AREA SURVEILLANCE RADAR

SCANTER 1002

Area Surveillance Radar

The SCANTER 1002 Radar System is tailored for detection and tracking of fast and slowly moving objects in and around high-sensitivity areas and critical infrastructure.

Where traditional electronic perimeter protection solutions typically only monitor outer boundaries and lines, SCANTER 1002 provides complete meter-by-meter coverage both outside and inside a physical perimeter.

Providing 360° surveillance and high update rates, the radar and its embedded tracker deliver constant surveillance of detected targets by determining course, speed, and heading of targets over land and sea. Along with an unsurpassed resolution even the smallest targets will be detected and tracked providing a true and confident security overview.

Product Characteristics

High Availability
Based on proven Solid-State technology, the SCANTER 1002 radar is designed for uninterrupted surface surveillance and availability – meeting the demands for 24/7 infrastructure protection.

The Radar to match your needs
The SCANTER 1002 radar is sold in two range performance variants: SCANTER 1002 with coverage range of 3 km, SCANTER 1002 Extended Range with coverage range up to 12 km.

Wide Detection in All Weather Conditions
SCANTER 1002 radars deliver uninterrupted, all-weather detection and tracking of more than 100 simultaneous tracks ranging from humans, vehicles, jet skis and boats. SCANTER 1002 is vital for reliable and precise early warning and extended surface surveillance.

Integration to T.react CIP

Combined the SCANTER 1002 with Terma's T.react CIP wide area protection solution, the SCANTER radar provides the most cost effective intelligent wide area perimeter detection solution to date, facilitating threat evaluation and behavior analysis of detected targets to maximize the time available for severity assessment, decision, and possible intervention.

Acting as the primary sensor in Terma's T.react CIP system, the SCANTER 1002 radar plays a critical role in ensuring that all detected objects that violates parts of the established safety framework are automatically analyzed, prioritized, and presented according to severity. This allows the operator to focus on things that matter whilst the system sorts the action from distraction.

The SCANTER 1002 radar along with the T.react CIP system are easy to integrate into a PSIM system with full operational overview and event handling.

For more information on T.react CIP, visit www.terma.com

Key Benefits:

- Automatic wide area threat detection and tracking
- Simultaneous handling of more than 100 threats
- Scalable from small installations to border size solutions via Terma's T.react CIP system
- Proven technology built on 60+ years of experience working in harsh environments

SCANTER 1002 Specifications	SCANTER 1002	SCANTER 1002 Extended Range
Transmission frequency	Ku-band	
Transmitted power	8 W	
Instrumented range	3 km	Up to 12 km
Detection range - walking person (1 m2, height 1.5 m)	3 km	5.5 km
Detection range - crawling person (0.5 m2, height 0.5 m)	1.6 km	1.6 km
Detection range - small vehicles (5 m2, height 1.5 m)	3 km	7.3 km
Detection range - large vehicles (10 m2, height 1.5 m)	3 km	9.2 km
Detection range - heavy vehicles (100 m2)	3 km	12 km
Detection range - fast moving target (1 m2, height 1 m)	3 km	5.3 km
Detection area	Up to 28 km^2	Up to 452 km^2
Minimum detection range	20 m	
Power consumption	130 W	
Power supply	115V-240V	
Waveform	Pulse compression	
Scanning	360° continuous rotation	
Rotation rate	15 to 45 RPM	
Angular accuracy	Average standard deviation < 0.5°	
Range accuracy	Average standard deviation <3m	Average standard deviation <3m, <6m in 12km range
Antenna elevation tilt	Adjustable	
Max. number of tracked targets (TWS)	>100	
Weight	35 kg	
Size (diameter, height)	D 500 mm, H 850 mm	
Control, tracks, and video interface	IP network	
Radar parameters	Profiled and adaptable to the operational environment	
User interface software	Windows or Linux	
Ambient temperature (operations)	-25 °C to +60 °C	
Ambient temperature (storage)	-40 °C to +70 °C	
IP protection class	IP 65	

Operating in the aerospace, defense, and security sector, Terma supports customers and partners all over the world. With more than 1,600 committed employees globally, we develop and manufacture mission-critical products and solutions that meet rigorous customer requirements.

At Terma, we believe in the premise that creating customer value is not just about strong engineering and manufacturing skills. It is also about being able to apply these skills in the context of our customers' specific needs. Only through close collaboration and dialog can we deliver a level of partnership and integration unmatched in the industry.

Our business activities, products, and systems include: command and control systems; radar systems; self-protection systems for ships and aircraft; space technology; and advanced aerostructures for the aircraft industry.

Terma has decades of hands-on know-how in supporting and maintaining mission-critical systems in some of the world's most hostile areas. Terma Support & Services offers through-life support of all our products to maximize operational availability, enhance platform lifetime, and ensure the best possible cost of ownership.

Headquartered in Aarhus, Denmark, Terma has subsidiaries and operations across Europe, in the Middle East, in Asia Pacific as well as a wholly-owned U.S. subsidiary, Terma North America Inc., headquartered in Washington D.C. and with offices in Georgia and Texas.

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