Specifications

		Portable Radio		Mobile Radio	Data Modem
		PT580	PT580H	MT680	DT600
General Specifications	Frequency Bands	806-870 MHz	350~400 MHz 380~430 MHz 410~470 MHz 806~870 MHz	350~400 MHz 380~430 MHz 410~470 MHz 806~870 MHz	380-430MHz 410-470MHz
	Dimensions (HxWxD)	125 × 53.5 × 32mm	127.5 × 54.5 × 35.5mm	70 × 184 × 201mm	194 × 133 × 46mm
	Weight	265g(with battery and antenna)	348g(with battery and antenna)	1900g	<980g(with GPS receiver)
	Battery	1800mAh Li-Ion battery	1800mAh Li-Ion battery	–	–
	Battery Life (5/5/90 Duty Cycle)	>10hours	>16hours	–	–
	Operating Voltage	3.7V	7.4V	10.8V-15.6V(Typical values 13.2V)	10.8V-15.6V(Typical values 13.2V)
User Interface	LCD Color Display	1.8inch，160*128pixels，65536colors	1.8inch，160*128pixels，65536colors	2.8inch，320*240pixels，260K colors	–
	Talk Groups - TMO	2048	2048	2048	–
	Talk Groups - DMO	1024	1024	1024	–
	Phonebook	512	512	512	–
	Missed Calls	20	20	20	–
	Received Calls	20	20	20	–
	Dialed Calls	20	20	20	–
	Inbox	50	50	50	–
	Outbox	20	20	20	–
	Drafts	10	10	10	–
	Scan Lists	20 (20 groups in each list)	20 (20 groups in each list)	20 (20 groups in each list)	–
RF Specifications	RF Channel Bandwidth	25KHz	25KHz	25KHz	25KHz
	RF Power Output	1W	3W	10W	3W
	RF Power Level Accuracy	±2dB	±2dB	±2dB	±2dB
	RF Power Control	5 steps of 5dB			
	Receiver Class	ETSI EN 392-2/396-2 Class A	ETSI EN 392-2/396-2 Class A	ETSI EN 392-2/396-2 Class A	ETSI EN 392-2/396-2 Class A
	RX Static Sensitivity	-112dBm (typical -116dBm)			
	RX Dynamic Sensitivity	-103dBm (typical -105dBm)			
	Maximum Audio Power Output	1.5W	1W	4W (internal) 10W (external)	–
GPS Specifications	Sensitivity	–	≤-138dBm acquisition sensitivity		
		–	≤-154dBm tracking sensitivity	≤-154dBm tracking sensitivity	
	Accuracy	–	≤10m	≤10m	
	Cold Start (Time to First Fix)	–	<120s	<50s	<50s
	Hot Start (Time to First Fix)	–	<10s	<10s	<10s
Environmental	Operating Temperature	-25℃ ~ +65℃	-25℃ ~ +65℃	-25℃ ~ +65℃	-30℃ ~ +70℃
	Storage Temperature	-40℃ ~ +80℃	-40℃ ~ +80℃	-40℃ ~ +80℃	-40℃ ~ +85℃
	Humidity	ETS 300 019 (95%)	ETS 300 019 (95%)	ETS 300 019 (95%)	0%~100%
	Water and Dust Protection	IEC60529, Ip57	IEC60529, IP57	IP54 (main unit) IP67 (front panel) IEC60529 or GB-4208-93	IEC60529，IP54
	Drop, Shock & Vibration	MIL-STD- 810 F			

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

For more information, Please visit Digital.hytera.com/TETRA

To purchase , become a dealer or application partner, please contact us ✉ TETRA.marketing@hytera.com

Hytera Communications Corporation Limited

Hytera TETRA Series Products Introduction

Hytera, complying with ETSI TETRA open standard, brings you versatile TETRA series products, including portable radio, mobile radio, data modem and various solutions. Hytera responds to your demands for mission critical with the most valuable solution of leading digital technologies, innovative user-oriented product design and complete product portfolio.

www.hytera.com

TETRA, an advanced and popular digital trunking standard, delivers multiple-base wireless communications for various demanding situations with its powerful dispatching and data transmission functions.

