# OBARRETT

### PRC-2080+ Tactical VHF radio system



### **Features include**

- Compact, Lightweight, Modular Design: Built for portability and ease of use.
- Configurable Options:
  - 5 W Hand Portable
  - 25 W Manpack
  - 50 W Mobile
  - 50 W Base Station
  - 50 W Re-broadcast system
- Advanced Signal Processing: DSP technology for voice and data signals.
- **Enhanced Communication:** Supports selective and group calling.
- Wide Compatibility: Operates seamlessly with other 30–88 MHz communications equipment.

### Available options include

- Encryption and frequency-hopping for secure communications.
- Messaging and encrypted data transfer capabilities.

The PRC-2080+ is part of the renowned family of Barrett transceivers, built to deliver reliable and robust communication in the field.



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### **Communication modes**

The PRC-2080+ offers multiple levels of encryption and frequency-hopping security for secure and reliable communications. Standard features include analog voice and digital unencrypted data transmission. Available encryption levels provide enhanced security to meet mission-critical needs:

- Standard Encryption
- Advanced Frequency Hopping Security
- Customizable Encryption Protocols

Built to excel in demanding conditions, the PRC-2080+ is a reliable solution for tactical operations requiring secure and versatile communication capabilities.

- Analogue Voice Fixed Frequency (AFF)
- Digital Unencrypted Data Fixed Frequency
- Digital Encrypted Voice Fixed Frequency (DEFF)
- Digital Encrypted Voice Frequency Hopping (DEFH)\*\*
- Digital Encrypted Voice Free Channel Search (DEFCS)
- Digital Encrypted Data Fixed Frequency
- Digital Encrypted Data Frequency Hopping\*\*

\*\* Requires an Australian Department of Defence Export licence.

### Simple to use

The PRC-2080+ is user-friendly and designed for high-pressure environments, with intuitive controls for basic functions and an advanced handset for features like field programming, selective/group calling, and menu options. It modernizes tactical communication, replacing the outdated PRC-77 by addressing vulnerabilities like interception and jamming.

#### Rugged design

The PRC-2080+ is built with robust construction to ensure durability, simplicity, and easy maintenance. Its modular design consists of only three internal modules, which can be replaced without the need for special tools. All inter-module connectors are gold-plated to ensure reliability, and the design eliminates wiring looms or complex backplane assemblies.

Emphasizing a low cost of ownership over an extended service life, the transceiver's software-defined architecture ensures seamless compatibility with legacy and current communication systems, making it a future-ready solution.

### Modular construction

The PRC-2080+ is a reliable and high-performance VHF transceiver, featuring a modular design for enhanced versatility and efficiency. Its RF module offers fast frequency switching, low power consumption, and excellent resistance to ECM. The DSP module handles tasks like speech coding, encryption, and frequency hopping, ensuring secure communication. The PA module amplifies signals for reliable communication. Combining advanced RF, DSP, and software capabilities, the PRC-2080+ delivers secure, cost-effective communications, making it a top choice in the tactical military market.

## PRC-2080+ 5 W VHF Tactical handheld

### package - P/N 2085-00-10

In stand-alone configuration, the PRC-2080+ is ideal for squad level communication requirements. Using either the supplied advanced handset or optional tactical headset, the PRC-2080+ transceiver can communicate reliably up to 8 km in open space (subject to terrain and topography), using the standard tape whip antenna. A webbing pouch is included and an An optional multicam canvas backpack is available. (see back page)

#### The standard package comprises:-

- PRC-2080+ VHF transceiver
- Tactical handset with keypad
- Tape whip antenna with gooseneck
- Rechargeable 6.5 Ah Li-Ion battery
- AC/DC battery charger
- Webbing pouch Multicam
- Collapsible whip 1.8m



### PRC-2081+ 25 W VHF Manpack package The standard package comprises:-

#### P/N 2086-00-10

The PRC-2081+ 25 Watt Manpack upgrades the PRC-2080+ transceiver with increased power and communication range. The PRC-2081+ is a military grade manpack communication set specifically designed for tactical applications and designed to withstand complete immersion, vibration, drop and temperature extremes to MIL-STD 810G.

- PRC-2080+ VHF transceiver
- VHF 25 W docking station
- 10 Ah, 14.4 V Li-Ion battery pack
- AC/DC charger
- AC/DC battery charger
- Collapsible section whip
- Tape whip antenna
- Tactical handset with keypad
- Daypack Multicam



### PRC-2082+ 50 W VHF Mobile package

#### P/N 2087-00-10

The PRC-2082+ Mobile package provides a convenient docking station for the PRC-2080+ transceiver as well as the flexibility for dismounted use when not in the vehicle (additional accessories are required to use the PRC-2080+ as a Hand Portable). The 50 W VHF amplifier provides range extension and increased link reliability when connected to the external vehicle whip antenna system. The PRC-2082+ can be installed in a range of vehicles including jeeps, patrol boats, APC's, and tanks. The PRC-2082+ is ready for connection to combat net radio systems incorporating intercom harnesses. The overall size of the system makes it one of the smallest VHF platforms available making it particularly suited to vehicles where space is limited.

