

# MT3100 - AM3100

SPECTRE™ M



## Mount, Dock, and Amplifier for HH3100 Series Radios



The MT3100 is a rugged mobile mount and docking station with unique features that was designed for the HH3100 Series multiband radios.

It operates from any +10V to +33V DC power source and provides battery charging for the HH3100.

In addition to charging the main radio battery, the MT3100 offers an additional dock where a second (spare) battery can be charged.

The MT3100 mount offers a true “jerk and run” capability that does not require connecting or disconnecting any cable. This allows the user to transition from vehicular/mobile operation to handheld operation in seconds.

The MT3100 mount supports “retransmission” and tactical Intercom interfaces.



The AM3100 is a rugged and compact 50W tactical amplifier that supports all of the HH3100-series operating modes. This includes FM, AM, and DIGITAL modes in both fixed-frequency and hopping modes (TRANSEC).

The AM3100 is designed to be mounted on the back of the MT3100 vehicle mount and receives its power from the mount. The AM3100 is automatically switched on-line when the radio is inserted into the mount. This minimizes the need for operator intervention.

### MT3100 Mount

- Rugged MIL-STD-810G mount and dock
- Auto-detection of mounting and unmounting of a radio
- Built-in BITE with visual LED indicators
- Volume control, Power switch and Dimmer switch
- RS232 (DB-9), USB (Type A), and RJ45 (Ethernet) interfaces
- DC input from +10 to +33 VDC (12 VDC and 24 VDC)
- Charging capability for radio battery and spare battery while operating
- Real “Jerk and Run” (Hot Swap)
- Retransmission capability (with optional RETRANS kit)
- VIC-1 interface option

### AM3100 Amplifier

- 50W\* 30–512 MHz amplifier
- Rugged & compact 50W tactical amplifier
- Natural convection cooling
- Full spectrum 30–512 MHz coverage
- Supports fixed frequency and frequency hopping
- Fully compatible with Datron’s HH3100A and HH3100M radios

\* 25W typical when powered from 12 VDC

\* United States Patents: 9,935,668; 10,056,932; D830986; and 10,251,030

www.dtwc.com +1-760-597-1500 995 Joshua Way, Suite A, Vista, CA 92081 USA



# MT3100 and AM3100

## Mount, Dock, and Amplifier for HH3100 Series Radios



### Datron World Communications, Inc.

995 Joshua Way, Suite A  
Vista, CA, USA 92081

Tel: +1-760-597-1500

Fax: +1-760-597-1510

E-mail: [sales@dtwc.com](mailto:sales@dtwc.com)

Web: <http://www.dtwc.com>



Subject to export regulations

Specifications subject to change without notice - rev 210616

Spectre M is a registered trademark of Datron World Communications Inc.

Made in the USA

This datasheet contains no ITAR data.



### MT3100 Mount Specifications

#### AUDIO

- AUDIO INTERFACE Standard MIL audio interface (U-283/U) for MHS, H-250, etc.
- EXTERNAL SPEAKER Audio interface for external speaker

#### DOCKING

- AMPLIFIERS Provides interface for AM3100 amplifiers

#### DC POWER

- DC OUTPUT TO AMP +10 VDC to +33 VDC (nominal +12 VDC and +24 VDC)
- CABLE DC power cable w/ MIL-DTL-55181/2-01 compatibility connector
- DC INPUT +10 VDC to +33 VDC (nominal +12 VDC and +24 VDC)

#### ANTENNA CONNECTORS

- ANTENNA N-F antenna connector
- GPS GPS antenna connector (TNC)

#### MECHANICAL

- SIZE (H x W x D) 10.75 in. ( 11.3 in. with AM3100) x 11.1 in. x 13.5 in.  
273 mm (287 mm with AM3100) x 282 mm x 343 mm
- WEIGHT 20.0 lbs. (28.7 lbs. with AM3100)  
9.1 kg (13 kg)
- COLOR Matte Black + Olive Drab Green

#### ENVIRONMENTAL

- TEMPERATURE Operating: -30° C to +60° C per MIL-STD-810G Methods 501.5, and 502.5 Procedure II for operation  
Storage: -40° C to +85° C per MIL-STD-810G Methods 501.5, Procedure I, and 502.5 Procedure I for storage
- TEMPERATURE SHOCK Per MIL-STD-810G, Method 503.5, Procedure I-C
- RAIN Per MIL-STD-810G. Method 506.5, Procedure I
- HUMIDITY (Operating) Per MIL-STD-810G, Method 507.5, Procedure II
- SALT FOG Per MIL-STD-810G. Method 509.5, Procedure I
- SAND and DUST Per MIL-STD-810G, Method 510.5, Procedure I and II
- VIBRATION Per MIL-STD-810G. Method 514.6, Procedure I
- SHOCK Per MIL-STD-810G. Method 516.6, Procedure I

### AM3100 Amplifier Specifications

#### GENERAL

- RADIO CONNECTOR BNC female
- ANTENNA CONNECTOR Type N female
- HIGH TEMPERATURE High temperature power fold back
- DC POWER +10 VDC to +33 VDC (nominal +12 VDC and +24 VDC)

#### TRANSMIT

- RF POWER INPUT 5 Watts peak typical (auto-managed)
- RF POWER OUTPUT 50 Watts\* peak typical in both FM and AM (~12.5W AM carrier)
- RF GAIN 10 dB at +28.0 ±4.0 VDC; 7 dB at +14.0 ±4.0 VDC
- RF GAIN FLATNESS ±1dB
- HARMONIC REJECTION -55 dBc 2nd and 3rd harmonic; -60 dBc 4th-10th harmonic
- RX-TX SWITCHING SPEED 100 μS

#### RECEIVE

- FREQUENCY RANGE 30-512 MHz
- INSERTION LOSS 1 dB max.
- VSWR 2.5:1 max.
- TX-RCV SWITCHING SPEED 100 μS
- RECEIVE FILTER 30-512 MHz band-pass filter

\* 25W typical when powered from 12 VDC