Hytera, as the leading provider of professional wireless communications equipment and a member of TETRA MoU, offers a series of TETRA terminal products complying with ETSI TETRA open standard. Characterized by superior performance, comprehensive solution, novel appearance, user-friendly menu and flexible configuration, Hytera TETRA products provide efficient, reliable communications for industry clients of public security, airport, port and subway etc. with its innovative applications and unique functions.
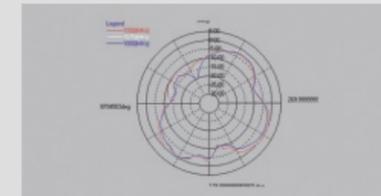
DT600

MT680

PT580

PT580H

* More about TETRA standard, please visit http://www.tetramou.com or http://digital.hytera.com.cn/TETRA

Innovative Design & Convenient Operation

❶ Patented antenna

The radio antenna and GPS antenna are integrated to ensure convenience and better performance.

❷ Large-size color display& multilingual UI

The large-size TFT LCD display with multilingual UI delivers you favorable accessibility.

❸ Separated knobs

Separated by the antenna, the two knobs of portable radio stand apart from each other, which reduces misoperation when with gloves on or under dim light.

❹ User-friendly menu

The menu gives you quick access to all services and functions. Our TETRA products, terminal and mobile, employ the same UI style so that you can learn to operate different models easily.

❺ Ergonomic key

The smart body incorporates big keys for ease of use and precise operation.

❻ 2-in-1 knob

The mobile radio employs a 2-in-1 large knob to adjust the channel and volume quickly.

Reliable quality & Superior performance

① Rugged and reliable

Compliance with MIL-STD-810 F requirements, and passing of HALT (Highly Accelerated Life Test) , ensure outstanding performance even under harsh environments.

② IP57 compliance

PT580H complies with IP57 requirements, withstanding immersion testing (1meter up to 30 minutes).

③ High RF output power for large-area coverage

High RF output power(portable up to 3W, mobile up to 10W) can effectively enlarge signal coverage, including basement and in-door coverage.
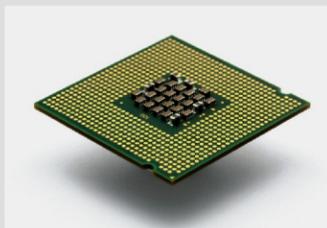
④ High compatibility

Strong network compatibility can accommodate the interconnection requirements of TETRA MoU, and be compatible with systems and terminals of other manufacturers.

Flexibility & Scalability

① Customized encryption

Besides TETRA standard encryption, advanced encryption tailored to users' demands can also be achieved to ensure communication confidentiality.

② Further development port

Our TETRA products reserve port for you or any third party to further develop desired functions such as GPS, call control and telemetry.

③ Software upgradable

Authorized dealers can download the Software Upgrade Kit on Hytera official website*; this can help end-users upgrade software and enjoy further features with an ease .

④ Customizable interface

Users can customize the operation interface of portables and mobiles , shielding unnecessary menus to simplify operation and improve efficiency.

* Separate areas by network restrictions, please contact our local sales representative.

PT580

TETRA Portable Radio

Powered by compact body, IP56 compliance, 1.8-inch high resolution color display,1W RF output and clear digital voice, the TETRA portable radio PT580 will refresh your communication experience.

Innovative design

① Large-size color display

PT580 adopts a 1.8-inch high resolution color transflective LCD display (up to 6 lines), allowing good visibility even under sunshine.

② Ergonomic key

The smart body incorporates big keys for your comfort and convenience.

③ IP56 compliance

Compliant with IP56 requirements, it works well after the direct jet of water.

④ Display & keyboard protection

Avoid damage to the display and keyboard while falling, enhancing durability.

⑤ 2-in-1 knob

Easy channel selection and volume control with one knob.

Other features

● Rugged and reliable

Compliance with MIL-STD-810 F, and passing of HALT (Highly Accelerated Life Test), ensure outstanding performance even in harsh environments
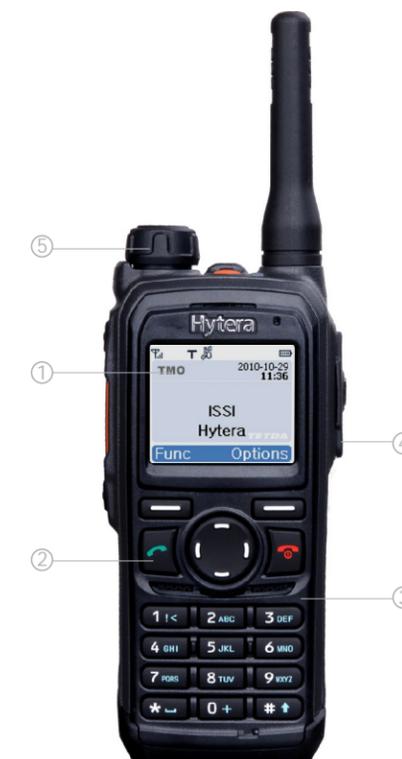
● Vibration

This feature is helpful in alerting you to reception of any voice or message under noisy or low-volume conditions.

