Hytera
Respond & Achieve

TETRA Portable Terminal

PT5 Series

PT580H Plus S
PT560H

Water and dust proof, these IP68 rated devices are rugged and reliable, offering a high RF output, clear digital audio and in-built Bluetooth and GPS. Ideal for mission critical users.

Excellent Performance with IP68 water & dust ingress protection, higher RF output, clear digital voice, built-in BT and GPS positioning, the Tetra portable PT5 series will ensure the call gets through anytime and anywhere. The PT560H radio is the latest addition to the PT5 Series TETRA Portables.

PT580H PT560H

www.hytera.co.uk

PT5 Series

Highlights

Reliable Design
The PT5 Series is designed to comply with the TETRA ETSI Standard, but is also certified MIL-STD-810 G and IP68 Dust & Water Protection. These tests ensure that the PT5 Series will stand up to the toughest conditions and all-weather environments.

Improved Receiving Performance
The PT5 Series has received a 2dB sensitivity improvement compared to previous generations. This will help capture weaker signals and increase coverage.

Outstanding Audio
The PT5 Series offers a variety of audio profiles for different user groups. These profiles can be specific for different working scenarios. Advanced audio technology such as the noise suppression and AGC algorithm delivers a clear voice transmission.

Comprehensive Security Protection
The built-in hardware encryption module provides multiple levels of security protection, with keys and algorithms.

Comprehensive Security Protection
The multi-satellite location services allows the PT5 Series to be operated globally. The PT5 Series supports GPS, Glonass and Beidou.

Enhancements:

- IP68 Protection Level
- Wideband: 405-475M
- Longer Battery Life

New added features:

- DMO Full Band TX/RX
- Built-in BT 4.0
- DMO Repeater type 1A

PT5 Series
Efficient Critical Communication

Patented Antenna
The patented antenna design is positioned in the middle of the device to help the tactile access of the control knobs.

Multi-satellite Location Service
Supports GPS, Glonass and Beidou location system.

Channel Control
Operate this freely without watching the device, easy to move between channels as required.

Strong Screen
Enhanced materials have been used in the design process to strengthen the screen against knocks and drops.

High Receive Sensitivity
With a 2dB sensitivity improvement, the PT5 Series can capture weak signals and increase the transmission distance.

BT 4.0 Data Applications
Bluetooth upgrading and programming solution allows the user to facilitate changes or upgrades wirelessly.

Dust & Water Proof
The IP68 rating guarantees reliability in dusty environments or when submersed in water.

Enhanced Audio Quality
The latest noise cancellation technology ensures voice transmissions are heard loud and clear.

Smart Battery
Determine the precise state of the battery, indicating capacity and remaining charging time.

Rugged Design
Fully compliant with MIL-STD-810 G. The PT5 series radio shows outstanding performance in tough environments.

Easy Operation Keypad
The ergonomic design makes it easy to operate the device, even with gloves.

MIL-STD 810 G

IP68

3W

Equipped with accessories for different tasks, the PT5 Series accessory family makes it even easier to operate Hytera devices. The PT5 Series arrives with standard ergonomic and power accessories, speak with your authorised Hytera partner to discuss all options.

Standard Accessories

Belt Clip BC19

Hand Strap RO04

2000mAh Li-ion Battery BL2109

Antenna

MCU Rapid-rate Charger CH10A07

Power Supply cable (EU standard PS1018)

PT5 Series Versatile Accessories

Waterproof Remote Speaker Microphone (IP67) SM18N5

MCU Multi-unit Charger (also compatible with high capacity battery) MCA08

2500mAh Li-ion Battery BL2505

Wireless Headset with Double PTT EHW02

Vehicle Adapter for Charger (DC-DC) CHV09

Smart Charger CH20L06

3-wire Surveillance Earpiece with Transparent Acoustic Tube (Beige) EAN17

Leather Case LCY006

You can expect excellent audio performance through our robust and reliable accessory options. Audio accessories are designed to provide clear voice transmissions in even the noisiest environment.

Rugged connectors give you confidence in your accessories, the remote speaker microphone has a high IP rating for use in harsh environments. In addition, the wireless earpiece options allow hands free use for specialist tasks.

Features

Voice Service

- Individual Call
- Group Call
- Broadcast Call (TMO)
- Open Group Call
- DTMF
- Gateway Call (DMO)
- Repeater Call (DMO)
- Phone Call
  - PABX
  - PSTN
- Pre-emptive Call
- Late Entry
- DGNA
- Group Scanning
- Fallback Operation
- Emergency Call
  - Emergeny Group Call to Selected Group/Group Call to Pre-defined
  - Group/Individual Call/Phone Call (PABX/PSTN)
  - HOT MIC
  - Emergency Cycle
  - Configurable Emergency Priority
  - Location Information Sending (TMO)
  - Silent Emergency Call (TMO)
- Talking Party Identification
- Individual Call Restriction via Phonebook
- Group Change Voice Broadcast
- CAD (Call Authorised by Dispatcher)
- BT
- Notification Talkgroup
- Favourite Folder
- Audio Profile

License Control

- GCK*
- SCK OTAR*
- VOX
- Temporary Disable Enhancement
- SDS Template
- Drive Test
- Cell Application
- Route Trace
- Load Directed Roaming*
- Low Power Class
- BT Upgrade & Program

* (Free Trial Applicable)

