

# SANmilitary Presentation

## July 2015

[www.sanmilitary.com](http://www.sanmilitary.com) [Info@sanmilitary.com](mailto:Info@sanmilitary.com)  
Tel. +4528268417 & +4550127757

# SANmilitary Area of Operation

## Main areas of operation

- ❖ Defence Sector
- ❖ Sales and Marketing
- ❖ Project Management/Support
- ❖ Technical Support
- ❖ After sales support
- ❖ Logistic support

## Main areas of expertise and marketing

- ❖ Armoured vehicles
- ❖ Subsystems for Land, Air & Maritime
- ❖ Surveillance & security systems
- ❖ Force Protection
- ❖ Sensor Systems
- ❖ Air Reconnaissance Targeting Systems
- ❖ Command and Control systems
- ❖ Maintenance, training courses and documentation



# SANmilitary contribution to SMART DEFENCE

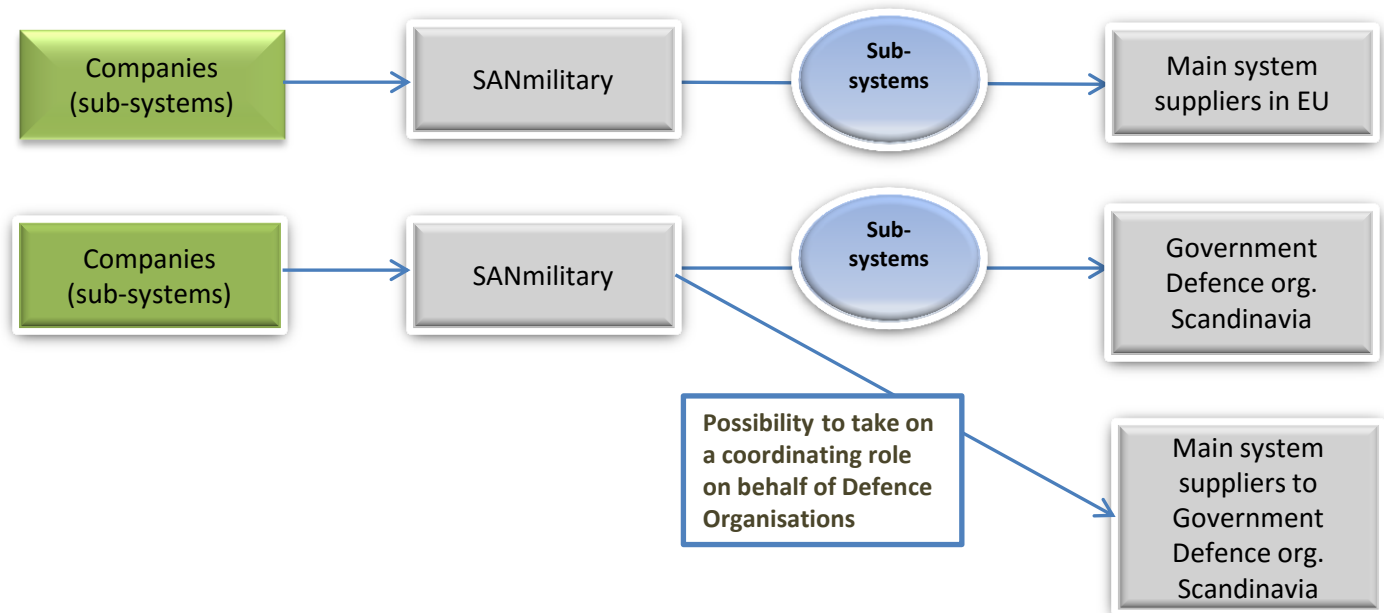
## Smart Defence initiative:

❖ We take the responsibility of integrating our sub-systems to whatever main system the costumer might have

### This ensures for the costumer:

- Limited casework for the costumer & use of resources
- Delivery of complete system in accordance with, documentation spare parts & other activities relating to the complete system

