

APPLICATIONS

- Personal Navigation Devices
- Asset Tracking
- Personal Safety
- Smart Phones
- Personal Digital Assistants
- Netbooks / Ultra Mobile Devices

FEATURES

- Single Package Module with on-board trace antenna option
- Built-in antenna switch for external antenna use (DM100A)
- Low current consumption
- Dual SAW filter for excellent blocking performance
- On-board LNA for improved sensitivity
- <1 second TTFF for hot starts
- UART and USB 2.0 Interfaces
- Tracking sensitivity: – 159 dBm
- RoHS Compliant

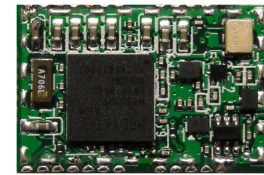
CONTACT DETAILS

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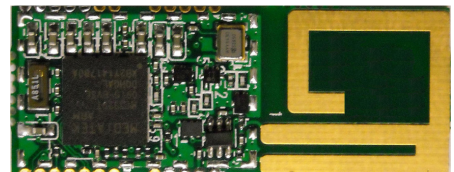
Delta Mobile Systems DM100 GPS Module provides a fully integrated solution for those companies looking for a “time-to-market” advantage using a small footprint, cost effective GPS solution for their products. Available in two versions; DM100A comes with an integrated on-board antenna, while the DM100 requires use of an external antenna.

Providing a true drop in solution with the antenna and RF circuitry in a single small footprint package, the DM100A offers ease of integration and shorter design cycles for faster time-to-market. The DM-100 offers the same superior performance but without the on-board antenna providing a small footprint for those applications where space is critical.

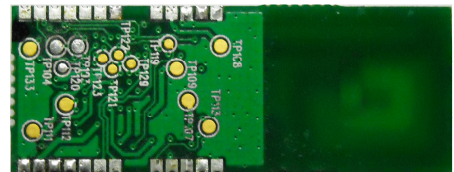
The GPS Module products have been designed for re-flow onto customer’s main board for a compact highly integrated GPS solution. **Note:** DM100A antenna tuning may be needed based on the final enclosure and application.



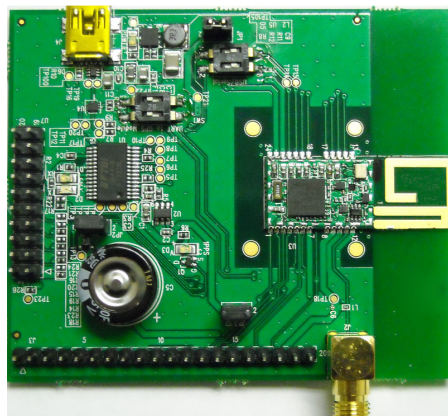
DM100 GPS Module (without shield)



DM100A GPS Module (without shield)



DM100A GPS Module – Solder Side



DM100-DEV Development Board

DM100-DEV Development Kit: To aid in the integration of the DM100 into customer target applications, Delta Mobile Systems makes available a complete development kit for the DM-100 module. The DM100-DEV kit contains the following parts:

- Test board with DM100A, USB interface, SMA antenna interface
- CD ROM with test software application
- Complete DM100 specification with reference design information
- Application notes
- External Antenna

Technical Specifications

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For more information on any of our products or services please visit us on the Web at:
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DM100A Minimum / Maximum Ratings

Rating	Value	Units
Operating Voltage	3.0 to 4.3	Volts
All Input / Output Pins	-0.5 to 3.3	Volts
Battery Backup (V_BCKP)	2.0 to 4.3	Volts
Operating Temperature Range	-40° to +85°	Celsius

DM100A Characteristics

Characteristic	Specification	
Module Size	DM100 (External Antenna) DM100A (Printed Antenna)	12.3mm x 20mm x 3.0mm 12.3mm x 34mm x 3.0mm
Product Packaging	Tray	
Pin Footprint	Castellation, 24 pins	
Interface	UART USB 2.0	
Supported NMEA Commands	NMEA 0183 V3.01 and previous – GSV, RMC, GSA, GGA, VTG, GLL	
Supported GPS Standards	SBAS (WAAS, GNOS, GAGAN, MSAS), DGPS	
Channels	66 (search) / 22 (tracking)	
LNA	Internal to module	
RX Sensitivity	Acquisition Tracking	- 144 dBm - 159 dBm
Time-To-First-Fix (TTFF)	Cold Start (Autonomous) Warm Start (Autonomous) Hot Start (Autonomous)	32 sec 28 sec < 1 sec
Supply Current	Icc Acquisition Icc Tracking	53 mA 44 mA

Note: This specification is subject to change without notice.