● Powerful speaker

The built-in 1W speaker in PT580 generates loud and clear voice even under noisy environment.

● Reversible screen

When the radio is belted on the waist, you can read the screen just by reversing the screen instead of reversing the whole radio.

PT580H

TETRA
Portable Radio

Distinguished by IP57 compliance, 1.8-inch high resolution color display, 3W RF output, clear digital voice, man down and GPS positioning, the TETRA portable radio PT580H will enrich your communication experience.

*Launch adjustable power

Innovative design

① **Patented antenna**

The radio antenna and GPS antenna are integrated to ensure convenience and better performance.

② **Separated knob design**

Separated by the antenna, the two knobs of portable radio stand apart from each other, which reduces misoperation when with gloves on or under dim light.

③ **Large-size color display**

PT580H adopts a 1.8-inch high resolution color transflective LCD display (up to 6 lines), allowing good visibility even under sunshine

④ **Ergonomic key**

The smart body incorporates big keys for your comfort and convenience.

⑤ **IP57 compliance**

Compliant with Ip57 requirements, withstanding immersion testing (1meter up to 30 minutes)

⑥ **Display & keyboard protection**

Avoid damage to the display and keyboard while falling, enhancing durability.

Other features

● **Rugged and reliable**

Compliance with MIL-STD-810 F, and passing of HALT (Highly Accelerated Life Test), ensure outstanding performance even under harsh environments.

● **High RF output power**

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

● **GPS positioning**

The built-in GPS port supports GPS message transmission, GPS positioning and visualized dispatching.

● **Man down**

An alarm will be triggered when the radio is down or positioned aslant for a preset time period, improving user safety.

● **Vibration**

This feature is helpful in alerting you to reception of any voice or message under noisy or low-volume conditions.

● **Powerful speaker**

The built-in 1W speaker in PT580H generates loud and clear voice even in noisy environment.

● **Reversible screen**

When the radio is belted on the waist, you can read the screen just by reversing the screen instead of reversing the whole radio.

PT580H complies with IP57 requirements, withstanding immersion testing (1 meter up to 30 minutes).

MT680

TETRA
Mobile Radio

10W RF output power, easy operation, flexible installation, front panel compliant with Ip67*, and built-in powerful speaker; Hytera TETRA mobile radio offers you real-time communications and dispatching for mission critical.

*The front panel in compliant with IP67 when installed separately.

Innovative design

① Large-size color display

MT680 adopts a 2.8-inch 26K color TFT LCD display (up to 6 lines), allowing good visibility even under sunshine.

② 2-in-1 Knob

Easy channel selection and volume control with one knob .

③ Knob whitening ring

The channel/volume knob can also work as a status indicator.

④ Reliable handheld microphone port

The reliable handheld microphone port is compliant with military requirements, ensuring communication consistency.

⑤ Programmable keys

16 programmable keys available for shortcut access to facilitate your operation.

16 programmable keys

⑥ Flexible installation

MT680 allows much installation flexibility. You may integrate the front panel with the main unit, or install it separately. The front panel is IP67 compliant.

⑦ Ergonomic key

The smart body incorporates big keys for your comfort and convenience.

Other features

● Rugged and reliable

Compliance with MIL-STD-810 F, and passing of HALT (Highly Accelerated Life Test), ensure outstanding performance even under harsh environments.

● High RF output power

MT680 gets a RF output power up to 10W, effectively enlarging signal coverage.

● GPS

The built-in GPS port supports GPS message sending, positioning and visualized dispatching.

● Built-in 4W powerful speakers

No external speakers, saving installation space as well as cost.

