H SERIES DMR RADIOS

EMPOWERED COMMUNICATIONS

The Hytera H-Series

Hytera was a founding member of the DMR Association and was the first company to successfully deploy DMR Tier II and Tier III systems. Since then, Hytera has been a leading provider of DMR radios and systems, and has continuously improved products based on customer feedback.

The H-Series of radios and repeaters is the culmination of this experience and spirit of innovation. The H-Series is the next-generation in creative style and functionality that elevates the industry standards in professional digital two-way radios.

Table of Contents

SERIES DMR RADIOS

HP602   HP682   HP702   HP782

HM782

Industry Leading Audio Quality
The H-Series radios are designed for clear voice quality in loud environments with AI-based voice enhancement and deep learning ability that can accurately extract voice from background noises as loud as 30db in real time. The H-Series radios feature large-forward facing speakers with water-porting technology that quickly drains water out of speaker cavity to maintain audio clarity.

Extended Coverage and Connectivity
The HP6 and HP7 radios extend radio range through increased Tx power efficiency, Rx sensitivity, improved antenna gain, and reduced attenuation. This produces a 25% increase in coverage distance that improves efficiency and reduces network infrastructure costs. Two patented technologies and a voice buffer reduces packet loss during Rx handover for consistently clear calls and fewer dropped words.

Enhanced Worker Safety
H-Series radios are designed for safety with an easy access emergency button, emergency calling, and priority interrupt. The Lone Worker feature prompts the user to press a key or speak to indicate they are safe. Man Down allows the handheld radios to automatically enter emergency mode when the radio is inclined or remains motionless for a predetermined time period. Remote Monitor allows a dispatcher to enable the PTT button on a user's radio and listen during an emergency.

Thinner and Lighter
An optimized mechanical design with advanced materials, and a lightweight lithium polymer battery results in a thin and compact handheld radio that weighs less than 11 ounces.

Multi-System Operation
The H-Series can be deployed in a variety of networks, including Analog and Digital Conventional, XPT Trunking, DMR Tier II, Tier III Trunking, IP Multi-Site Connect, and DMR Simulcast Systems.

THE NEW STANDARD OF QUALITY AND PERFORMANCE

HM782

HP602 HP682 HP702 HP782

Higher Level of Ruggedness
The HP6 and HP7 Series are fully compliant with the IP68 and MIL-STD- 810G standards. They are dust proof, impervious to water jets, submersible to a depth of 2 meters for 4 hours, and can stand up to thirty drop-shock tests on concrete from 2 meters height. The HP6 and HP7 Series feature an anti-magnetic speaker does not attract magnetic metal dust and shavings. The HP702 and HP782 are available in Intrinsically Safe models for use in areas where flammable dust and vapors are present. The HM782, HM682, and HM652 mobile radios are compliant with IP54.

Longer Battery Life
The latest in lithium polymer battery technology is used to power the HP6 and HP7 Series handheld radios for excellent performance. The battery is light and small, achieving a shift life of up to 24 hours on high transmit power with a duty cycle of 5/5/90.

Enhanced GPS Location Tracking
Optional GPS reports real time locations to other radios, the dispatcher, or third-party applications. GPS data can be transmitted during voice calls for immediate location targeting, and GPS data is compressed to increase channel capacity and reduce hardware cost.

Greater Calling Flexibility
The H-Series supports Individual Calls, Group Calls, and All Call, to provide the flexibility to communicate with any or all users.

Higher Security
Digital End-to-End and Over-the-Air Encryption secures voice and data transmitted on digital channels to prevent eavesdropping. Hardware encryption is implemented through a built-in encryption card. Software encryption uses the secure ARC4 and AES algorithms.

Bluetooth and MicroSD Card
Optional Bluetooth enables connectivity to wireless accessories, and the MicroSD card provides additional capabilities like voice recording.

HP6 AND HP7 HANDHELD RADIOS

HP602	HP682	HP702	HP782
AI-Based Digital Noise Cancellation and Large Speakers			
0.91" OLED Display	1.8" LCD-TFT 160x128 Display	0.91" OLED Display	2.4" LCD-TFT 320x240 Display
360° Smart Knob for Volume Control and Channel Switching			
N/A	Navigation buttons and Keypad	N/A	Navigation buttons and Keypad
2 Programmable Buttons	5 Programmable Buttons	3 Programmable Buttons	6 Programmable Buttons
9.35oz (265g)	9.88oz (280g)	10.23oz (290g)	10.93oz (310g)
IP68 and MIL-STD 810G			
UHF 400 – 527, VHF 146 – 174		UHF 350 – 470, VHF 146 – 174	
1,024 Channels (512 digital/512 analog) with 64 Zones (256 Channels per Zone)			
Anti-Magnetic and Water Porting Speakers			
2,000mAh Lithium Polymer Battery		2,400mAh Lithium Polymer Battery	
5/5/90 Battery Life up to 20 Hours		5/5/90 Battery Life up to 24 Hours	
Extended Range through increased Tx power efficiency, Rx sensitivity, improved antenna gain, and reduced attenuation			
End-to-End Advanced AES and ARC4 Encryption (additional license required)			
Advanced GPS Location Tracking (on specific models)			
Built-in Bluetooth (on specific models)			
N/A		MicroSD Card for Voice Recording	
Programmable Emergency Button		Dedicated, Easy-Access Emergency Button	
Lone Worker, Man Down, and Priority Call Interrupt* Emergency Features			
Silent Vibrate Mode			
N/A		Intrinsically Safe models available	
Supports Analog, DMR Tier II Conventional, XPT		Supports Analog, DMR Tier II, XPT, DMR Tier III (additional license)	

* Priority Call Interrupt requires an additional license on HP602 and HP682 radios

HP6 AND HP7 HANDHELD RADIOS

THE NEW STANDARD OF FUNCTIONALITY AND USER EXPERIENCE

The HP68 and HP782 handheld radios feature large TFT-LCD displays that provide ample screen area for easily accessing a variety of information and functionality.

Simplified Navigation

The app icons are arranged in a grid layout, making visual recognition more intuitive. The menu layers are simplified and streamlined so users can easily change settings and adjust features.

Clear Notifications and Information Display

On the home screen, the radios display time and contact alias/ID, and can display two notifications simultaneously. The radio supports notifications of emergency calls, missed calls, call alerts, new messages, and users can preview message contents.

The dialing interface supports selection of individual calls, group calls, PSTN/PABX phone dialing, fast dialing, and channel switching (CPS selection configuration).

The call interface displays call status (digital/analog, encryption status, recording status, call transfer, etc.), contact alias/ID, contact address, call duration, and speaker location information.

