



SMARTAC

Technologies to enhance mission superiority
for the modern warfighter





GAIN THE TACTICAL EDGE WITH ENHANCED MISSION SUPERIORITY.

The overall objective in an area of operations is to establish command & control and win battles whilst minimizing losses. Therefore, enhanced Mission Superiority is the key technological force multiplier that leads to mission success.

Understanding the operating environment

Reliable intel needs to be available on persons, objects, static or moving, and installations before a decision on actions can be taken. All possible actions need also to be evaluated within the legal framework and ROEs. This will only be achieved when all sensor information is extremely precise and target location is highly accurate.

Observe - Orient - Decide - Act

When all data of the observed situation is gathered and evaluated, a decision can be taken, based on solid intelligence and analysis. Only then an operation will lead to success as planned by guiding the effectors to the defined targets.

Collaborate across different domains

It is crucial that all deployed personnel have sensors available that match their requirements best. This is why Safran offers a wide range of handheld optronic and observation devices. Whether your duties are in Close Air Support, Artillery, Dismounted Operations or Sniping: Our products combine best-in-class technologies for all operational needs.

Safran: solutions based on competence

For decades, we have been at the forefront of our industry. Our customers benefit from world-leading competencies in rangefinding and tracking, geo positioning, metrological image processing, military surveying and customized software development.



SMARTAC – WE HAVE YOUR BACK.

Listening to our customers and to draw the right conclusions is what we do. Questioning our own solutions on a regular basis, being one step ahead, pushing boundaries to the technically feasible limits, that's what we understand by being fast and flexible.

Technologies that drive you forward

SMARTAC is the heart of our technology landscape that allows you to successfully enhance mission superiority with our portable optronic devices and target location systems. The combination of state-of-the-art technology solutions gives you the advantage that is decisive in the area of operation.

SMARTAC dimensions for enhanced mission superiority

- Situational Awareness
- Target Location
- GNSS Denied Areas
- Information Fusion
- Moving Targets

SMARTAC technologies allow you to make your missions safer, minimize collateral damage, gain better intelligence, synthesize information and precisely locate targets.

Software as a key element to guarantee future readiness

We constantly develop our solutions further, following a turnkey approach that offers you total peace of mind. A key element of SMARTAC is the focus on enhanced software capabilities, which open up new possibilities in accuracy, speed, communication and information.

HOW SMARTAC MULTIPLIES YOUR FORCE IN THE AREA OF OPERATIONS



DISMOUNTED TEAM A

Situational awareness

- Thermal imaging
- Target handoff with integrated pointer and See-Spot capabilities
- Mapping option

Solutions:

- MOSKITO TI/TI+
- CTAM target acquisition marker

CLOSE AIR SUPPORT

GNSS denied / spoofing areas

- True Northfinding system

Target location

- TLE CAT I (CE90) up to 5km

Solutions:

- JIM Compact or MOSKITO TI/TI+ with STERNA TNF
- SLAM D laser target designator as option

SNIPING TEAM

Situational awareness

- Long range detection day and night

Moving target

- Measure and calculate distance and speed

Optimized SWaP design

Connectivity to ballistic calculators

Solutions:

- JIM Compact, MOSKITO TI/TI+ or PLRF 25C
- COSMO SWIR-monocular

INDIRECT FIRES

Target location

- Highly accurate azimuth

GNSS denied / Spoofing areas

- Surveying methods with reference points

Solutions:

- JIM Compact, MOSKITO TI/TI+, PLRF 25C or VECTOR with STERNA TNF
- STERNA GLPS for gun laying

ON SCENE COMMANDER

Situational awareness

- Thermal imaging and lowlight channel
- Fast GNSS positioning
- BMS connectivity

Target location

- DMC and LRF

Information Fusion

- Positive ID during day and night
- See-Spot functionality

Solutions:

- JIM Compact

DISMOUNTED TEAM B

Situational awareness

- Information fusion
- Signature management

Connectivity

- Connectivity to ballistic calculators
- ATAK, BMS

Solutions:

- MOSKITO TI/TI+
- PLRF 25C
- ECOTI for thermal capabilities
- ECOSI for target engagement

Engineering know-how with direct impact on your mission. At Safran we are proud that our engineering teams have one objective: to put themselves in your shoes as the operator of our solutions and take your perspective. This leads to world-best SWaP engineering capabilities.



**Intuitive handling -
HMI Design**

You can always rely on the most intuitive design when using our equipment. This is of greatest importance, when things get rough. Then there is no time to think twice how a certain function can be found and which information can be communicated: it just needs to be intuitive, even without training every other day.

**Outperform -
Optimized Power Consumption**

Our engineers dig deep into the field of energy optimization. Low energy consumption of the integrated components allows for much longer runtime and less need to change batteries. On a mission, you don't want to fill your bags with batteries, but with relevant equipment.

