

# Ground and Coastal Radar

## GR12/1



GR12/1 Persistent Ground and coastal Surveillance radar is a new advanced high resolution radar with unique and outstanding capabilities. Featuring simultaneous multibeam technology, the radar provides persistent surveillance and instantaneous target tracking over a wide area.

In operational use by military, paramilitary and security agencies, the radar instantly detects, monitors and tracks all moving targets in the Region of Interest (ROI), such as a walking person, a moving vehicle and various boats and vessels at sea.

The radar features one stationary (non-rotating) planar antenna, covering an azimuth sector of 90°. Full 360° coverage is achieved either by adding more antennas or by placing the radar on a positioner.

The radar detects a moving person and a rubber boat up to 1,000m or a moving vehicle and a sailboat up to 2,000m.

The radar is designed for simultaneous detection and tracking of ground moving targets and sea surface targets, even in adverse weather conditions.

### Features

- Instantaneous and continuous multi-beam coverage of the entire Region of Interest
- High probability of target interception, in all weather conditions, even if the target is not persistent
- Automatic and continuous detection and tracking with high accuracy
- Dual mode simultaneous operation both on ground and on the sea surface
- Multi-target automatic tracking
- Unparallel performance for small and slow moving targets
- Very low false alarm rate
- Easily deployed and operated
- Interoperability with Electro-Optic sensor
- Several radars can be networked, providing an integrated picture on a C4ISR console display
- Solid state radar with very high MTBF
- Very low Life Cycle Cost (LCC)
- Multi-beam Solid State FMCW Radar
- Non-moving parts
- Each target is continuously monitored and its track is updated multiple times per second
- 360° coverage can be achieved by employing 4 planar stationary antennas of 90° each
- Locally or remotely controlled and operated
- Man portable

### Applications

- Border surveillance and protection
- Critical infrastructure protection
- Harbor surveillance

### Specifications

Radar type:	High resolution FMCW radar
Frequency:	C-Band
Detection range:	Up to 1000m for rubber boat / moving person Up to 2000m for sailboat / moving vehicle
Azimuth coverage:	Instantaneous 90°
Range accuracy:	Less than 10m
Azimuth accuracy:	2°
Interface connection:	Ethernet TCP/IP
Power:	12 – 24 VDC with internal battery pack
Power consumption:	12W
Radar dimension cm:	25 x 13 x 31 (W x D x H)
Radar weight:	6kg (including battery)
Max number of tracks:	200
Track update rate:	Few times per second