Multiple User Profiles

Four different user profiles can be selected according to the scenario and set the corresponding tone, volume, vibration, and more. For example, profiles can match the environment, such as indoors in a meeting or outdoors in a noisy area.

Interface Switcher

The Interface Switcher allows users to easily to switch between the home screen and up to three frequently used interfaces. This makes it easy to view or perform feature settings on these interfaces for efficient operations and to ensure rapid response in critical situations.

Dynamic Calls

Calls can be made with manual dialing without switching the dialing mode. In the dialing interface, users can select a private, group, or PSTN/PABX call. In addition to the contact alias/ID, the radio also displays call status (including call mode, encryption status, recording status, and call forwarding status), contact address, and call duration.

Text Messaging and Conversational SMS

Private and group text messages can be typed freeform or the user can send and receive a variety of preprogrammed messages. The short message is displayed in the form of a dialog box, along with the message and sender details. The interactive mode is more intuitive, and the message sending and receiving is simple and efficient.

HM6 AND HM7 MOBILE RADIOS

HM652	HM682	HM782
Good Compact and cost-effective entry-level mobile radio	**Better** Compact and high-value mid-tier mobile radio	**Best** Full-featured top-of-line mobile radio
AI-Based Digital Noise Cancellation		
Control Keys on Handheld Speaker Mic	Control and programmable piano key buttons on control head	
LCD Screen on Handheld Mic	1.5" LCD Full-Color Display	2.4" LCD TFT full color display, 320x240
512 Channels, 32 Zones, 32 Channels per Zone	512 Channels, 32 Zones, 256 Channels per Zone	1,024 Channels, 64 Zones, 256 Channels per Zone
UHF 400-470 with 5-45W RF Output Power		UHF 350-470 with 45W RF Output Power VHF 136-174 with 50W Output Power
Supports DMR Tier II, and XPT Multi-Site* radio systems		DMR Tier II, XPT Multi-Site*, DMR Tier III*
ARC4/AES Encryption* and End-to-End Advanced Hytera AES Encryption*		
MIL-STD 180G rated for shock and vibration and IP54 rated for water and dust intrusion		
Dedicated Emergency Call Button, Lone Worker, Remote Monitor, Priority Interrupt*, Remote Radio Enable/Disable (Stun and Revive)		
N/A	Pre-Defined Text Messages 256 Characters Each	
Extended Range through increased Tx power efficiency, Rx sensitivity, improved antenna gain, and reduced attenuation		
Advanced GPS Location Tracking and Built-in Bluetooth (on specific models)		
Functions as wireless gateway, and supports Back-to-Back and Clarity Transmission modes		
Mixed Mode Channel Scanning (Analog and Digital)		
N/A		SIP Phone and DTMF Dial with optional speaker/mic, Ethernet RJ-45 Port for Digital Gateway Functions, MicroSD card for Audio Recording or Hardware Encryption

* Additional License Required. No license required for Priority Interrupt and XPT on the HM782.

HM782 MOBILE RADIO

360° Smart Knob for Volume and Channel Switching

Easy Access Emergency Button

2.4" TFT LCD Display

Built-in Speaker

Ethernet RJ-45 Port

IP54 and MIL-STD-810G

Accessory and Cable Port

Power

Programmable Buttons

Navigation Buttons

AI-Based Digital Noise Reduction

Handheld Mic Port

Antenna Port

Built-in Bluetooth

MicroSD Card

GPS Antenna Port

Compact 1DIN Chassis with Fast-Cooling Aluminum Case

Multi-System Flexibility
The HM782 can be deployed in Analog and Digital Conventional, MPT and XPT Trunking, DMR Tier II and Tier III Trunking, IP Multi-Site Connect, and DMR Simulcast Systems.

Greater Calling Flexibility
The HM782 supports Individual Calls (radio to radio, radio to dispatcher), Group Calls (one radio to many, dispatcher to many), All Call (broadcast call to all radios, transmit only), and Telephone Calls (with connectivity to PSTN, PABX or SIP networks).

Clear and Bright Display
The HM782 features a 2.4-inch, 240x300 HD TFT-LCD display with an intuitive six-grid navigation interface with large type and icons. The display supports 262,000 colors, and is clearly visible in bright sunlight.

Enhanced Worker Safety
The HM782 radios are designed for worker safety with an easy access emergency button, emergency calling, and priority interrupt. Lone Worker prompts the user to press a key at preset intervals to indicate they are safe. Large tactile knobs and piano-style buttons provide easy access that keep eyes on the road.

Durable and Rugged
IP54 compliant for water and dust ingress, and MIL-STD-810G for shock and humidity.

Louder and Clearer Audio
Hytera provides industry-leading audio quality through an optimized forward-facing loudspeaker and AI-based voice enhancement with deep learning ability that can accurately extract voice from noise in real time.

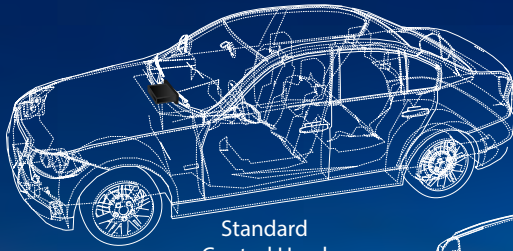## Enhanced GPS Location Tracking
The HM782 reports current location information to other radios, the dispatcher, or third-party applications in real time, enhancing the efficiency of visualized dispatch applications.
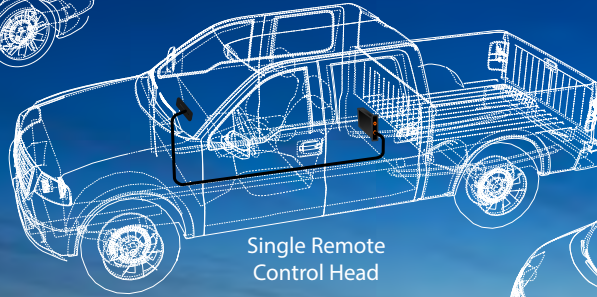
Higher Security
The HM782 supports Digital End-to-End and Over-the-Air Encryption for voice and data. Hardware encryption is implemented through a built-in encryption card. Advanced software encryption uses the ARC4 and AES encryption algorithms.
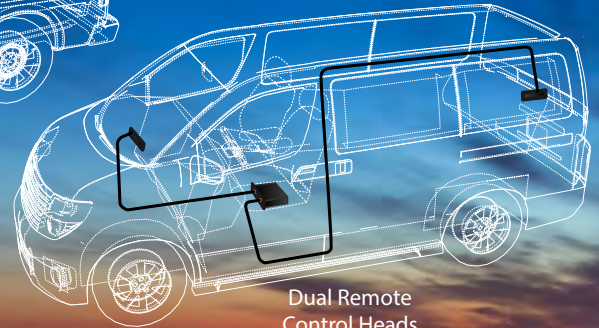
HM782 MOBILE RADIO

The HM782 can be installed as a single-unit control head within reach of the driver, or with one or two remote control heads connected via cable to a radio installed under the seat or the rear of the vehicle compartment. The HM782 can also be deployed in a desktop base station chassis with a power supply.