## Subsystems



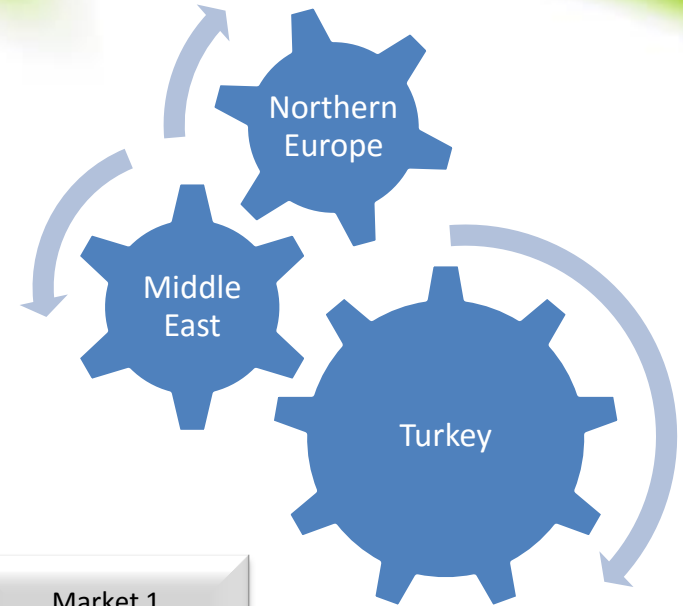
# Overall marketing Strategy

## Market strength

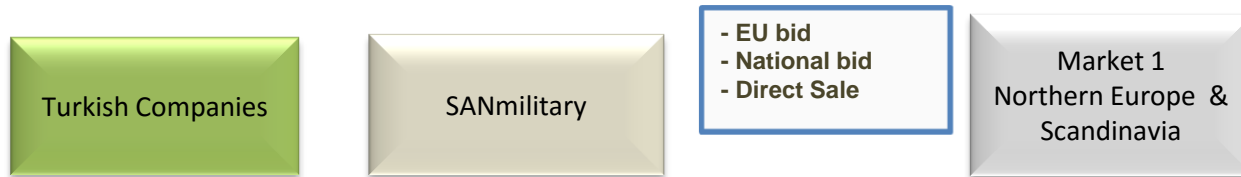
- Area 1 - Strong and knowledge in Denmark, Norway, Sweden, Finland & Germany
- Area 2 - Strong and knowledge in Turkey, Middle East (through contacts in Turkey)

## Strategy for marketing:

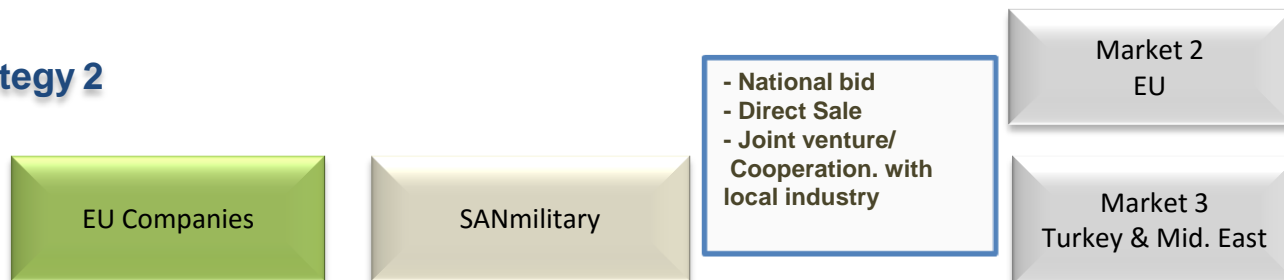
- ❖ Our main partners are located in Turkey
- ❖ Our primary market is Northern Europe & Scandinavia (& EU)
- ❖ Our secondary partners are located Northern Europe & Scandinavia
- ❖ Our secondary market is Turkey & Middle East
- ❖ We work both ways and have strong knowledge & presence in both market sectors



