FULL SITUATIONAL AWARENESS

– FOR OFFSHORE RIGS AND PLATFORMS

Situational awareness is key

Offshore rigs and platforms whether it be for oil and gas extraction, or in connection with wind farms are small domains of their own set in the middle of the sea. Domains which need to be aware of their surroundings through constant surveillance and mitigation of security risks in a very harsh environment.

Operators of offshore rigs and platforms face the risk of accidents and collisions, unwanted trespassers and security breaches that are costly and dangerous to both staff and the entire operation at sea.

Situational awareness of vessels and low altitude aircraft approaching and leaving is key to meeting these challenges, present each day, all year long at a busy rig or platform. And you need to have the right systems in place which provide the overview needed to work safely and efficiently.

Proven radar solution

Terma's series of quality radars are specifically designed to solve the same concerns found on oil, gas and wind farm rigs and platforms as they do in the many ports and coast lines around the world regarding Vessel Traffic Services (VTS) and Coastal Surveillance Systems (CSS).

The SCANTER 5000 Series radar is specifically designed to provide reliable sea surface surveillance and will detect the smallest non-cooperative targets in adverse environmental conditions.

Typically, the SCANTER 5000 Series is used for monitoring of:

- All vessel movements
- Buoys and other fixed targets
- Pilot boarding operations
- Anchorages

Additionally, the SCANTER 5000 is an essential tool for dependable detection of:

- Illegal trespassing of unknown vessels
- Fast boats and jet skies with hostile intentions e.g., piracy

Full IALA compliance
The SCANTER 5000 Series complies with and exceeds IALA Guideline G.1111 recommendations for IALA Advanced systems, providing an excellent performance match to VTS demands.

More possibilities - Dual Channel Signal Processing
Our SCANTER 5000 series also allow for true dual channel signal processing. Use one channel in the radar system for standard surveillance purposes for your rig or platform, while the other is configured to simultaneously provide a second data feed serving another purpose. This includes Doppler processing (MTI) for short-range, low-level air surveillance to support Search and Rescue operations, helicopter approach operations and oil-spill detection capabilities that integrate with major oil-spill detection systems without compromising VTS/CSS operation.

Easy system integration
Featuring a flexible set of interfaces for control, monitoring and data outputs, the SCANTER 5000 Series is easily integrated with both new and existing surveillance and safety systems on your rig.

Designed for continuous use in harsh environments
The SCANTER range has a proven track record and is designed for use in harsh marine environments for a minimum lifetime of 15 years and with low maintenance in mind, providing offshore rigs and platforms superior radar performance at an availability exceeding 99.95%. The optional redundant configuration ensures even higher availability and further peace of mind regarding your critical radar installations.

Product Characteristics

Available in high-power (SCANTER 5202) and low power (SCANTER 5102) variants, the transceiver provides radar video, plots, tracks, control, and BITE service data, all available through the transceiver's LAN interface. An array of conventional interfaces, including analog and digital video outputs are also available.

The optional embedded TERMA ET2 target tracker offers tracking of fast, agile, and small targets in severe weather conditions and, at the same time, reliably tracks large, slow-moving targets.

Features:
- Increased resolution – 3m cell size delivers unsurpassed weather penetration
- Frequency Diversity and Time Diversity for enhanced small target detection
- High immunity against interference
- Transmission power adjustable in sectors – to match desired range and avoid unnecessary radiation of selected areas
- Radar video distribution on LAN
- Extremely high reliability – MTBFC ≥ 50,000 hours and very low maintenance costs
- Optional Doppler processing (MTI) for short-range, low-level air surveillance to support Search and Rescue operations
- 50 W and 350 W peak power Solid State Power Amplifier (SSPA)

Based on the SCANTER Radar Technology
Terma has developed and manufactured radar systems for more than 60 years and installed +3,000 radar systems worldwide. This experience is valued by coast guards who depend on Terma's sensor technology and appreciated by the largest ports in the world that strive for reliable and economical solutions.

Key Benefits
- Low cost of ownership
- Superior performance
- Integrated, advanced tracking capability
- Combined Surface and Air Surveillance option
- Software defined design – flexible and extensible

Key Figures

Weight	77 kg
Dimensions	990 mm x 497 mm x 305 mm (h x w x d)
Type	Solid State power amplifier
Frequency bands	9.0 GHz to 9.2 and 9.225 to 9.5 GHz
Sector Transmission	up to 16 user-defined sectors Dynamic range >140 dB overall Noise figure <2.5 dB
Emitter	50 W and 350 W peak* - 10 W and 70W average (at 20% duty cycle) Profile settings 16 Min. detection range 30 m BITE measurements Fully integrated

**In the 9.0-9.2GHz band 300W peak power*