Standard
Control Head

Single Remote
Control Head

Dual Remote
Control Heads

FLEXIBLE CONFIGURATIONS

APPLICATION EXAMPLES: The HM782 can extend coverage range, connect multiple radio sites, provide wireless data transmission, and support multiple simultaneous mode functions.

Back-to-Back
The HM782 can be deployed Back-to-Back to enable communication between analog and digital radios, or radios with different frequencies. Two HM782 radios can be deployed Back-to-Back, or one radio and a repeater can be used.

Radio 1
Frequency 1

Radio 3
Frequency 2

Back-to-Back Cable

HM782

HM782

Radio 2
Frequency 1
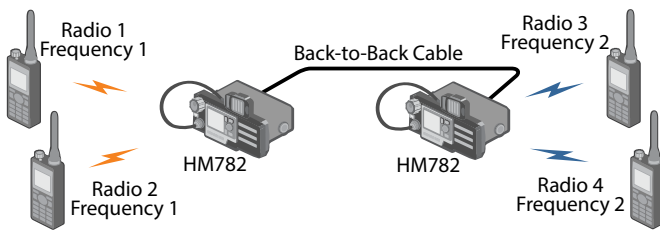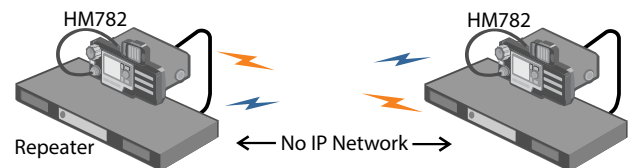
Radio 4
Frequency 2

IP Transit
Multiple HM782 mobile radios can be connected to an Ethernet/IP network to provide a reliable and cost-effective method to connect remote radio sites and extend coverage areas. IP Transit can connect radio sites with analog or digital radios, and radios with different frequencies.

IP Network

HM782

HM782

Site 1
Frequency 1

Site 2
Frequency 2
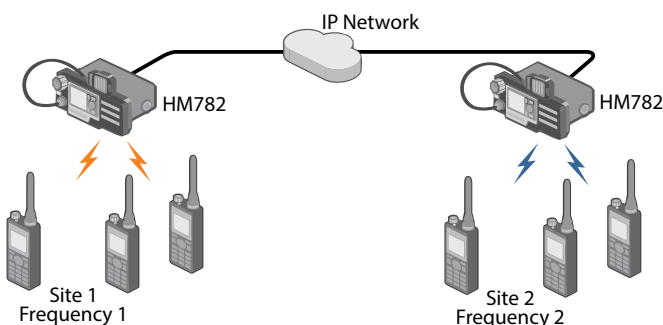
Wireless Link
In situations where a wired IP network is unavailable between two repeaters, two HM782 radios using different frequencies can provide a wireless link between the repeaters.

HM782

HM782

Repeater

⟵ No IP Network ⟶

Clarity Transmission
The Clarity Transmission feature provides a wireless data path between remote network devices and a central network management station. HM782 radios also function as compact gateway devices and provide wireless channels that transmit data transparently without any modification, and can be deployed in a variety of monitoring and industrial control processes.

HM782

HM782

HM782

HM782

Ethernet
Switch

SCADA
RTU

TCP/IP
Device

Page 8
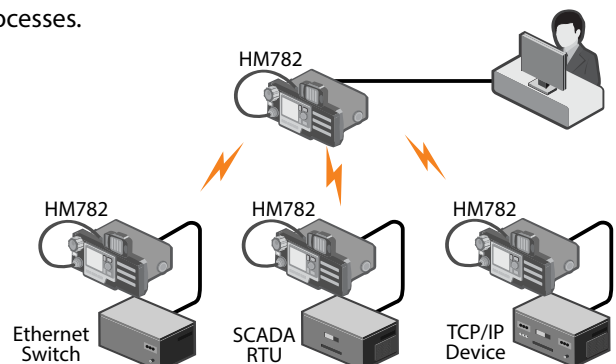
HM652 AND HM682 MOBILE RADIOS

Louder and Clearer Audio
Industry-leading audio quality through AI-based voice enhancement with deep learning ability that can accurately extract voice from background noise in real time. Howling suppression prevents feedback between two radios in the same vehicle.

Multi-System Flexibility
The HM6 mobile radios can be deployed in Analog and Digital Conventional, DMR Tier II, Hytera XPT Trunking (multi-site with license), and support Roaming between repeater sites.

Greater Calling Flexibility
Supports Individual Calls (radio to radio, radio to dispatcher), Group Calls (one radio to many, dispatcher to many), and All Call (broadcast call to all radios, transmit only).

Improved Worker Safety
The HM6 radios are designed for worker safety with an easy access emergency call button. Lone Worker prompts the user to press a key at preset intervals to indicate they are safe. Optional Priority Interrupt (with license) allows a dispatcher to interrupt existing calls with important emergency information, and a dispatcher can remotely enable and disable radios.

Analog or Digital Mode
The HM6 radios can operate in either analog or digital mode, which is the ideal solution for migrating from analog to digital with minimal disruption and investment.

Greater Range
With high RX sensitivity, the HM682 delivers clear and dependable communication even in areas where the signal is unstable or weak.

Durable and Rugged
IP54 compliant for water and dust ingress, and MIL-STD- 810 G for shock and humidity. The 10 pin aviation connector for the handheld microphone is tight and secure, and coil cable has excellent stretching ability for long service life.

Enhanced GPS Location Tracking
HM682 models that support GPS report current location information to other radios, the dispatcher, or third-party applications in real time, enhancing the efficiency of visualized dispatch applications. GPS data is transmitted during voice calls for immediate location targeting, and GPS data is compressed to increase channel capacity and reduce hardware cost.

Higher Security
Supports Digital End-to-End Encryption for voice and data. Advanced AES 256 bit encryption is also available (optional with a license).

Built-In Bluetooth
HM6 models that feature Bluetooth support audio handset accessories to improve safety and productivity during in-vehicle communications.