## Strategy 1



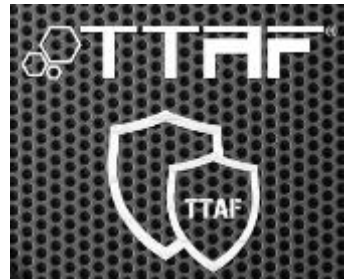
## Strategy 2





# SANmilitary Area of Operation

**Our Partners & Companies**  
**we are agents for:**



# SANmilitary Product portfolio Products

- **Vehicles.** Armoured Vehicles (4x4, 6x6), Riot Control Vehicles and Commercial Trucks
- **Subsystems & Software.** Variety of control box & software solutions within Electronic Systems, Image Processing, Radar & EW, Simulation, Satellite Technologies
- **Security & Surveillance Systems.** Border surveillance systems, Vehicular Reconnaissance & Surveillance System Solutions Thermal imagers & Day cameras
- **Communications systems.** MANPACK Multiband Multimode Radio, VEHICULAR / BASE STATION Multiband Multimode Radio, HANDHELD Multiband Multimode Radio
- **Radar Systems**
- **Weapon Systems.** Radars, Electro optical cameras, Surveillance Systems, Weapons Systems & Leopard II upgrade
- **Mine Protected Seats & weapon rails**
- **Fire Suppression System**
- **High level Leopard II & M113 upgrade**
- **Cables.** Aerospace Cable Assemblies, Wire Harnesses, Fibre Optic,, Cable Assemblies, RF/ BNC Cable Assemblies & Electro-Mechanical Assemblies
- **Defence systems,** Fire Control System, Air Data links, Power Distribution box, Live Weapon Simulation & Railroad Systems
- **Zeppelin/Balloon Based – Surveillance & Electro Optic Systems**
- **Add-On Armour.** Armour for any type of Vehicles (Armoured Vehicles & Helicopters) from composite materiel, Personal Protection (Helmet & Body Armour)
- **Shelter System.** Transportable Shelter systems
- **Mobile Field Hospital**
- **Control Systems.** Intervalometer, control unit, remote control unit, control navigation system
- **Camouflage Systems.** Multispectral camo. Net, Mobile camo system, shelter camo. System
- **UAV (Unmanned Aerial Vehicle)**
- **High quality military & security boots**
- **Man-Borne ECM**

[www.sanmilitary.com](http://www.sanmilitary.com)  
Info@sanmilitary.com Tel.  
+4528268417 & +4550127757

# SANmilitary Product portfolio

## Surveillance Systems

### Electro Optic Systems

- \* Laser Range Finder and Designator,
- \* Multi Pulse Laser Range Finder (MPLRF) designed to provide target range data to anti-aircraft gun and missile systems. With its capabilities of 20 km measurement range
- \* Third Generation Night Vision Equipment,

### Thermal imagers both for land based applications and airborne platforms.

- \* Hand-Held Thermal Imager
- \* Thermal Weapon Sight
- \* BOA Thermal Weapon Sight, providing situational awareness, enables the user to detect threats in the battlefield
- \* PYTHON Thermal Weapon Sights, an innovative design, provides high performance thermal image. Optimized field of view enables user to perform threat detection extensively beyond the weapon's effective range

### Systems

- \* Hand-Held Integrated Electro-Optical Sensor System
- \* SCOUT integrated electro-optical sensor system incorporating Thermal Camera, Laser Range Finder, Digital Magnetic Compass, GPS Receiver, Laser Pointer.
- \* FALCONEYE Electro-Optical Sensor System which comprises an advanced Thermal Imaging System and a high performance Day TV Sensor. Discrimination of threats, by using detection, recognition and identification criteria, is the major function attained by this surveillance systems. Eagle eye: is an infrared fire control sighting system which provides the marksman and commander with target detection, recognition and firing ability even the platform is on the move under adverse battlefield conditions such as dust, smoke, mist, fire and camouflage.



