

RVT-30/50/80

GROUND AND COASTAL SURVEILLANCE RADAR SERIES



Invap's RVT Series is a new family of ground surveillance radars, engineered for improved all-weather detection of very slow-small moving targets, both on the ground and on the sea surface. RVTs

architecture combines FMCW and state of the art digital multi-beam technologies to achieve high-end performance while keeping low cost and optimum SWaP.

PRELIMINARY

Applications

- Battlefield surveillance
- Border and coastal surveillance
- Critical infrastructure/ site perimeter / high profile events protection
- Anti-drone protection

Main features

- Persistent surveillance and instantaneous target tracking over 90° by multiple simultaneous digital beams.
- Up to 360° azimuth coverage (mechanical scan or multiple panel option)
- Automatic target classification
- Low RF transmitted power (LPI)
- Light weight - man portable, vehicle mount and fixed installation versions.
- Very-low power consumption
- High reliability, maintenance free solid state design.
- Seamless integration with EO, and drone countermeasure systems.
- ICD & software API available for 3rd party systems integration.

Specifications

Overview

- Radar type: High Resolution FMCW Doppler Ground Surveillance Radar
- Operating frequency: X-band
- Tracking: >600 simultaneous tracks
- Beamforming: multiple digitally generated beams for simultaneous 90° coverage on each antenna panel
- Azimuth coverage: one, two, three or four static antenna panels for 90°, 180°, 270° or 360° persistent coverage or, single antenna panel with mechanical rotation for 360° coverage
- Track update rate: less than 1 sec (staring), 10 sec (when rotating)

Electrical

- Power consumption: <100 W
- Power supply: 16-50 VDC, Optional battery pack and AC/DC converter.

Interfaces

- Control and data output: Gigabit Ethernet
- Data format: Asterix or custom
- User I/O: Ethernet, CAN, RS-232 and RS-422

Physical

- Weight: 15kg to 45kg (according to version)
- Operating temperature: -20°C to +60°

PRELIMINARY

Detection range	RVT-30	RVT-50	RVT-80
<ul style="list-style-type: none"> • Drone • Pedestrian • Rubber boat • Small vehicle • Large vehicle/medium ship 	4 km 8 km 12km 15 km 25km	6 km 10 km 15km 25 km 35km	8 km 15 km 23 km 36 km 48km
Max. instrumented range	30km	50km	80km
Azimuth accuracy	0.6°	0.3°	0.3°
Range resolution	0.2m -10m		



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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