HM652 Handheld Control Head
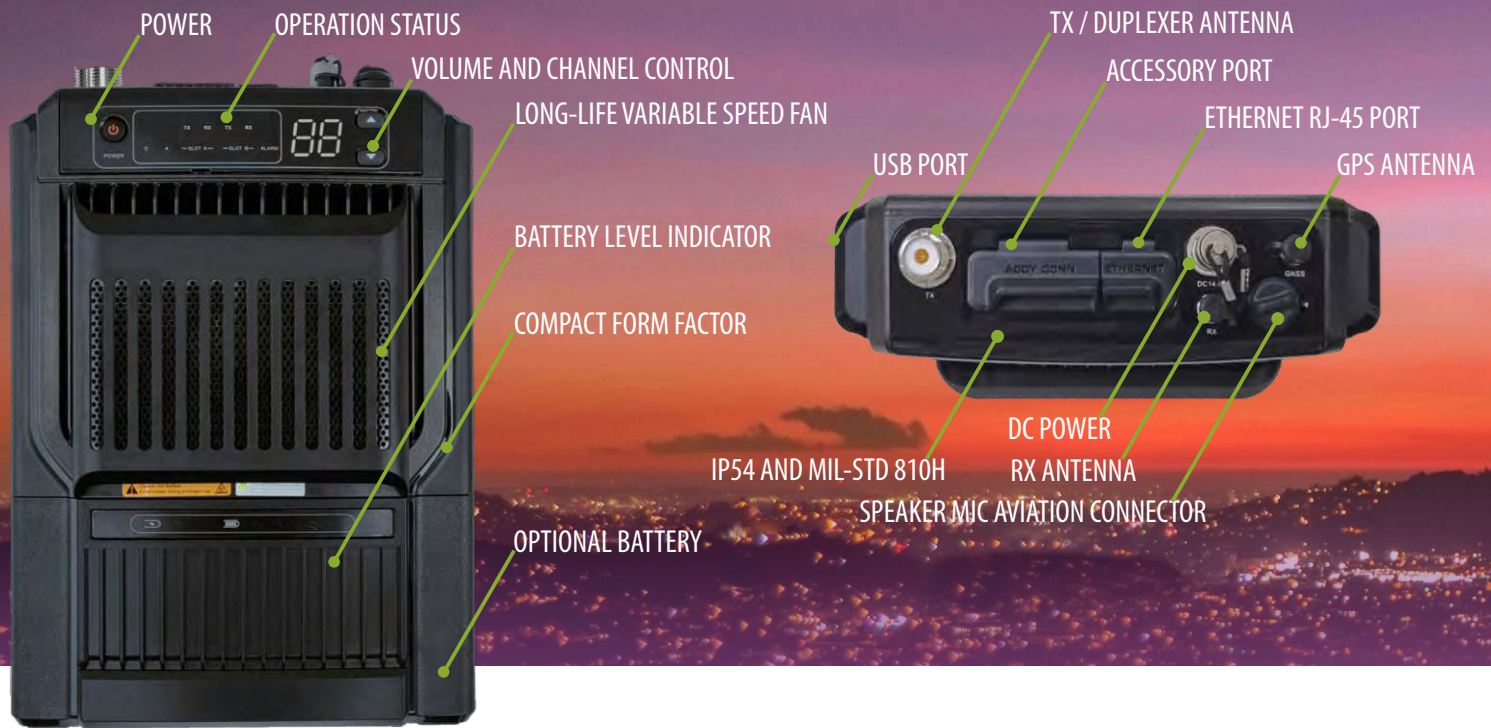The HM652 has a Handheld Control Head with three programmable buttons provides easy operation with a convenient location to control power, switch channels or contacts, and adjust volume.

HM682 Front Panel Controls and LCD Display
The HM682 front panel features tactile buttons and piano keys for easy operation, and the LCD display is readable even in the dark or direct sunlight.

HR652 COMPACT DMR REPEATER

POWER   OPERATION STATUS

VOLUME AND CHANNEL CONTROL

LONG-LIFE VARIABLE SPEED FAN

BATTERY LEVEL INDICATOR

COMPACT FORM FACTOR

OPTIONAL BATTERY

TX / DUPLEXER ANTENNA

ACCESSORY PORT

ETHERNET RJ-45 PORT

USB PORT

GPS ANTENNA

DC POWER

IP54 AND MIL-STD 810H   RX ANTENNA

SPEAKER MIC AVIATION CONNECTOR

Ultra-Compact Form Factor
Weighing only 4 pounds, 6 ounces and measuring less than 7" tall (without the optional battery) the HR652 delivers unprecedented performance in a compact form factor. It can be deployed in portable applications or be installed on any flat surface in areas with limited wall space.

Analog & Digital Auto Switch
The HR652 can operate in analog mode, DMR mode, or dynamic mixed digital/analog mode, which automatically switches between analog and digital calls, and provides an ideal solution for smooth analog to digital migration with minimal investment.

Reliable Operation
The HR652 is built to perform in harsh environments with MIL-STD-810H compliance for ruggedness and impact resistance, and IP54 rated for dust and water intrusion. It supports 25W high power transmission or variable Wattage low power transmission for localized coverage and preventing interference.

Higher Security
The HR652 supports Digital End-to-End and Over-the-Air Encryption with optional ARC4 and AES advanced encryption algorithms.

Farther Coverage
The HR652 features industry-leading RX sensitivity and 25 Watts output power to cover more area than other compact repeaters, delivering cost-effective coverage for an entire campus, or on each floor of a high-rise building. It The HR652 also functions as a Single Frequency Repeater that uses both DMR timeslots to receive and forward calls over a single frequency in Direct Mode (with an additional license).

Flexible Networking and System Interconnect
The HR652 repeater provides seamless connectivity with a variety of systems, including SIP and VoIP Phones, dispatching systems, DMR Tier II, and IP Connect (with an additional license). IP Connect enables linking multiple HR652 repeaters via IP networks to expand coverage to multiple locations, or to provide supplemental coverage for a campus, or large building to ensure radio network coverage throughout the entire facility.

Battery Power
The HR652 features an optional battery for portable applications and for battery backup in fixed indoor installations in the event of a power outage. The 12.5Ah large-capacity battery can provide up to 4 hours at 25W. Fast charging technology enables the battery to be fully charged in just 3.5 hours with the optional AC/DC power adapter and 100W fast charger.

Portable
The HR652 can be equipped with the optional battery, dedicated antenna, GPS, and a light backpack for mobile operations such as combating forest fires and search and rescue. It can also be deployed in vehicles for mobile coverage and powered by the vehicle battery. The HR652 can be turned on and used immediately upon arriving at the site. The ultra-light design can also be used with drones to achieve a wider range of signal coverage.

HR1062 DMR REPEATER

Compact 1U Form Factor   Audio and Programming Port   Operation Status

TX Antenna   Accessory Ports   AC Power

RX Antenna   DC Power

Ethernet RJ-45 Port   Long-Life Variable Speed Fan

Compact 1U Form Factor
The 1U height is half that of conventional repeaters, and the HR1062 features a in-built power supply to save valuable rack space.