# SANmilitary Product portfolio

## Surveillance Systems

### Electro Optic Sensor System (ATS-60)

#### Features

- \* Multi-Sensor Capability
- \* High Resolution Cooled Thermal Camera
- \* Continuous Zoom Lens (CCD and Thermal)
- \* Eye-Safe Laser Range Finder
- \* Compact, Rugged, Military Hardened
- \* Integrated GPS and DMC (optional)
- \* Freezing Capability (Thermal)
- \* Polarity Change (Thermal)
- \* Automatic Contrast and Brightness Adjustment (Day-TV/Thermal)
- \* Manuel Contrast and Brightness Adjustment (Thermal)
- \* Focus Adjustment
- \* Reticle Brightness Adjustment
- \* Target Range Measurement Capability
- \* Laser Reflection Selection
- \* RS-422 Communication Interface
- \* Compliant to EMI/EMC according to MILSTD-461E Table-V
- \* External Software Update

#### Technical Specifications:

##### Thermal Camera

- \* 3 Preset Field of Views
  - \* Narrow FOV : 20X1.6o (±%10)
  - \* Medium FOV : 60X4.8o (±%10)
  - \* Wide FOV : 16.80X13.5o (±%10)
- \* Continuous Zoom: from WFOV to NFOV
- \* Digital Zoom : x2
- \* Detector Type : Cooled, 3-5  $\mu$ m,
- \* Detector Format : 640X512
- \* Cool Down Time : Less than 7 minutes

##### Day TV camera

- \* 3 Preset Field of Views:
  - \* Wide FOV : 16.80X12.6o (±%10)
  - \* Middle FOV: 60X4.5o (±%10)
  - \* Narrow FOV: 20X1.5o (±%10)
- \* Continuous Zoom: from NFOV to WFOV
- \* Digital Zoom : Continuous to 12X
- \* Sensor type : .” Color CCD



#### Application

- \* Fire Control
- \* Armoured vehicles
- \* Remote Weapon Stations
- \* Main Battle Tanks
- \* Target Acquisition

#### Environmental Conditions

- \* Operating Temperature : -40°C to +55°C
- \* Storage Temperature : -40°C to +65°C
- \* Standard : MIL-STD-810 G

#### Optional Accessories

- \* Control and Display Unit (optional)

##### Laser Range Finder

- \* Type : Class 1, eye-safe laser
- \* Wavelength: 1.54  $\mu$ m
- \* Range : From 100m to 20000m
- \* (changes according to target and environmental conditions)
- \* Accuracy:  $\pm$  5m

##### Physical

- \* Dimensions : 260mm x 225mm x 131mm
- \* Weight : < 6.5 kg



# SANmilitary Product portfolio

## Surveillance Systems

### Electro Optic Sensor System (ATS-40)

#### Features

- \* Freezing Capability (Thermal)
- \* Polarity Change (Thermal)
- \* Automatic Contrast and Brightness Adjustment (Day-TV/Thermal)
- \* Manuel Contrast and Brightness Adjustment (Thermal)
- \* Focus Adjustment
- \* Reticle Brightness Adjustment
- \* Target Range Measurement Capability
- \* Laser Reflection Selection
- \* External Software Update

#### Technical Specifications

##### Thermal Camera

- \* Operating Band : 8-12  $\mu\text{m}$
- \* Detector :Uncooled Type
- \* Detector Format : 384x288 or 640x480
- \* Field of View (HxV) :
- \* 384x288 version
  - \* Narrow : 4°x3.2°
  - \* Wide : 12°x8°
- \* 640x480 version
  - \* Narrow : 4.6°x3.5°
  - \* Wide : 13.75°x10.3°
- \* Video Output : CCIR
- \* Electrical Interface: RS422
- \* Input Voltage : 12V $\pm$ 0.5V
- \* Weight : <3.5kg
- \* Focus Distance :
  - \* Narrow : 50m –  $\infty$
  - \* Wide : 5m -  $\infty$

##### CCD Camera

- \* Field of View (H):
- \* Narrow FOV: 1,7°
- \* Wide FOV: 57,8°
- \* Continuous Zoom from NFOV to WFOV
- \* Video Output : PAL
- \* x12 Electronic Zoom
- \* x36 Optical Zoom

##### Laser Range Finder

- \* Laser Type : Eye Safe Laser Class 1
- \* Range : 50m-5500m
- \* Resolution :  $\pm$ 5 m

##### Power Requirement

- \* Input Voltage: 18V-33V
- \* Nominal  $\leq$  30W
- \* Maximum  $\leq$  100W
- \* Compliant with MIL-STD-1275D
- \* Reverse Input Current Protection

##### Communication Interface

- \* RS-422



#### Environmental Conditions

- \* Operating Temperature : -40°C to +55°C
- \* Storage Temperature : -40°C to +65°C
- \* Standard : MIL-STD-810 G

# SANmilitary Product portfolio

## Surveillance Systems

### Ground Surveillance Radar

Ground Surveillance Radar is designed and developed for detecting, classifying and tracking Targets moving on or close to ground or sea and artillery fire adjustment purposes at day and night in all weather conditions.