### PRC-2084+ 50 W VHF Base package

### P/N 2089-00-10

The Barrett PRC-2084+ VHF Base Package, provides a convenient docking station with power amplification to 50 W, as well as the flexibility of dismounted communications when removed from the docking station (additional accessories are required to use the PRC-2080+ as a Hand Portable).

The VHF Base Package can be installed in a number of temporary base and fixed command configurations and operated from a variety of AC and DC power sources.

### PRC-2083+ 50 W VHF Re-broadcast

### System - P/N 2088-00-10

The Barrett PRC-2083+ Re-broadcast system is typically used to link two low band VHF networks providing extended range to overcome communication difficulties due to distance or terrain. The two networks can use different security options (frequency hopping and encryption) providing a field deployable interoperability solution.

The re-broadcast system utilizes two PRC-2084+ 50 Watt systems and incorporates a nine band co-location filter assembly and AC/DC power supply with battery backup facilities all housed in a MIL-SPEC ruggedised transportable case allowing for easy deployment in any field environment.

#### The standard package comprises:-

- PRC-2080+ VHF transceiver
- Vehicle docking station
- 50 W VHF amplifier
- Tactical handset with keypad
- **Tactical Installation Kit**
- **Rugged external amplified** speaker
- Anti-vibration mount

- The standard package comprises:-
- PRC-2080+ VHF transceiver
- Vehicle docking station
- 50 W VHF amplifier
- Tactical handset with keypad
- AC power supply module
- **Tactical Installation Kit**
- **Rugged external amplified** speaker

The standard package comprises:-

- PRC-2080+ VHF transceiver x 2
- Vehicle docking station x 2
- 50 W VHF amplifier x 2
- Advanced tactical handset x 2
- AC power supply
- **Bandpass filter panel**
- **Transportation casing**
- **Tactical Installation Kit**
- Rugged external amplified speaker x 2







### PRC-2080+ General specifications

Squelch150 Hz tone squelchDisplayBacklit LCD graphics displayProgrammingPC programming software, Fill Gun, Cloning cable, Tactical handsetBITEAdvanced module diagnostics & error reporting	Display Programming BITE Output power	Backlit LCD graphics display PC programming software, Fill Gun, Cloning cable, Tactical handset Advanced module diagnostics & error reporting 5 W / 500 mW / 50 mW nominal (selectable)
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### **Mechanical & environmental**

#### PRC-2080+ 5 W VHF Hand Portable package - P/N 2085-00-10

Battery	14.4 V 6.5 Ah Li-Ion
Antennas	Tape whip with balun gooseneck
	6 section whip with balun gooseneck
Dimensions in mm	110W x 60D x 250H including battery
Weight	1.3 kg with battery pack
Temperature	Operating -30°C to +60°C
Construction	Aluminium body and polycarbonate battery
	casing
MIL-STD 810G	Drop, shock, vibration & immersion

#### PRC-2081+ 25 W VHF Manpack package – P/N 2086-00-10 (General specs as per PRC-2080+ unless noted below)

Battery Antennas	14.4 V 10 Ah Li-Ion Tape whip with gooseneck or 6 section collapsible whip
Output power	25 W
Dimensions in mm	215W x 280D x 95H
Weight	7.7 kg with backpack frame and battery pack
Temperature	Operating -30°C to +60°C

#### PRC-2082+ 50 W VHF Mobile package – P/N 2087-00-10 (General specs as per PRC-2080+ unless noted below)

Supply voltage12 to 28 V DCOutput power50 WDimensions in mm230W x 250D x 270HWeight10.8 kg excluding antenna

### PRC-2084+ 50 W VHF Base package - P/N 2089-00-10

(General specs as per PRC-2080+ unless noted below)

Power Supply		
Output power		
Dimensions in mm		
Weight		

100 to 240 V AC 50 W 230W x 445D x 335H 15 kg excluding antenna

#### PRC-2083+ 50 W VHF Re-broadcast System – P/N 2088-00-10 (General specs as per PRC-2084+ unless noted below)

Power Supply	100 to 240 V AC
Dimensions in mm	685W x 715D x 550H
Weight	58 kg excluding antennas

Specifications are typical. Equipment descriptions and specifications are subject to change without notice or obligation.

#### Head Office:

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### Webbing pouch - Multicam

- Designed to be worn on webbing using the MOLLE system for attachment.
- Made from 1000 denier nylon.



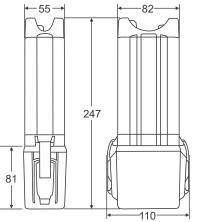
### Canvas backpack - Multicam (optional)

- Lightweight backpack design is suited to back mounting of the transceiver using either a short or long antenna.
- Made from 1000 denier nylon.





#### Dimensions in mm







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