AC/DC Auto Switch
The HR1062 supports AC/DC auto switching for locations with different power sources, power redundancy, and eliminates the cost and space required for power adapters.

Analog & Digital Auto Switch
Mixed channel mode detects the receiving signal and automatically switches between analog and digital mode to provide a simple migration path.

Reliable Operation
Variable speed fan provides optimal cooling with front to back internal airflow, combined with high quality components to ensure 100% duty cycle operation for mission critical and heavy call traffic applications.

Flexible Radio Network Connectivity
The HR1062 supports a wide variety of analog and digital radio networks, including Analog and Digital Conventional, IP Connect, DMR Tier II, and XPT Trunking.

Wide Coverage
Enhanced Rx sensitivity extends communication range, and an Ethernet port provides access to IP networks to enable remote site connectivity.

DMR - 2 TDMA 2 Time Slots
TDMA digital technology provides 2 simultaneous voice channels that improves efficiency and doubles capacity without an extra frequency.

Higher Security
The HR1062 supports Digital End-to-End and Over-the-Air Encryption. This optional software-based encryption uses the secure and reliable ARC4 and AES encryption algorithms.

SmartOne

SmartOne is a professional dispatching and unified communications solution that integrates voice and video communications. It is based on soft-switching technology that provides integration between DMR networks, public telephone systems, Push-to-Talk over Cellular, and video communication systems.

SmartOne allows for interconnected and unified dispatching across multiple technology standards whenever and wherever needed. It supports voice and video group calling and GPS location tracking with geofencing and breadcrumb route histories.


Flexible Interconnection

The HR1062 repeater is designed as an intelligent and seamless communication platform with the flexibility to connect with a variety of systems. The HR1062 can provide inter-system connectivity to SIP and VoIP Phones, dispatching systems, IP Connect, DMR Tier II, and XPT Trunking Systems.
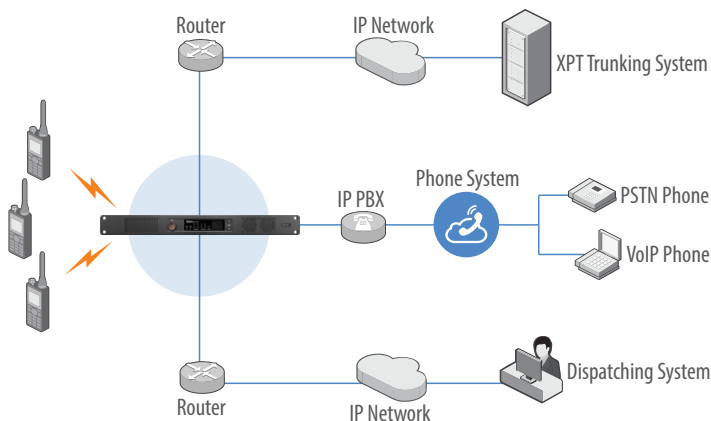
XPT Trunking System (License Required)

The XPT Trunking System is a widely-deployed, cost-efficient, and easily expandable radio system from Hytera. Based on proven repeater technology, XPT provides a wide-area distributed trunked radio system with increased capacity, and does not require a controller node and dedicated control channel for high-traffic users.
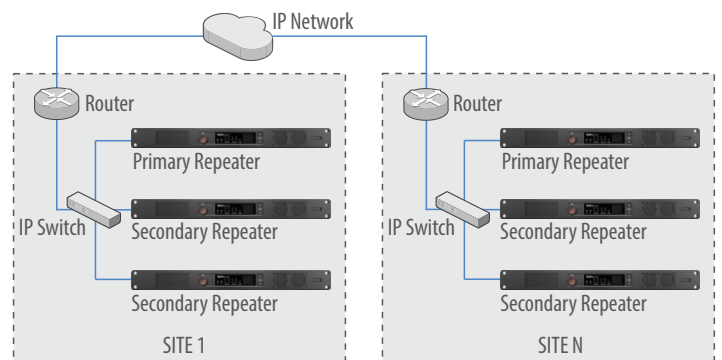
Wireless Link

Wireless Link communication provides wireless connection between two systems when there is no IP link. Two HM782 mobile radios using different frequencies provide a wireless link between the repeaters in remote locations.
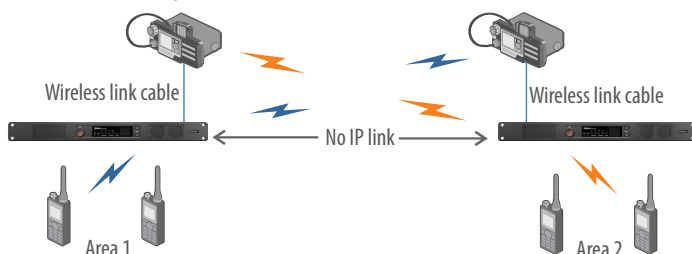
Back-to-Back

Back-to-Back operation provides a cross-band communication IP link between two repeaters to enable connectivity to analog and digital radios, or radios with different frequencies.

Page 12
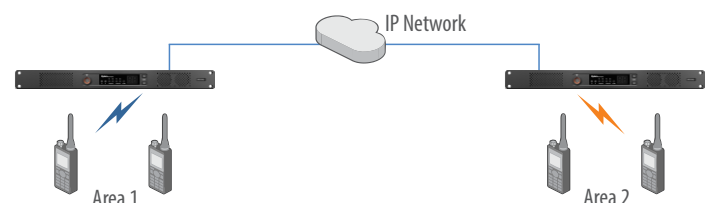
HP6 AND HP7 HANDHELD RADIO ACCESSORIES

An Optional Extended DMR warranty adds 2 years to the standard 3 year Hytera DMR product warranty for a total of 5 years of warranty protection.
Contact Hytera US Inc or your Local Hytera Dealer for more information on additional accessories.