#### Features

- \* Border Surveillance
- \* Coastal Surveillance
- \* Battlefield Surveillance
- \* Mobile Applications
- \* Fully Solid State
- \* Advanced Digital Signal Processing (DSP)

#### Techniques

- \* Ku-band Pulsed Doppler Radar with Pulse

#### Compression

- \* Track-While-Scan (TWS) in Surveillance Mode
- \* Multi-target Tracking
- \* Automatic Track Classification
- \* Low Output Power for Low Probability of

#### Intercept (LPI)

- \* B-Scope or PPI Display,
- \* Digital Map Overlay,
- \* Remote Control,
- \* High Accuracy and Resolution,
- \* PC-Based Hand-Held Operator Unit,
- \* Selectable Antenna Rotation Speed,
- \* 360° Continuous or Sector Scanning,
- \* Adjustable Sector Width,
- \* Selectable Range Scales,
- \* User Defined Alarm and Friendly Zone Selection,
- \* Built In Test (BITE)

#### Operation Modes

- \* Surveillance Mode and Multi – Target Tracking Mode
- \* Acquisition and Classification Mode
- \* Fire Adjustment Mode
- \* Clutter Map Mode
- \* Track-While-Scan (TWS)

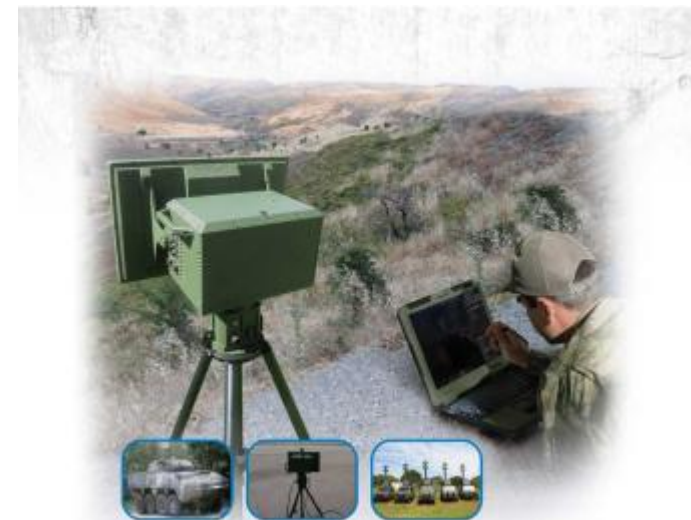
#### System Units and Accessories

- \* Main Units
- \* Sensor Unit
- \* Antenna Unit
- \* Control Display Unit
- \* Accessories
- \* Tripod
- \* Headphones
- \* Optical Sight for Calibration
- \* Peripheral Units
- \* AC / DC Converter
- \* Battery Pack
- \* Re-usable Storage Container



#### Technical Specifications

- \* Operating Frequency : Ku-Band
- \* Instrumented Range : 40 km
- \* Pedestrian Detection Range : Up to 12km
- \* Selectable Azimuth Scan Width : 10° -360°
- \* Elevation Positioning :  $\pm 24^\circ$
- \* Storage Temperature : - 40°C to + 70°C,
- \* Operating Temperature : - 32°C to + 50°C,
- \* Compliance with MIL-STD-810G and MIL-STD-461F



# SANmilitary Product portfolio

## Surveillance Systems

### Thermal Camera Unit

#### Features

- \* LWIR Uncooled Thermal Camera
- \* Dual-FOV
- \* 640x480 Detector Option
- \* Light and Compact Structure
- \* Rugged
- \* X2 Electronic Zoom
- \* Freezing Capability
- \* Polarity Change
- \* Automatic Contrast and Brightness Adjustment
- \* Manuel Contrast and Brightness Adjustment
- \* Motorized Focus Adjustment
- \* Automatic Image Processing Algorithms
- \* Reticle Adjustment
- \* External Software Update



