



# SELEX GALILEO

A Finmeccanica Company



## GABBIANO SURVEILLANCE RADAR FAMILY

**The Gabbiano Family is a cost effective state-of-the-art, X-Band radar solution for surveillance at sea, on land and along coastlines in all-weather conditions.**

Gabbiano provides both long and short range surveillance capability for civilian and military forces incorporating:

- Homeland Security - including drug trafficking, smuggling, illegal immigration and terrorism
- EEZ protection (e.g. illegal fishing)
- Environmental surveillance (oil and hazardous material spills, wild life protection)
- Maritime Patrolling and Search and Rescue operations
- Combat Search and Rescue Missions
- Support to covert operations of Special Forces by day or night

Gabbiano Radar Family's high level of modularity and flexibility allows for operation on-board Unmanned Aerial Vehicles as well as both fixed and rotary wing manned platforms. The two basic Gabbiano configurations (T20 and T200 Power) are available with nose-mounted or belly-mounted antenna, providing respectively a  $\pm 90^\circ$  and  $360^\circ$  surveillance.

Moreover, antennas of several sizes/ characteristics, tailored to the specific application, are available.

### KEY FEATURES

- Low weight, low power consumption
- LPI capability
- TWS: > 200 targets
- ECCM capabilities (frequency agility, jammer avoidance etc.)
- Digital/ Programmable waveform generator
- Short blind zone (75 m, down to 6m in T-20 Configuration)
- High resolution modes
- Maritime surveillance, up to 220 NM
- High reliability
- Standard and flexible interfaces.

### GABBIANO THE PERFECT SOLUTION FOR ANY PLATFORM

UAV and small manned aircrafts are typically the most challenging platforms for payloads due to weight and space constraints. Gabbiano Radar Family offers a competitive solution: the T20 configuration. With its low power consumption from a single power supply source, lightweight along with standard and flexible interfaces and LPI characteristics, Gabbiano T20 is the right solution for those platforms with demanding constraints.

## Gabbiano Surveillance Radar Family

### GABBIANO FOR GROUND SURVEILLANCE

The Gabbiano Radar provides all the features for Homeland Security missions, primarily aimed at border protection, or in Combat Search and Rescue missions.

High resolution modes (Spot Synthetic Aperture Radar and Strip Synthetic Aperture Radar) grant a sub-meter resolution over wide swath areas. GMTI mode allows detection of moving targets on ground.

### GABBIANO FOR SEA SURVEILLANCE

Gabbiano is ideal for Search and Rescue and maritime surveillance missions. In addition to the standard air-to-surface search modes with TWS, this radar provides the high resolution (ISAR) mode which enables the user to classify the intercepted targets. To complete the Search and Rescue features, SART mode is also available.

### GABBIANO FOR NAVIGATION AID

Ground mapping, weather and beacon modes provide navigation aid to the crew.

### GROWTH CAPABILITY

Based on MRP (Modular Radar Processor) technology, the Gabbiano Radar Processor can be easily upgraded. Moreover, since the radar modes are performed by means of high level software, any new feature or customisation requires solely software updates with no need for hardware retrofit.

## TECHNICAL CHARACTERISTICS

### Radar Gabbiano T20

Weight	360° antenna (belly) ± 90° antenna (nose)	43 Kg
Cooling	Air cooled	
Frequency	X band	
MTBF	1300 hours	
Input power	450 W; single power source 28 Vdc	
Fully coherent transmitter	Solid state power amplifier	
Average transmitted power	20 W	

### Radar Gabbiano T200 (Power)

Weight	360° antenna (belly) 62 Kg ± 90° antenna (nose) 56 Kg
Cooling	Air cooled
Frequency	X band
MTBF	800 hours
Input power	305W (28Vdc) & 1200VA (115V-400 Hz)
Fully coherent transmitter	TWT
Average transmitted power	200 W with Peak Power Management



Gabbiano Radar Family's high level of modularity and flexibility makes it suitable for Unmanned Aerial Vehicles as well as both fixed and rotary wing manned platforms.