



SEPTIER

Frontier - Sea Radar



**Cellular Detection and
Positioning of Nautical Vessels**

Septier - Frontier Cellular Sea Radar

Septier Cellular Sea Radar provides nautical vessel detection and positioning by identifying and locating cellular devices aboard those vessels. This bridges the gap standard radar systems suffer from, with regards to detecting small sea vessels, favored by individuals involved in illegal or terror activities. Part of the **Septier FRONTIER** suite of solutions, the **Cellular Sea Radar** provides an additional important layer of protection from nautical threats.

Cellular Detection Of Sea Vessels

Marine and coastal surveillance radars have difficulties in detecting very small sea vessels and have therefore become popular with smugglers trying to avoid detection by coast guards. The **Septier Cellular Sea Radar** provides a solution to this problem by detecting active cell phones aboard these vessels. In addition, the system also extracts the cellular identifiers of the acquired devices providing an additional layer of information, which can be used to identify the people onboard the vessels.

Multiple Positioning Capabilities

Septier Communication has integrated its advanced location algorithms and technologies into the **Septier Cellular Sea Radar**, turning it into a powerful cellular positioning solution. Devices acquired by the system are positioned in a variety of methods and accuracies – in some cases even the GPS coordinates of the device may be extracted. The calculated position is linked to the identities of the positioned devices, so it is possible to track the vessels' location and path, even when multiple vessels are detected by the system.

Lead Information For Follow-up Actions

Once a device has been identified as suspicious or requiring further investigation, follow-up actions can be taken: A fast patrol boat can be launched to intercept the vessel; electro-optical means may be employed to get visual information concerning the vessel which may help to identify whether it poses a threat; and the information provided by the **Septier Cellular Sea Radar** (cellular identities) can be used to target future communications of the acquired device.

Septier Frontier - Sea Radar Operational And Technical Specifications

Feature	Description
Identifies Extracted	IMSI, IMEI, TMSI, IMEI-SV
Location Capabilities	Distance measurements, distance measurements intersection (requires multiple units), distance measurement intersection with line of bearing, distance measurement intersection with time-based measurements GPS extraction (for supporting devices)
Lists Definition	Support for multiple groups of subscribers, import and export included
Active Positioning	Cross technology
Targets DB	Included, import and export available
Operating Range	Varies Depending on configuration, physical layout and electromagnetic environment. Maximal range can be controlled by user
Active Positioning	Cross technology, up to 4 targets in parallel
Supported frequency bands	GSM-850, P/E-GSM-900, DCS-1800, PCS-1900 UMTS I 2100, UMTS II 1900, UMTS IV 1700, UMTS V 850, UMTS VII 900 E-UTRA I 2100, E-UTRA II 1900, E-UTRA III 1800, E-UTRA IV 1700, E-UTRA V 850, E-UTRA VII 2600, E-UTRA VIII 900, E-UTRA XX 800 5G (NSA) Note: support for additional frequency bands may be provided upon requirement
Transmission output power	Varies depending on configuration (10 mW – 100W total)
Signal Source	PLL synthesized
Power supply	90 – 230VAC / 12VDC / Battery (only for configurations that included backup battery)



ABOUT SEPTIER

Septier Communication Ltd. provides innovative, robust and cost-effective solutions and products for intelligence and Law Enforcement Agencies (LEAs), Telecom and Internet service providers. These solutions include communications interception and analysis systems, cellular location tracking infrastructure, telecom resources protection and more.

Septier is a global organization with offices and representatives worldwide.

At Septier we leverage our extensive base of deployed systems, operational knowledge and deep technological capabilities to support our customers and their needs.

For more information please visit www.septier.com



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