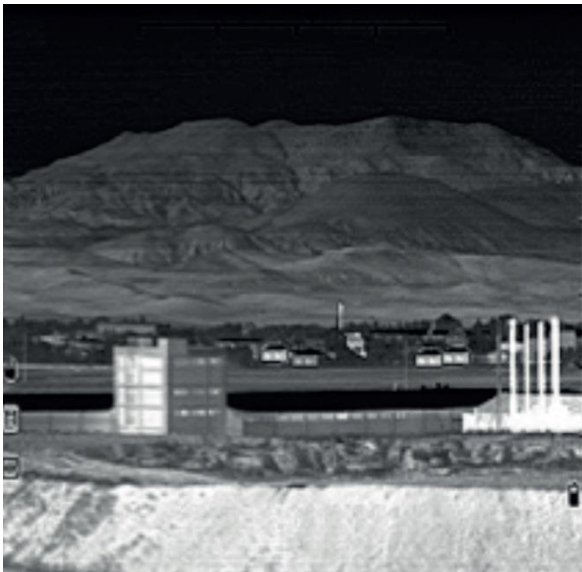
#### Technical Specifications

- \* Operating Band : 8-12  $\mu\text{m}$
- \* Detector :Uncooled Type
- \* Detector Format : 384x288 or 640x480
- \* Field of View (HxV) :
  - \* 384x288 version
    - \* Narrow : 4°x3.2°
    - \* Wide : 12°x8°
  - \* 640x480 version
    - \* Narrow : 4.6°x3.5°
    - \* Wide : 13.75°x10.3°
- \* Video Output : CCIR
- \* Electrical Interface: RS422
- \* Input Voltage : 12V $\pm$ 0.5V
- \* Weight : <3.5kg
- \* Focus Distance :
  - \* Narrow : 50m –  $\infty$
  - \* Wide : 5m -  $\infty$



#### Environmental Conditions

- \* Operating Temperature : -40°C to +55°C
- \* Storage Temperature : -40°C to +65°C
- \* Standard : MIL-STD-810 G



# SANmilitary Product portfolio

## Surveillance Systems

### Vehicular Reconnaissance & Surveillance System Solutions

#### Stabilized E/O and Radar System

Stabilized E/O and Radar System provides the system target detection/recognition, target classification, target locating, multi / single target traction and situational awareness. Stabilized E/O and Radar System primarily designed for use on wheeled or tracked armored vehicles providing effective reconnaissance, surveillance and intrusion detection capabilities at day and night. Stabilized E/O and Radar System is ready to operate under harsh battlefield conditions with advanced stabilization and motion detection algorithms..



#### Modules:

##### Ground Surveillance Radar

Ground Surveillance Radar detects, tracks and classifies moving targets on the ground, as well as low flying airborne targets. The Ground Surveillance Radar is also used for artillery fire adjustment, providing feedback on the fall of shot with respect to the intended target. The compact and lightweight system built on solid-state design, employs a versatile interface that allows for convenient integration on vehicles and elevated masts or towers. The radar may also be operated as a stand-alone system on its tripod.



##### E/O Unit

E/O Unit is composed of Thermal Camera, CCD Camera and Laser Range Finder and it provides effective target detection under severe weather and harsh battlefield conditions. E/O Unit's Thermal Camera includes cooled thermal imager in order to satisfy the higher range observation requirements.



##### Mast

HSY, Radar, E/O unit, INS (optional) package can be mounted on a motor driven mast.





# SANmilitary Product portfolio

## Surveillance Systems

### Vehicular Reconnaissance & Surveillance System Solutions

#### Stabilized E/O and Radar System

##### Modules:

##### High Accuracy Stabilized Gimbal (HSY) and Leveling Unit

HSY is a high accuracy direction and stabilization unit that radar, E/O unit and INS (optional) are installed on. HSY includes hardware and software for main functions such as automatic target detection/tracking, mechanical and electronic image stabilization, mechanical and electronic image leveling, video streaming. Leveling unit is a mechanism that levels the components/units (E/O Unit, Radar, INS, HSY) which are fixed on it up to ten degrees.



