G	

	Item Low me		emory machine	High memory machine
1	Talk Groups - TMO		2048	3000
Т	Talk Groups - DMO		1024	2000
	Phonebook		1000	1000
	Missed Calls		20	20
	Received Calls		20	20
	Dialed Calls		20	20
	Inbox		50	400
	Outbox	20		50
Drafts		10		50
Drafts -TMO		61		61
Folder -TMO		64×200 (200 groups in each list )		200×200 (200 groups in each list )
	Folder -DMO 32×200		0 groups in each list)	50×200 (200 groups in each list )
GPS	Sensitivity	,	-148dBm acquisition sensitivity	
	Sensitivity		-162dBm tracking sensitivity	
	Accuracy		2.5m CEP	
	Cold Start (Time to First Fix)		< 26s	
	Hot Start (Time to First Fix)		< 1s	

All specifications are subject to change without notice due to continuous development.

# **Standard Accessories**



1800mAh Li-ion Battery BL1806



MCU Rapid-rate



Power Supply Cable (EU standard) PS1018





Belt Clip BC19



Hand Strap RO04

# **Optional Accessories**



2500mAh Li-ion Battery BL2505



Dual Pocket MCU Charger Kit CH10A06



Battery Optimizing System MCA05



MCU Multi-unit Charger Thick Battery) MCA08



Vehicle Adapter (DC-DC) CHV09









Waterproof Remote Speaker Microphone (IP67) SM18N5



ESW01-N1



Headset EBN09





Noise Cancellation Headset ECN18



D-earset with PTT-ON-MIC ESN12







with Transparent Acoustic Tube EAN23



(for use with PTT&MIC cable) ES-01



Receive-Only Earpiece with Transparent Acoustic Tube ES-02



Receive-Only C Style Earloop (for use with PTT&MIC cable) EH-01



Earhook with Swivel Speaker (for use with PTT&MIC cable) EH-02



PTT&MIC cable (for use with Receive-Only Earpiece) ACN-01



Earpiece with Transparent Acoustic Tube(Beige) EAN17



Earpiece with Transparent Acoustic Tube(Black) EAN18



Wireless Earphone and Neck Loop(Beige)

Pictures above are for reference only and may vary from actual products.



















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