MIL-Spec design

All devices and build in components are specified according to MIL-STD 810 and MIL-STD 461. We test our devices to the limits and they will even withstand harshest theconditions and use beyond the standards.

SWaP in focus -

Miniaturization of sensors

Developing smaller sensors, nevertheless always more powerful, is one of our specialties. Smaller sensors lead to more compact, lighter devices. Lighter devices in return allow better fatigue-free observation tasks and free weight that can be used for other important equipment.

Stay connected -

Devices with best connectivity options

Our SMARTAC solutions lead the way with the latest connectivity options like Wifi, Bluetooth 5.1, Ethernet, Gigabit Ethernet. Transfer images or stream video in real time. Connect to BMS/FCC, ATAK and ballistic solvers like Kestrel and Garmin or remote control a device.



SOLUTIONS POWERED BY SMARTAC



JIM Compact



MOSKITO TI/TI+



STERNA TNF



PLRF 25C



COSMO



CTAM



ECOTI and ECOSI



SLAM D

SITUATIONAL AWARENESS



- Intuitive use:** Easy handling of devices / Only relevant data displayed on the HMI
- GNSS positioning:** Fast and automated assessment of own and target position
- Signature management:** Reduce likelihood of being detected due to small laser beam divergence and the used laser spectrum
- Long range detection:** Early detection without being seen during day or night / Up to 10 km on NATO targets
- Intelligent algorithms:** Enable highly accurate target location measurements based on elaborate interaction of Laser Rangefinder and Digital Magnetic Compass
- Mapping:** Position and visualize POIs on digital maps in the device / Store and share POIs
- Day and night vision:** Thermal imaging with cooled and uncooled tubes / High-performance lowlight channels
- BMS connect:** Ready to connect to most BMS / Share images, video streams, POIs and target location data

INFORMATION FUSION



- Positive ID:** Fast detection and positive ID even during night missions / Fusion of thermal and lowlight sensors
- POI integration:** Augmented reality view of the area / Points of interest are fused virtually into a live image
- Picture-in-Picture:** Always eyes on target / Virtual information is added on display / No blocking of the current live view
- Mapping:** Digital maps are shown as picture-in-picture / Visualization of target data and location
- See-Spot:** Easy target handoff / Visualization of laser pointer or designator spots during night and day
- Fireweaver integration:** Augmented reality integration / Speed up the sensor-to-effector loop / Avoid collateral damage

GNSS DENIED AREAS



- Survey methods:** No magnetic north needed / North finding and positioning done with known reference points
- Mapping:** Use digital maps only to mark POIs / Reliably handoff targets to other units / Get own position without GNSS
- True North Finding:** Our True North Finder works reliably in any environmental conditions and landscapes

MOVING TARGET



- Measurement:** Precisely measure distance, direction and speed of moving targets
- Scanning mode:** Accurate information on azimuth and distance / High laser frequency with constant measurements
- Fast CPUs:** Short start-up time at any temperature / Rapid measurements in all viewing modes
- Fiber laser:** World leading laser technology with low energy consumption
- Coaxial NIR pointers:** Keep accurate track of objects / 840 nm laser pointer and 1550 nm laser rangefinder merged into the same beam

TARGET LOCATION



- True North Finding:** CAT I capability with gyro-based northfinder and our payloads
- Digital Magnetic Compass:** Best-in-class digital magnetic compasses with heading accuracy of 4.4 mil
- Mapping:** Avoid collateral damage / Check plausability of target information / Correct target location to increase accuracy

OUTSTANDING SERVICE PROMISES THAT SUPPORT YOUR OBJECTIVES



BEFORE MISSION

The preparation of a mission starts with initial training of the operators and continues with maintaining the devices on a regular basis.

- We promise to offer the best training so your troops undergo excellent preparation
- We promise that with our devices you can rely on regular upgrades, so that they keep the pace with your changing mission requirements, e.g. with our different mission packages
- We promise to offer service and support options that match your needs – many of them are accessible for you on our Customer Portal

DURING MISSION

Men and materials are deployed in very demanding environments and are exposed to all kinds of extremes – the operational capability of our devices needs to be 100% assured.

- We promise that our devices are as rugged and reliable, and withstand highest stress
- We promise that our devices are engineered with a plug and play approach, making their use intuitive even under stressful situations
- We promise 24 h access to Support via our Customer Portal, e.g. to consult manuals, ask for troubleshooting or reach out to customer support

AFTER MISSION

After a mission devices need to be checked, cleaned and sent in for service if required.

- We promise to offer state-of-the-art service capabilities with short turn-around times
- We promise upgrades anytime and anywhere with the latest software version or additional software mission packages as downloads



POWERED BY TRUST

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