STANDARD ACCESSORIES

R003
Nylon Hand Strap

BC48
Belt Clip

PS1014
Power Adapter

CH10L30
Drop-In Single Unit Charger

BP2002 (HP6)
2000mAh Li-Ion Polymer Battery

BP2403 (HP7)
2400mAh Li-Ion Polymer Battery

UHF and VHF
Long Antenna (HP6)

UHF Stubby Antenna
or VHF Long Antenna (HP7)

OPTIONAL ACCESSORIES

External earpieces that are used in combination with the ACN-02

ACN-02P
Mic and PTT button with VOX and
3.5mm Jack Receive-only Earpiece (IP54)

ES-01
Receive-Only Earbud

EA-01
Receive-Only Transparent
Acoustic Tube

EH-01
Receive-Only C-Style Earloop

EH-02
Receive-Only Swivel Earpiece

Water-Resistant Remote Speaker Mics and Earpieces

SM26N1-P
Palm PTT Mic with Speaker
and emergency button (IP67)

SM26N2-P[1]
Palm PTT Mic with Speaker
and emergency button (IP54)

EAS03[1]
Receive-Only Clear
Acoustic Tube Earpiece

[1] The SM26N2-P features a 2.5mm jack for receive only EAS03 earpieces

All-in-one earpieces and microphones

EHN26-P
C-style Earpiece with microphone
and in-line PTT button

EAN24-P
Transparent Acoustic Tube
Surveillance Earpiece with microphone
and in-line PTT button

Bluetooth and Other Accessories

ESW08
Bluetooth Earpiece with
PTT button and microphone

ESW01
Bluetooth Earpiece with charger
(requires PS1030 power adapter)

SM27W2
Bluetooth Remote
Speaker Microphone (IP67)

POA121
PTT Bluetooth Ring

MCL39
6-Radio Multi-Unit Charger

PC152
USB programming cable

MOBILE RADIO AND REPEATER ACCESSORIES

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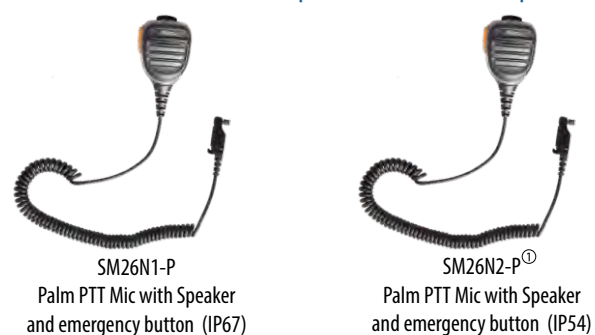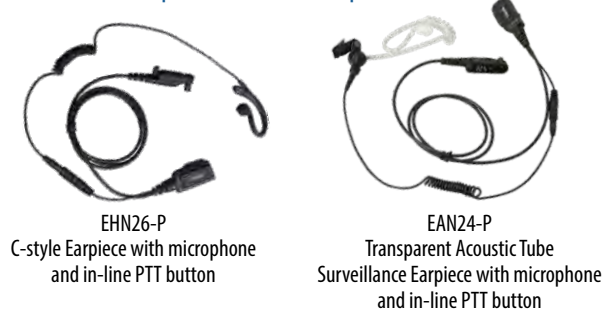
STANDARD MOBILE RADIO ACCESSORIES

SM16A1 (HM782 and HM682)
Palm PTT Mic

SM25A1 (HM652 only)
Palm PTT Mic with emergency call
and operation buttons and LCD screen

BRK44 (HM652 and HM682)
BRK08 (HM782)
Mounting bracket and hardware

PWC10
10' Power Cable

GPS04
GPS antenna (for GPS models)

OPTIONAL MOBILE RADIO ACCESSORIES

SM27W2 (HM782 only)
Bluetooth Remote Speaker Mic
with charging cable*

SM27W1
Bluetooth Remote Speaker Mic with operation
buttons, LCD screen, and charging cable*

SM19A1 (HM782 Only)
Palm PTT Mic with
keypad and emergency button

SM10A1 (HM682 and HM782)
Desktop Microphone

SM09D1
External Speaker with 6' Power Cable

PS22002
External Power Supply, 220W,
backup power battery applicable

12492 (HM782 Only)
12493-H (HM652, HM682)
Desktop Cabinet for Mobile Radio

SEC1223
External Power Supply
Input 120VAC, Output 13.8VDC, 23 Amps

* For Bluetooth models

OPTIONAL REPEATER ACCESSORIES

HR1062 Repeater Optional Accessories
The HR1062 ships with a standard AC power cable

SM10A1
Desktop Microphone

SM09D1
External Speaker with 6' Power Cable

PS22002
External Power Supply, 220W,
backup power battery applicable

Programming Cables

External Duplexers

Back-to-Back Cables

HR652 Compact Repeater Optional Accessories
The HR652 ships with a standard AC power cable

SM25A1
Palm microphone with
emergency call and
operation buttons and
LCD screen

PS8002
AC/DC Power Adapter
100W Fast Charger
100~240VAC/2A 16.8V/8A/134.4W
(required to charge battery)

MR3332S-3
Internal Duplexer,
5 MHz separation

BRK36
Wall-Mount
Bracket

BL9915
Li-Ion Battery Pack
12500mAh

Supports
third-party
Antenna

NCN035
Backpack

GPS04
GPS antenna

HP6 AND HP7 HANDHELD RADIO SPECIFICATIONS

General	
Frequency Range	UHF 400-527 MHZ , VHF 136-174MHz
Channel Capacity	1,024 Channels (512 Analog, 512 Digital)
Zone Capacity	64 Zones with 256 Channels per Zone
Channel Spacing	12.5kHz / 20kHz / 25kHz
Operational Voltage	7.7V (Rated)
Battery	**HP6** 2000mAh Li-Ion Polymer **HP7** 2400mAh Li-Ion Polymer
Battery Life (5/5/90)	**HP6** 16 Hours with GPS on, 20 Hours GPS disabled **HP702** UHF - 24 Hours, 26 Hours GPS disabled VHF - 21 Hours, 25 Hours GPS disabled **HP782** UHF/VHF - 20 Hours, 24 Hours GPS disabled
Weight	**HP702** 10.23oz (290g), **HP782** 10.93oz (310g) **HP602** 9.35oz (265g), **HP682** 9.88oz (280g)
Dimensions (H x W x D) (without antenna)	**HP602** 43/4" x 25/32" x 13/16" (122 x 55 x 30.5mm) **HP682** 43/4" x 25/32" x 17/32" (122 x 55 x 31.5mm) **HP7** 5 3/16" x 2 5/32" x 1 5/32" (132 x 55 x 29.5mm)
Frequency Stability	± 0.5ppm
Antenna Impedance	50Ω
Display	**HP602 and HP702** OLED 0.91" Display **HP682** LCD 1.8", 160x128, 65,536 colors, 6 rows **HP782** LCD 2.4", 320x240, 262,000 colors, 10 rows
Bluetooth	BT 5.0 BLE+EDR
Encryption (Optional)	Advanced end-to-end digital (128/256bit) DMRA encryption. Additional license required.