With their modular structure, The Reconnaissance and Surveillance system solutions can be adapted to any type of Armored Vehicle in accordance with the requirements of the end user.

##### Displays and Joystick Control Units

ASELSAN provides Joystick Control Unit for remote control of the Radar and E/O Units and LGU 120 12" LCD Display Unit that is designed and ruggedized for military applications. LGU 120 is used as display unit in many communication, control and gun systems with its special mechanical structure, wide operating temperature range, MIL-STD-810G compliant shock and vibration specifications and EMI protection features.



# SANmilitary Product portfolio

## Surveillance Systems

### Aerostat Unmanned Air Vehicle

Aerostat system is a tethered unmanned air vehicle. Size can be modified according to user's minimum altitude and payload capacity requirements. The system, can carry out missions that endure for weeks with lighter than air technology. There are alternatives for tether systems which can be

used for data and power transmission. There are different models available which has the capacity to carry payloads of 30+ kg payload and operate at 300 – 1000m altitude (AGL). It is an easy to use system and has low operation cost. With the winch system it has vertical take off and landing (VTOL) capability. The system has portable and stationary ground control station solutions which include mooring station, Winch system, command and control unit. With the modular gondola design, it can operate with multi-purpose payloads (EO, LIDAR, Multi Spectral Camera, Communication Relay, Thermal Camera Radar)

#### Features

- \* 1+ week endurance
- \* 300 – 1000m altitude (AGL)
- \* 30+ kg payload capacity
- \* Low operation cost
- \* Vertical take off and landing with winch system
- \* Modular gondola design for different payload capability

#### Areas Of Use

- \* Surveillance
- \* Mobile Communications
- \* Precision Agriculture
- \* Disaster and Emergency Management
- \* Airborne Early Warning
- \* TV and Radio Broadcasting
- \* Maritime and Road Traffic Management
- \* Critical Infrastructure Security



# SANmilitary Product portfolio

## Surveillance Systems

### Aerostat System

Compact aerostat system which decreases logistic needs with its spherical hull shape. It has 35 m3 volume which leads to maximum payload capacity of 20+ kg at 0°C.

The aerostat system can reach 500m altitude from 1500m MSL.

It can carry out missions that endure for 1 week without any helium addition. It is an easy to use system and has low operation cost . With its modular gondola design, it can operate with multipurpose payloads (EO, LIDAR, Multi Spectral Camera, Communication Relay, Thermal Camera Radar).

#### Features

- \* 1+ week endurance
- \* 500m altitude (AGL)
- \* 20+ kg payload capacity
- \* Low operation cost
- \* Vertical take off and landing with winch system
- \* Modular gondola design for different payload capability
- \* Has portable, and compact ground control station solution which can be operated by 2 person.
- \* Ground control station contains tether, helium storage tubes, landing connections, energy system , winch system that is used for vertical take off and landing (VTOL).

#### Areas Of Use

- \* Surveillance
- \* Mobile Communications
- \* Precision Agriculture
- \* Disaster and Emergency Management
- \* Airborne Early Warning
- \* TV and Radio Broadcasting
- \* Maritime and Road Traffic Management
- \* Critical Infrastructure Security

[www.sanmilitary.com](http://www.sanmilitary.com)  
Info@sanmilitary.com Tel.  
+4528268417 & +4550127757



# SANmilitary Product portfolio

## Surveillance Systems

### Solar Powered, Unmanned Airship

system can carry out long missions of weeks with the help of solar power and its lighter than air (LTA) technology.

With its zero-emission propeller system, it operates silent and environment friendly. Portable, mobile and stationary ground control solutions are available.

