RPA-240T is an L band Long Range 3D Air Surveillance radar with pencil beam Active Electronic Scanned Antenna.

Featuring state-of-the-art processing algorithms and advanced ECCM capabilities, with dedicated antennas, receiver and processor, the RPA-240T delivers excellent performance even in the most extreme clutter conditions and electronic warfare scenarios.

Its modular design, with distributed air-cooled RF power generation, allows H-24/365 operation, with high availability, minimum maintenance and low operational and logistics cost throughout its life cycle.

The whole system can be transported by land, sea or air (Aircraft C-130), being able to be completely disassembled and relocated in a few days, requiring a minimum preparation of the installation site.

The radar can be operated locally, configuring a complete command, control and communications center on it-self; or remotely and networked into a multi-sensor command and control system.
MAIN FEATURES

• Pencil Beam Active Electronic Scanned Antenna with low side lobe level
• Solid state transmitter-receiver modules (TRM)
• Digital waveform generation, with intra-pulse frequency diversity
• High bandwidth frequency agility
• Independent pencil configuration including waveforms, burst parameters and processing type
• Configurable scan pattern (by sector)
• Advanced digital processing, including MTI, Doppler, clutter map, adaptive filtering.
• Azimuth and elevation monopulse
• Automatic acquisition and tracking of up to 600 simultaneous targets
• Full self-diagnosis (BIT) capability
• Integrated calibration tools
• Local and remote operation and monitoring
• Integrated secondary interrogator
• Monoradar Processor for radar data fusion (SSR-PSR)
• Ground to air communications system, with relay function.
• Optional radome

INTERFACES

• Data output: ASTERIX, or custom defined
• Configuration and control: Intuitive user friendly graphical interface

SCODA C2 software

▪ Designed for Surveillance, Identification and Control activities
▪ Detection analysis tools
▪ Static and dynamic measurements
▪ Interception assistance.
▪ Data exchange with other terminals in the system
▪ Support for digital maps, points of interest, air routes and user defined work areas
▪ Multi-radar support
▪ Integrated communications tools
▪ Radar data recording and playback
SPECIFICATIONS

Frequency: Banda L (D)
Instrumented range: 240NM
Accuracy: <0.2°
Altitude: 100Kft
Scan rate: 6 RPM
Simultaneous target tracking capacity: > 600
MTBCF: > 1500 hour
MTTR: < 1 hour
IFF modes: 1,2,3/A, C, S (4 and 5 optional)

Advanced Electronic Counter-Counter Measures (ECCM)

- Interference analysis with automatic frequency selection
- Interference DOA reports (Jam-strobe)
- Side lobe blanking
- Side lobe interference detection with adaptive cancelling
- Pulsed interference detection and cancelling
- Burnthrough mode
INVAP’s headquarters are located in San Carlos de Bariloche at the foot of the Patagonian Andes. The company has offices in several cities throughout Argentina and operates in various countries.

INVAP’s Headquarters

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