



FishGUARD

RADAR
SECURITY
SYSTEM



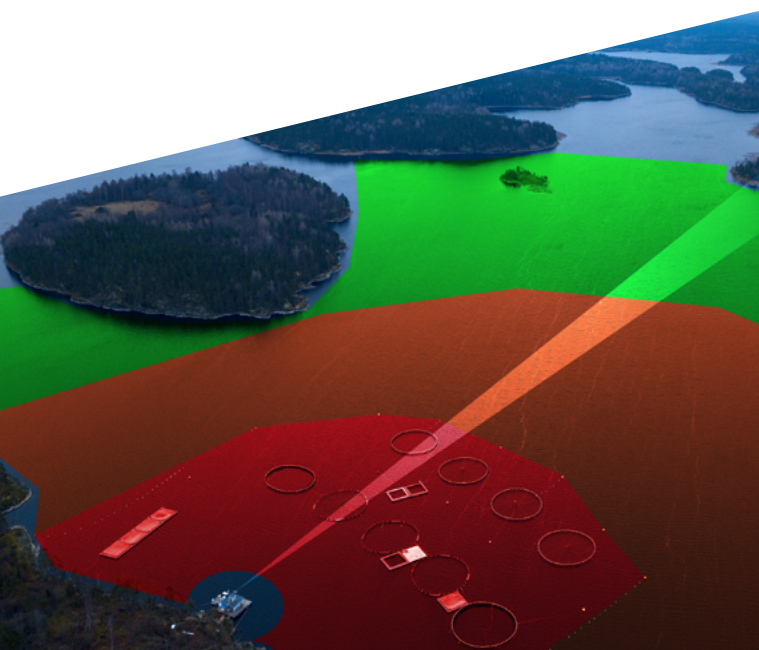
FishGUARD

RADAR SECURITY SYSTEM

FishGUARD is a radar system for remote monitoring of commercial fish farms. The system is able to control an area of more than 15 km², simultaneously recognizing multiple targets under any conditions.

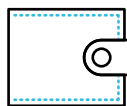
How FishGUARD works

The basic purpose of the FishGUARD is to detect intruders before they enter the facility. When the system defines unauthorized entry, it informs an operator by aural alarm about the proximity of the hazard. For visual confirmation the system automatically directs the thermal and video equipment to the target for its identification. After receiving the image, the operator makes a decision on the localization of the object (to dispatch a rapid response team or use additional tools such as guided searchlight, audible warning systems, etc.).



EFFICIENCY

The system is fully compatible with thermal cameras, videocameras and notification systems.



AFFORDABILITY

The cost of the system doesn't exceed 5% of the cost of one fish cage.



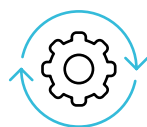
ALL-WEATHER CAPABILITY

The physical properties of radio waves provide 24/7 monitoring despite all the weather conditions.



SAFETY

The radar is absolutely safe for people and the environment because of low radiation (up to 1 W) that equals two smartphones.



SIMPLICITY

The system management is automatic and eliminates human errors.



EMBEDDED INTELLIGENCE

FishGUARD records and plays back all input data. This allows to conduct a qualitative assessment of the situation and adjust threat scenarios.

Basic supply set

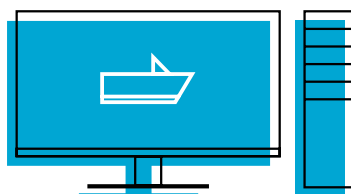
Radar sensor (SKAT)



Communication unit



Operator's workstation
with special software



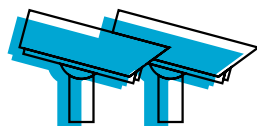
up to **3 500 m**
hovercraft
detection range *

up to **2 200 m**
boat / snowmobile
detection range *

Options

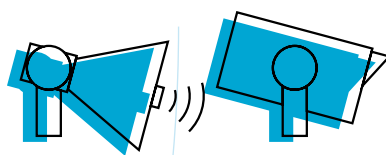
Thermal and optical imaging
equipment

*(various types of video cameras
and thermal cameras for target visual-
ization and identification)*

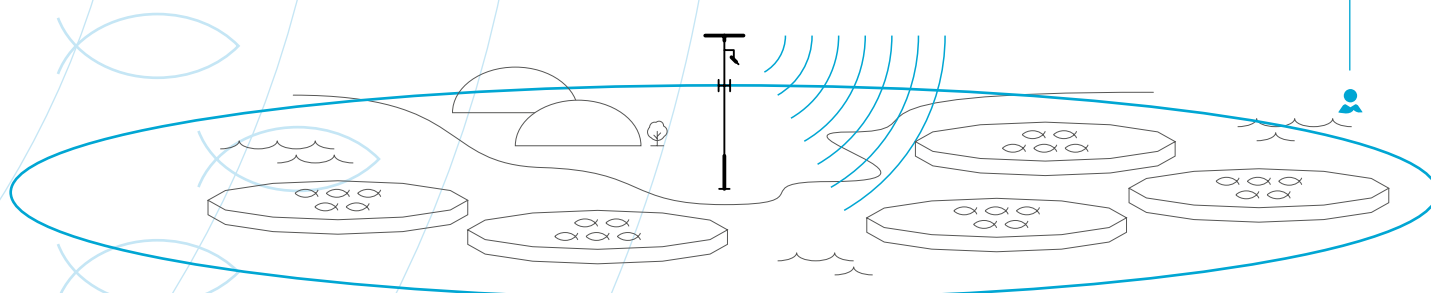


Additional equipment

*(searchlights, speakers and signaling
lights to warn the intruders about pos-
sible response actions)*



up to **500 m**
swimmer
detection range *



* The actual detection range may vary depending on the specifics of the installation site and surrounding objects.

Specifications

FishGUARD Radar security system

Security system	FishGUARD Lite	FishGUARD Standard	FishGUARD Active
Maximum detection range, m *			
a hovercraft	1 500	2 000	3 500
a boat/snowmobile	1 000	1 300	2 200
a swimmer	300	350	500
Power consumption without options, W, max.	600	600	1000
AC power supply, V	220	220	220

* The actual detection range may vary depending on the specifics of the installation site and surrounding objects.

SKAT series radar sensors

Sensor type	SKAT Lite	SKAT Standard	SKAT Active
Operation frequency, MHz	9 400	9 400	9 400
Type of transmit/receive module	solid-state	solid-state	solid-state
Transmitter output power, W, max.	1	1	1
Range resolution, m, max.	3	3	3
Beam width in the vertical plane, °	30	30	30
Beam width in the horizontal plane, °	2.3	1	1
Frequency deviation, MHz, max.	96	96	96
Scan rate, rpm	24	24	24
Communication interface	Ethernet 100Base-T	Ethernet 100Base-T	Ethernet 100Base-T
Protection level	IP56	IP56	IP56
Operating temperature range, °C	-40...+55	-40...+55	-40...+55
Dimensions, cm	37 × 40 × 100	37 × 40 × 200	36 × 44 × 200
Weight, kg	25.2	29.2	29.5

Communication unit

Protection level	IP55
Operating temperature range, °C	0...+55
Dimensions, cm	40 × 41 × 22
Weight, kg	8

GET YOUR CUSTOM
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