GPS (5 Satellites visible at nominal 130dBm)	
Time to First Fix Cold Start	<60 Seconds (Typical TTFF)
Time to First Fix Hot Start	<10 Seconds (Typical TTFF)
Horizontal Accuracy	<5 meters

Receiver	
Digital Sensitivity	0.18µV (BER 5%)
Analog Sensitivity	0.16µV (Typical) (12dB SINAD) 0.18µV (12dB SINAD)
Adjacent Selectivity	TIA-603: 60dB@12.5kHz, 70dB@20/25kHz ETSI: 60dB@12.5kHz, 70dB@20/25kHz
Spurious Response Rejection	TIA-603: 70dB@12.5/20/25kHz ETSI: 70dB@12.5/20/25kHz
Intermodulation	TIA-603: 70dB@12.5/20/25kHz ETSI: 65dB@12.5/20/25kHz
Hum and Noise	40dB@12.5kHz, 43dB@20kHz, 45dB@25kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤3%
Audio Response	+1 to -3dB
Conducted Spurious Emission	<-57dBm

Transmitter	
RF Power Output	Low Power: VHF 1W, UHF 1W High Power: VHF 5W, UHF 4W
FM Modulation	11K0F3E @ 12.5kHz, 14K0F3E @ 20kHz, 16K0F3E @ 25kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data and Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz, -30dBm >1GHz
Modulation Limiting	±2.5kHz @ 12.5kHz, ±4.0kHz @ 20kHz, ±5.0kHz @ 25kHz
FM Hum and Noise	40dB @ 12.5kHz, 43dB @ 20kHz, 45dB @ 20/25kH
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 25kHz
Audio Response	+1 to -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE+2™

Environmental	
Operating Temperature	-0°F to +140°F (-20°C to +60°C)
Storage Temperature	-40°F to +185°F (-40°C to +85°C)
ESD	IEC 61000-4-2 (Level 4), ±8kV Contact, ±15kV Air
Dust and Water Ingress	IP68 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock and Vibration	Per MIL-STD-810 C/D/E/F/G Standard

ORDERING INFORMATION

HP6 Ordering Information	
HP602-Um	UHF 400-527MHz (Antenna 400-470MHz), 1-4W
HP602-V1	VHF 136-174MHz (Antenna 147-160MHz), 1-5W
HP602-G-BT-Um	UHF 400-527MHz (Antenna 400-470MHz), 1-4W, with GPS and Bluetooth
HP602-G-BT-V1	VHF 136-174MHz (Antenna 147-160MHz), 1-5W, with GPS and Bluetooth
HP682-Um	UHF 400-527MHz (Antenna 400-470MHz), 1-4W
HP682-V1	VHF 136-174MHz (Antenna 147-160MHz), 1-5W
HP682-G-BT-Um	UHF 400-527MHz (Antenna 400-470MHz), 1-4W, with GPS and Bluetooth
HP682-G-BT-V1	VHF 136-174MHz (Antenna 147-160MHz), 1-5W with GPS and Bluetooth
HP7 Ordering Information	
HP702-Uv	UHF 350-470MHz (Antenna 400-470MHz), 1-4W
HP702-V1	VHF 136-174MHz (Antenna 146-164MHz), 1-5W
HP702-G-BT-Uv	UHF 350-470MHz (Antenna 400-470MHz), 1-4W, with GPS and Bluetooth
HP702-G-BT-V1	VHF 136-174MHz (Antenna 146-164MHz), 1-5W, with GPS and Bluetooth
HP782-Uv	UHF 350-470MHz (Antenna 400-470MHz), 1-4W
HP782-V1	VHF 136-174MHz (Antenna 146-164MHz), 1-5W
HP782-G-BT-Uv	UHF 350-470MHz (Antenna 400-470MHz), 1-4W, with GPS and Bluetooth
HP782-G-BT-V1	VHF 136-174MHz (Antenna 146-164MHz), 1-5W, with GPS and Bluetooth
HP7 Intrinsically Safe Ordering Information	
HP702-G-BT-IS-Uv	UHF 350-470MHz (Ant. 400-470MHz), 1-4W, GPS, Bluetooth
HP702-G-BT-IS-V1	VHF 136-174MHz (Ant. 146-164MHz), 1-5W, GPS, Bluetooth
HP782-G-BT-IS-Uv	UHF 350-470MHz (Antenna 400-470MHz), 1-4W, GPS, Bluetooth
HP782-G-BT-IS-V1	VHF 136-174MHz (Antenna 146-164MHz), 1-5W, GPS, Bluetooth

Specifications apply to all H-Series handheld radios, unless noted otherwise in **bold text**.
HP6 refers to both HP602 and HP702, and HP7 refers to both HP702 and HP782.
All specifications are subject to change without notice due to continuous development.

HM6 AND HM7 MOBILE RADIO SPECIFICATIONS

General	
Frequency Range	**HM6** UHF 400-470 MHZ **HM782** UHF 350-470MHz , VHF 136-174MHz
Channel Capacity	**HM782** 1,024 Channels (512 Analog, 512 Digital) **HM6** 512 Channels (Analog or Digital)
Zone Capacity	**HM652** 32 Zones with up to 32 Channels per Zone **HM682** 32 Zones with up to 256 Channels per Zone **HM782** 64 Zones with 256 Channels per Zone
Channel Spacing	12.5kHz / 20kHz / 25kHz
Operational Voltage	13.6V ±15%
Weight	**HM652** 2lb, 6.8oz (1100g) **HM682** 2lb, 8.5oz (1150g) **HM782** 3lb 8.1oz (1,520g)
Dimensions (H x W x D) (without antenna)	**HM652** 2 21/32" x 6 15/32" x 7 1/16" (42 x 154 x 164mm) **HM682** 2 21/32" x 6 1/4" x 7 1/4" (42 x 154 x 164mm) **HM782** 2 7/16" x 6 31/32" x 7 1/16" (61.5 x 177 x 179mm)
Frequency Stability	± 0.5ppm
Antenna Impedance	50Ω
Display	**HM652** LCD Display on SM25A1 Handheld Mic **HM682** LCD 1.5", 6 lines **HM782** LCD 2.4", 240x320, 262,000 colors, 10 rows
Bluetooth	BT 5.0 BLE+EDR
Encryption (Optional)	Advanced end-to-end digital (128/256bit) DMRA encryption. Additional license required.