User Security

- Man-Down
- Ambience Listening
- Radio User Assignment (RUA)
- Lone Worker
- Alert for Low Battery
- Emergency Protect Mode
- Call Out
- One Touch Emergency Call
- User Configuration Data Protection
- Keypad Lock
- Alert for Out of Network Coverage

Security Service

- Authentication
- Package Data User Authentication
- AIE: TEA1, TEA2, TEA3, TEA4
- Security Class: Class 1/2/3
- End to End Encryption
  - By Hytera Software (AES128)
  - By TETRA Software (AES128 / AES256)
  - By SIM card or TP chip
  - Coice Service / SDS Service
- Temporary Disable
- Permanent Disable

User Interface / Display

- Multi-language
- Java Platform 2.0
- 23 Programming Keys (PT580)
- Flexible Dialing Ways: Rolling Dialing, Index by Symbols and etc.
- Two Independent Microphones
  - Top MIC for Half-duplex Call
  - Button Mic for Full-duplex Call
- Display Reverse
- Customised Terminal Menu
- Time Synchronisation
  - With GPS Time
  - With System Time
- Configurable Maximal/Minimum Volume
- Input Method Editor
- Dark Blue and Light Blue Style Menu Display
- Group Application - Support for Sub-folder

DMO Repeater

- ETSI type 1A DMO Repeater for Channel Efficient Operation
- Repeats DMO Voice and Tone Signalling on Selected Talkgroup
- Repeats SDS and Status Messaging on Selected Talkgroup
- Transmission of Repeater Presence Signal

Data Service

- Short Data Service
  - SDS-1, 2, 3, 4, TL
  - Status Message
  - Immediate Text Message (TMO)
  - Long Text Message (TMO)
  - One Touch/Fast Sending Status Message;
  - Message Sending/Receiving During Calls;
  - Message Sending via DMO Gateway;
- Package Data
  - Single-slot
  - Multi-slot
- Peripheral Equipment Interface (PEI)
- AT Command
- OTAP (Over The Air Programming)
- Status Message Solution
- WAP
- Circuit Mode Data
- Short Data Template
- Work Order
- OTAK (Over The Air Keying)
- Upgrade and Program via BT

Location Service

- GPS/GLONASS/Beidou
- Control Centre Authentication by MS
- LIP Protocol
  - Trigger Conditions (Configured via Air or CPS)
    - Emergency Call
    - Interval
    - Distance
    - Power On/Off
    - Status Message
    - Positioning Loss/Regain
- NMEA Location Reporting
- Time Synchronisation and Adjustment
- Display the Calling Party's Relative Direction & Position
- Overspeed Alarm
- Route Trace

Specifications

General Specifications	Frequency Bands	380-430MHz / 405-475MHz 806-860MHz
	Dimensions (H x W x D)	127.5 x 55 x 39.5mm
	Weight	368g (with 2000mAh battery and antenna)
		400g (with 2500mAh battery and antenna)
	Battery	380-430MHz / 405-475MHz 806-860MHz
	Battery Life (5-5-90)	PT580H Plus: > 20 Hours (1800mAh), > 22 Hours (2000mAh), > 27 Hours (2500mAh)
	Operating Voltage	7.4 V
User Interface	LCD Colour Display	1.8inch, 160*128pixels, 65536 Colours
	Talk Group - TMO	6000
	Talk Group - DMO	4000
	Phone Book	2000
	Inbox	400
	Outbox	50
	Drafts	50
	Scan Lists - TMO	200
	Scan Lists - DMO	50
	Status Messages	200
	Folder - TMO	200 x 200 (200 groups in each list)
	Folder - DMO	50 x 200 (200 groups in each list)

RF Specifications	RF Channel Bandwidth	25KHz
	RF Power Output	3W (1.8W For 806-870MHz)
	RF Power Level Accuracy	±2dB
	RF Power Control	5stps of 5dB
	Receiver Class	ETSI EN 392-2 / 396-2 Class A & Class B
	RX Static Sensitivity	7.4 V
	RX Dynamic Sensitivity	-107 dBm(Min);-109dBm(Typical) 800M:-106 dBm(Min);-107 dBm(Typical)
	Audio Power Output	2W (Peak 3W)
GPS Specifications	Sensitivity	≤-146dBm Acquisition Sensitivity
		≤-165dBm Tracking Sensitivity
	Accuracy	≤2.5m
	Cold Start (Time to First Fix)	<35s
	Hot Start (Time to First Fix)	<1s
Environmental	Operating Temperature	-30°C ~ + 60°C
	Storage Temperature	-40°C ~ + 85°C
	Humidity	ETS 300 019 (95%)
	Water and Dust Protection	IEC60529, IP68
	Drop, Shock & Vibration	MIL-STD-810G;ETS 300 019-1-7 5M3; GJB150A-2009

All technical information was determined at the factory and in accordance with the corresponding standards. Subject to change on the basis of continuous development.

Your Hytera partner:

Further information can be found at:
www.hytera.co.uk

Keep up to date with Hytera on social media.

Hytera
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Hytera reserves the right to modify the product design and the specifications. In case of a printing error, Hytera does not accept any liability. All specifications are subject to change without notice.

Encryption features are optional and have to be configured separately. They are also subject to European export regulations.

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Ref. no.:TETRA_PT560H_EN_002A_180118