

HH3100 Series

Spectre M® Multi-Band Tactical Handheld/
Mobile Transceiver

SPECTRE™ M



Introducing the NEW Spectre M® Handheld Series Radio.



Datron's Spectre M® family of radios offer secure communications in ruggedized form-factors, provide a sophisticated feature-set, and utilize a simplified user interface for ease of operator training. The Spectre M family includes three versions: HH3100V, HH3100A, and HH3100M. All three models meet MIL-STD-810 for reliable operation in harsh environments.

The HH3100V is a high performance, competitively-priced, tactical handheld radio that features embedded ECCM, COMSEC (AES-256), and GPS capabilities. It is fully compatible with our Spectre V® family of radios (PRC2100V and HH2100V). The HH3100V is designed to satisfy the demanding requirements of today's sophisticated tactical communications arena.

The HH3100A includes all the functions and features found in the HH3100V and extends frequency coverage to 136 MHz. It adds an AM modem to implement ground-to-air communications.

The HH3100M includes all the functions and features in the HH3100V and HH3100A and extends the frequency coverage to 512 MHz.

The HH3100 series radios address today's most pressing battlefield needs by incorporating a full range of embedded features. Accurate position and time-of-day capability is afforded by the embedded GPS receiver. Frequency hopping and digital encryption waveforms offer a high level of jamming resistance and security.

All of the HH3100 series radios can be used in a network with the PRC2100V and HH2100V, providing base station, vehicle, manpack, handheld, or retransmit capability.

* Patents Pending

Features

- 30 to 512 MHz (depending on model)
- 100 programmable memory channels
- Rugged (MIL-STD-810G), immersible to 1m
- Handheld up to 7.5W
- Output power in 3 programmable settings
- Ground-to-Air AM operation (depending on model)
- Module level Built-In-Test (BITE)
- Embedded ECCM and GPS
- Embedded COMSEC with Spectre 40, 64, and new AES-256
- GPS reporting functions
- Spectre Messaging functions
- Data and management capability with companion software packages

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Subject to export regulations

Specifications subject to change without
notice - rev 180403

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Datron World Communications Inc.

Made in the USA



HH3100 mounted
in the MT3100
mount and dock

GENERAL

- **FREQUENCY RANGE**
HH3100V: 30–88 MHz
HH3100A: 30–136 MHz
HH3100M: 30–512 MHz
- **CHANNEL SPACING**
25 kHz or 12.5 kHz analog, 25 kHz digital
- **PRESET CHANNELS**
100 programmable memory channels - all mode information individually programmable per channel
Any or all analog channels in a group (up to 100)
- **SCANNING**
From front panel, fill device, or remotely via computer
- **CHANNEL PROGRAMMING**
Supports all Spectre V family hopping and encryption modes
- **MODES**
AES-256 Digital Encryption - 64 bit and 40 bit Spectre V crypto
- **ENCRYPTION**
Up to 58 MHz hopping in any region between 30 and 512 MHz
Fully compatible with PRC2100V and HH2100V Spectre V ECCM
- **ECCM**
Internal GPS antenna with bullet antenna or connection to external antenna
- **GPS**
Industry standard rechargeable Lithium-Polymer battery delivering 12+ hours of mission life
LCD battery icon
- **BATTERY PACK**
50 ohm N-type connector
LED backlit, multi-function LCD
- **LOW BATTERY INDICATOR**
- **ANTENNA PORT**
- **DISPLAY**

MECHANICAL

- **SIZE (H x W x D)**
10 in. x 3.4 in. x 1.9 in. includes battery pack (254 mm x 86 mm x 48 mm)
- **WEIGHT**
2.65 lbs. (1.2 kg) includes battery pack
- **PACKAGE**
Metal construction

ENVIRONMENTAL

- **TEMPERATURE**
-30 to +60° C (operating)
- **SHOCK, VIBE, etc.**
MIL-STD-810G-compliant
- **IMMERSION**
1 meter for 30 minutes per IP67

TRANSMITTER

- **RF POWER OUTPUT**
500mW to 7.5W (three software-adjustable settings)
- **DUTY CYCLE**
Continuous service, all modes
- **HARMONICS**
Better than -46dBc

RECEIVER

- **SENSITIVITY**
-116 dBm @ 12 dB SINAD
- **SQUELCH**
150 Hz tone, carrier, or CTCSS; compatible with many analog radios
- **AUDIO**
Better than 85 dB SPL from internal speaker

INTERNAL OPTION

- **SCRAMBLER**
HH7700, HH1077, and PRC1077 compatible scrambler

MISCELLANEOUS FUNCTIONS

- Programmable Channel Access control
- Selective Calling with Call Alert for Unit, Group, and All Level Calling
- 10 Programmable short messages available
- Spectre message alert and viewing of the SM messages on radio screen
- GPS reporting by time or PTT

ACCESSORIES

- Mobile Mount
- Amplifiers for mobile and handheld
- Battery chargers
- Mobile and handheld antennas
- Carrying pouch