GPS (5 Satellites visible at nominal 130dBm)	
Time to First Fix Cold Start	<60 Seconds (Typical TTFF)
Time to First Fix Hot Start	<10 Seconds (Typical TTFF)
Horizontal Accuracy	<5 meters

Receiver	
Digital Sensitivity	0.18µV (BER 5%)
Analog Sensitivity	0.16µV (Typical) (12dB SINAD) 0.18µV (12dB SINAD)
Adjacent Selectivity	TIA-603: 60dB@12.5kHz, 70dB@20/25kHz ETSI: 60dB@12.5kHz, 70dB@20/25kHz

Spurious Response Rejection	**HM6** TIA-603: 70dB@12.5/20/25kHz
	           ETSI: 70dB@12.5/20/25kHz
	HM782 TIA-603: 75dB@12.5/20/25kHz
	           ETSI: 70dB@12.5/20/25kHz

Intermodulation	**HM6** TIA-603: 75dB@12.5/20/25kHz
	           ETSI: 70dB@12.5/20/25kHz
	HM782 TIA-603: 70dB@12.5/20/25kHz
	           ETSI: 65dB@12.5/20/25kHz

Hum and Noise	40dB@12.5kHz, 43dB@20kHz, 45dB@25kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤3%
Audio Response	+1 to -3dB
Conducted Spurious Emission	<-57dBm

Transmitter	
RF Power Output	**HM6** High Power: UHF: 1-45W **HM782** High Power: UHF: 1-45W, VHF: 5-50W
FM Modulation	11K0F3E @ 12.5kHz, 14K0F3E @ 20kHz, 16K0F3E @ 25kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data and Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz, -30dBm >1GHz
Modulation Limiting	±2.5kHz @ 12.5kHz, ±4.0kHz @ 20kHz, ±5.0kHz @ 25kHz
FM Hum and Noise	40dB @ 12.5kHz, 43dB @ 20kHz, 45dB @ 20/25kH
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 25kHz
Audio Response	+1 to -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE+2™

Environmental	
Operating Temperature	-0ºF to +140ºF (-20ºC to +60ºC)
Storage Temperature	-40ºF to +185ºF (-40ºC to +85ºC)
ESD	IEC 61000-4-2 (Level 4), ±8kV Contact, ±15kV Air
Dust and Water Ingress	IP54
Shock, Vibration, and Humidity	Per MIL-STD-810 C/D/E/F/G Standard

ORDERING INFORMATION

HM652, HM682, and HM782 Ordering Information	
HM652-U1	UHF 400-470MHz, 5-45W
HM652-G-BT-U1	UHF 400-470MHz, 5-45W, with GPS and Bluetooth
HM682-U1	UHF 400-470MHz, 5-45W
HM682-G-BT-U1	UHF 400-470MHz, 5-45W, with GPS and Bluetooth
HM782-Uv	UHF 350-470MHz, 1-45W
HM782-V1	VHF 136-174MHz, 5-50W
HM782-G-BT-Uv	UHF 350-470MHz, 1-45W, with GPS and Bluetooth
HM782-G-BT-V1	VHF 136-174MHz, 5-50W, with GPS and Bluetooth

Specifications apply to all H-Series mobile radios unless noted otherwise in **bold text**.
HM6 refers to both HM652 and HM682. All specifications are subject to change without notice due to continuous development.

HR REPEATER SPECIFICATIONS

General	
Frequency Range	**HR652** UHF 400-470 MHZ **HR1062** UHF 400-527 MHz , VHF 136-174MHz
Channel Capacity	**HR652** 1,024 Channels, 1 Zone (64 Channels per Zone) **HR1062** 64 Channels
Channel Spacing	12.5kHz / 20kHz / 25kHz
Operational Voltage	**HR652** DC: 14.4V 15%, Battery Voltage: 12-16.8VDC **HR1062** DC: 13.6V ±15%, AC: 100-120V Current Consumption: DC: Standby ≤0.9A, Transmitting ≤12A AC: Standby ≤0.35A, Transmitting ≤1.2A
Battery Life (5/5/90)	**HR652** 25W: 4 hours 10W: 10 hours
Weight	**HR652** 4lb, 6oz (2.0 kg) without battery **HR1062** 17lb 80z (8.0kg)
Dimensions (H x W x D)	**HR652** 7 15/16" x 8 15/16" x 3 3/16" (201 x 211 x 80mm) **HR1062** 1 3/4" x 19" x 14 3/4" (44 x 483 x 366mm)
Frequency Stability	± 0.5ppm
Antenna Impedance	50Ω

GPS (5 Satellites visible at nominal 130dBm)	
Time to First Fix Cold Start	<60 Seconds (Typical TTFF)
Time to First Fix Hot Start	<10 Seconds (Typical TTFF)
Horizontal Accuracy	<5 meters

Receiver	
Digital Sensitivity	0.18μV (BER 5%)
Analog Sensitivity	0.16μV (Typical) (12dB SINAD) 0.18μV (12dB SINAD)
Adjacent Selectivity	TIA-603: 65dB@12.5kHz, 75dB@20/25kHz ETSI: 60dB@12.5kHz, 70dB@20/25kH
Spurious Response Rejection	TIA-603: 80dB@12.5/20/25kHz ETSI: 80dB@12.5/20/25kHz
Intermodulation	TIA-603: 75dB@12.5/20/25kHz ETSI: 70dB@12.5/20/25kHz
Hum and Noise	40dB@12.5kHz, 43dB@20kHz, 45dB@25kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤3%
Audio Response	+1 to -3dB
Conducted Spurious Emission	<-57dBm

Transmitter	
RF Power Output	**HR652** High Power 5-25W (Continuous Adjustable) **HR1062** 5-50W adjustable
FM Modulation	11K0F3E @ 12.5kHz, 14K0F3E @ 20kHz, 16K0F3E @ 25kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data and Voice: 7K60FXW
Conducted/Radiated Emission	Operating: ≤1GHz: -36dBm, >1GHz: -30dBm Standby: ≤1GHz: -57dBm, >1GHz: -47dBm
Modulation Limiting	±2.5kHz @ 12.5kHz, ±4.0kHz @ 20kHz, ±5.0kHz @ 25kHz
FM Hum and Noise	40dB @ 12.5kHz, 43dB @ 20kHz, 45dB @ 20/25kH
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 25kHz
Audio Response	+1 to -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE+2™

Environmental	
Operating Temperature	-22ºF to +140ºF (-30ºC to +60ºC)
Storage Temperature	-40ºF to +185ºF (-40ºC to +85ºC)
ESD	IEC 61000-4-2 (Level 4) ±8kV Contact, ±15kV Air
Dust and Water Ingress	**HR652** IP54
Shock, Vibration, and Humidity	**HR652** MIL-STD-810 C/D/E/F/G Standard

ORDERING INFORMATION

HR1062 and HR652 Ordering Information	
HR1062-U1	1U Rack-Mount DMR Repeater UHF 400-470MHz, 5-50W, DMR Tier II & Analog Conventional Mode
HR1062-V1	1U Rack-Mount DMR Repeater VHF 136-174MHz, 5-50W, DMR Tier II & Analog Conventional Mode
HF652-U1	Compact DMR Repeater UHF 400-470MHz, 1/25W, DMR Tier II & Analogue Con-ventional Mode

Specifications apply to all H-Series repeaters unless noted otherwise in **bold text**. All specifications are subject to change without notice due to continuous development.

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