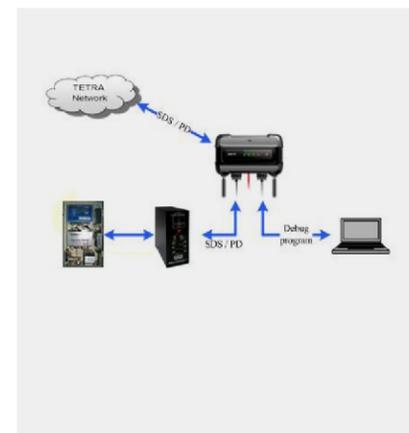Flexible installation

DT600

TETRA
Data Modem

Powered by professional modular design, 3W RF output power and rich application interfaces, Hytera TETRA data modem provides efficient and reliable data acquisition and remote monitoring for professional users in electricity, water industry hydraulic engineering, and oil pipeline etc.
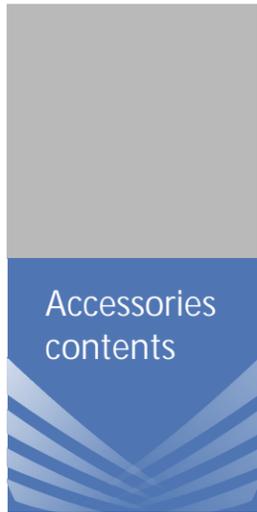
Main interface

① Dat (DATA) indicator

② Reg (Register) indicator

③ GPS working indicator

④ Power indicator

⑤ ON/OFF button

⑥ GPS antenna interface

⑦ PEI interface

⑧ Power interface

⑨ Debugging interface

⑩ TETRA antenna interface

Main features

● 3W RF output power

● Compact body & flexible installation

● Status indicator

● Standard PEI interface

● Supporting PPP/AT

● DNP3, IEC101

● Built-in GPS port

● User-friendly PC interface

● SDS Messages

● Packet data/Services

Accessories contents

Hytera also provides a full line of professional accessories (such as audio accessory, battery, charger and carrying accessory**) to deliver an optimal communication experience.

For Portable Radio*

Battery
BL1805   Li-ion Battery (1800mAh) (Standard Accessory) (PT580)
BL1806   Li-ion Battery (1800mAh) (Standard Accessory) (PT580H)
BL3201   Li-ion Battery (3200mAh) (PT580)

Power Source
CH10L13 Dual Pocket MCU Charger (Standard Accessory) (PT580)
CH10A04 MCU Rapid-rate Charger (Standard Accessory) (PT580H)
MCA05   Battery Optimizing System (PT580H)
MCA06   MCU Multi-unit Rapid-rate Charger (PT580H)
PS1014   US-standard Switching Power Adapter (For America only)
PS1018   EU-standard Switching Power Adapter (For Europe only)

Audio Accessory
EHN12   D-earset with on-MIC PTT
ESN10   Earbud with on-MIC PTT
EAN16   Earpiece with on-MIC PTT & Transparent
        Acoustic Tube
EAN17   3-wire Surveillance Earpiece with Transparent
        Acoustic Tube (Beige)
EAN18   3-wire Surveillance Earpiece with Transparent
        Acoustic Tube(Black)
SM18N1   Waterproof Remote Speaker Microphone (IP57) (PT580)
SM18N3   Waterproof Remote Speaker Microphone (IP57) (PT580H)
ESS07   Receive-Only Earbud (for use with remote speaker microphone)
ESS08   Receive-Only Earpiece with Transparent Acoustic Tube
        (for use with remote speaker microphone)

Carrying Accessory
RO04   Leather Strap (Standard Accessory)
BC17   Spring Belt Clip (Standard Accessory) (PT580)
BC08   Spring Belt Clip (Standard Accessory) (PT580H)
LCY002   Carrying Case (Thin Battery) (Leather) (Swivel) (PT580)
LCY003   Carrying Case (Thick Battery) (Leather) (Swivel)

Antenna
GPS dual-frequency antenna

LCY003 Carrying Case

MCA06 MCU Multi-unit Rapid-rate Charger

MCA05 Battery Optimizing System

For Mobile Terminal

Antenna
Mobile antenna
GPS antenna

Audio Accessory
SM16A1   Palm Microphone (Standard Accessory)
SM10A1   Desktop Microphone
SM09D1   External Speaker

Power Source
PS22002   Power Supply for Mobile Radio
        (300W,Backup Power Supply applicable)

Power Cord
PWC10   Vehicle Power Cord(>15A) (Standard Accessory)
POA33   Tube Fuse 32VAC-15A (Standard Accessory)

Mounting Bracket
BRK11   Mounting Bracket (Standard Accessory)

GPS antenna

Data Cable PC35

SM09D1 External Speaker

SM16A1 Palm Microphone   (Standard Accessory)

For Data Modem

PWC10   Vehicle Power Cord(>15A) (Standard Accessory)
PC41   Data Cable(USB to DB9 Female Connector)
        (Standard Accessory)
PC42   Data Cable(USB to DB9 Male Connector)
        (Standard Accessory)

TETRA antenna
GPS antenna (GPS port)

Ps22002 Power Supply for Mobile Radio

SM10A1 Desktop Microphone