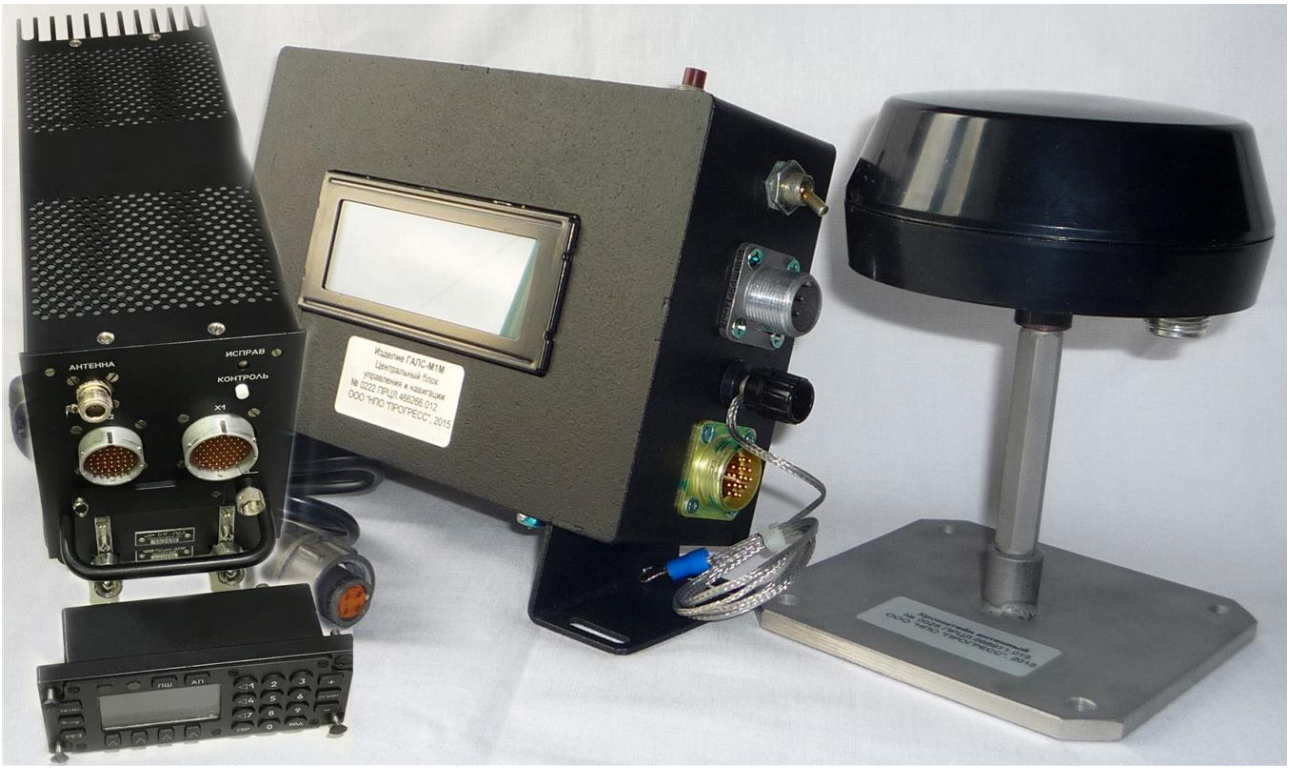
MR-1LA Tactical Land/Airborne Transceiver©



Features

- Low cost telecommunication & navigation for battle tanks, infantry fighting vehicles, and attack helicopters
- Ideal for retrofitting
- Automatic own position reporting using internal GNSS Receiver
- One solution for all platforms: Land Forces, Air Forces and Navy
- Multi-mode, multi-band VHR/UHF Transceiver
- Excellent Co-Location performance for multi-fit installation
- Multiband digital Auxiliary Receiver
- Fast Frequency Hopping
- Global Navigation Satellite System (GNSS) Receiver (GLONASS L1/L2 + GPS L1/L2/L5+BeiDou B1/B2/B3)
- GNSS Receiver with integrated text messaging from front panel
- All-in-view navigation using proven,120-channel GLONASS/GPS signal processor
- Standalone Position Accuracy < 1.5 m
- Digital interface with Enhanced Position Location and Reporting System or Battle Management System

Today, highly mobile forces, projected into remote theatres under joint-allied command, need to share a Common Operational Picture and real time situation awareness. They need to speed up the operational tempo and optimise the efficiency and survivability of each platform through cooperative engagements, and thus require state-of-theart communications that match this new operational context. To achieve information and communication superiority, networks connect seamlessly all users, all systems and all applications, to deliver the right services in the right place at the right time.
Moreover these SMA PROGRESS,LLC solutions are fully interoperable and bring to Land Forces the capability to operate in a tri-services environment (Land Force, Air Force & Navy) as well as in coalition.

One solution for all platforms

The ***key elements*** of the system are the **MR-1LA©** the VHR/UHF Transceiver, Front Panel, GNSS Receiver and the RF + GNSS Antenna's.

Specifications

General Characteristics VHR/UHF Transceiver

Frequency Range: 30 - 400 MHz
Channel Spacing: 8.33 kHz; 25 kHz; 50 kHz
Types of Radio Emissions:
30.000 - 87.975 MHz - 25 KHz - 16K8F3EJN - F3E
118.000 - 136.975 MHz – 8.33;25 KHz - 5K00A3EJN - A3E
100.000 - 149.975 or 220.000-399.000 MHz – 25 KHz – 6K80A3EJN – A3E or 16K8F3EJN- F3E or F1B,F1D – F1
156.000 - 173.975 MHz – 25 KHz – 16K8G3EJN - G3E
138.000 - 173.975 MHz – 25 KHz – 16K8F3EJN - F3E
100.000 - 149.950 MHz – 50 KHz – G1W, F1W - Fast Frequency Hopping
220.000 - 399.950 MHz – 50 KHz – G1W, F1W - Fast Frequency Hopping
Data Transfer Rate (F1W,G1W) – 1.2;2.4;4.8;16;32;64;128;256;512;768 kbit/s
RF Output Power: A3E – 20 W; F1,F3E,G3E – 30W; Fast Frequency Hopping – 75 W
Guard Receiver, Frequencies: 121.5;156.8;243;406 MHz
Power Supply: 22.5-28.5V, DC
Control: RS422 or RS485, Ethernet
Operation Temperature: -55 to +60 C
Dimensions: Transceiver - 131.5 x 172 x 362.5 mm; Front Panel – 146 x 64 x 55
Weight: Transceiver – 5.9 kg; Front Panel – 0.5 kg
Vibration, Shock: MIL-STD-810D
Supply variations: MIL-STD-704D
EMC: MIL-STD-461C
MTBF: 5,000 hours

GNSS Receiver

Frequency Range: GLONASS L1/L2 + GPS L1/L2
Standalone Position Accuracy: 1.5 m
Channel: 120 GNSS tracking channels
PPS time Accuracy: 50 nanoseconds
Interfaces: RS-232 or RS-485
Display: 70.4 x 20.8 mm
Dimensions: 198 x 132 x 85 mm
Weight: 1200 g
Operation Temperature: - 20º C - + 85º C
MTBF: 90,000 hours

For more information about MR-1AL©, please contact:

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