



# INVAP

DEFENSE, SECURITY  
AND ENVIRONMENT

## RPA-200M Mobile Long-Range 3D Primary Radar



# Protect for a better living.

RPA-200M is a tactical rapid deployment radar system with minimum personnel requirements. It includes an ADS-B sensor, an IFF sensor, and a long-range 3D primary sensor.

This radar system is fully designed and produced by INVAP with state-of-the-art technology featuring Doppler signal processing throughout the entire coverage volume (A-MTD), digital beam

forming (DBF), GaN amplifier technology, software-based modular and scalable architecture, Smart Radar automatic learning capabilities, and advanced electronic counter-countermeasures (ECCM).

The RPA-200M delivers excellent performance in a broad variety of operational scenarios, even in the most adverse clutter and interference conditions.

## Dual use

In addition to the features and performance typical of an air surveillance radar, its ability to detect and track slow- speed and low-altitude targets makes RPA- 200M an ideal tool to contribute to national defense, border control, and the fight against drug trafficking. The ATC version is configured as an ASR or an ARSR sensor. Both versions include an S-mode secondary interrogator and an ADS-B receiver.

## Multiple functions

This radar is developed to play multiple operational roles while simultaneously performing various functions (multifunctional), thus optimizing system resources.

## Mobile-tactical

The entire system (3D radar, MSSR/IFF, ADS-B) fits in a module the size of a 20-foot ISO container. Extra modules with additional operational posts can be easily added. The full set can be transported on a trailer with standard fasteners by helicopter, or in a single Hercules C-130 flight.

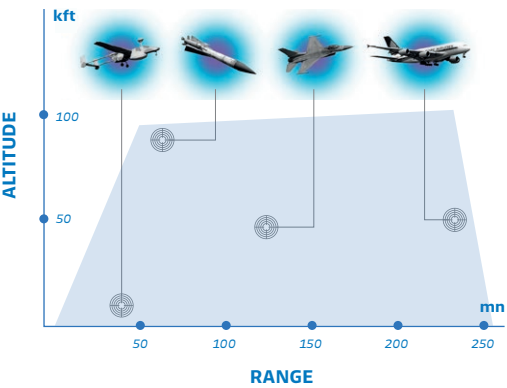
## Local or remote operation

The RPA-200M system can be operated from the ground or from the transport vehicle, and can be powered from a self-contained generator or the utility's power grid. Its local, or remote and unmanned operation, allows the RPA-200M to be networked into command and control systems.



SPECIFICATIONS

Operating Frequency	1215-1400 MHz
Instrumented Range	250 NM
Operating Range	135 NM (RCS=1m², Pd=80%,Pfa=10 <sup>-6</sup> )
Max. altitude	100 kft
Refresh time	5 or 10 seg
Range accuracy	30 m
Range resolution	250 m
Azimuth accuracy	< 0.3°
Azimuth resolution	3°
Elevation resolution	3.5°
Elevation accuracy	< 0.35°
Clutter improvement factor	55 dB
Sidelobe level	-35dB RMS
Number of TR modules	20
MTR power (each)	2 kW
Duty cycle	10%
Peak irradiated power	40 kW
Simultaneous target tracking	> 1000
Time from arrival on site to actual operation	< 30 min
Availability	> 99,98%
MTBF	> 3000 h
MTTR	< 30 min





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