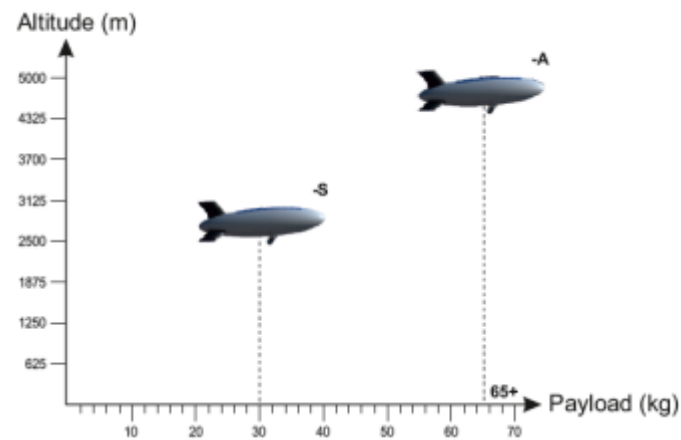
With the modular gondola design, it can operate with different payloads. (EO, LIDAR, Multi Spectral Camera, Communication Relay, Thermal Camera, Radar)

#### Features

- \* Solar Powered
- \* Autonomous Navigation
- \* Vertical Take Off And Landing
- \* 1+ Week Mission Time
- \* MTOW: <150 kg
- \* Payload Capacity: 30kg, 65+ kg
- \* Wind Resistance: 40 km/hour
- \* Maximum Operational Altitude (AMSL): 3000m, 5000m

#### Areas Of Use

- \* Surveillance
- \* Mobile Communications
- \* TV and Radio Broadcasting
- \* Disaster and Emergency Management
- \* Search and Rescue
- \* Airborne Early Warning
- \* 3D Mapping
- \* Precision Agriculture
- \* Maritime and Road Traffic Management
- \* Critical Infrastructure Security



[www.sanmilitary.com](http://www.sanmilitary.com)  
Info@sanmilitary.com Tel.  
+4528268417 & +4550127757



# SANmilitary Product portfolio

## Communication Systems

### HANDHELD Multiband Multimode Radio

#### Stabilized E/O and Radar System

##### Features:

- \* Multiband Multimode
- \* AM/FM/QPSK
- \* 5W Power Output
- \* Software Programmable Architecture
- \* Easy Man Machine Interface
- \* Built-in-Test (BITE)
- \* Remote Control Interface
- \* Emergency Erase
- \* Full duplex voice and data
- \* Simultaneous voice and data
- \* Advanced Electronic Protection Measure (EPM)

##### Techniques:

- \* Frequency Hopping (full band 30-512 MHz)
- \* Direct Sequence Spread Spectrum (DSSS)
- \* High data rate up to 64 kbps
- \* IP packet data service (variable 64 kbps full-duplex)
- \* ITU-T V.24/V.28 and Ethernet interface
- \* 14.4V Li-Ion (Rechargeable) Battery
- \* 1300 preset channels



Microtelephone



Earphone/Microphone Set



Wideband Antenna / Long Antenna



Solar Battery Charger



# SANmilitary Product portfolio

## Communication Systems

### MANPACK Multiband Multimode Radio

#### Features:

- \* Multiband Radio: 30-512 MHz Transceiver (V/UHF)
- \* AM/FM/QPSK
- \* Software Programmable Architecture
- \* Remote Control Interface
- \* Emergency Erase
- \* Full duplex voice and data
- \* Simultaneous voice and data
- \* Advanced Electronic Protection Measure (EPM)

#### Techniques:

- \* Frequency Hopping (full band 30-512 MHz)
- \* Direct Sequence Spread Spectrum (DSSS)
- \* High data rate up to 64 kbps
- \* Easy Man Machine Interface
- \* 10W Power Output
- \* Supports 25 kHz, 12.5 kHz and 8.33 kHz Channel Spacing
- \* Reliable Ad-Hoc Radio Networking
- \* Frequency hopping net scan (Up to 3 nets)
- \* Built-in-Test (BITE)
- \* Tactical Internet
- \* Li-Ion rechargeable Battery
- \* External GPS Connection



Manpack Mounting Kit

Wideband Antenna

Battery Block / Battery Charger

Handset



# SANmilitary Product portfolio

## Communication Systems

### VEHICULAR / BASE STATION Multiband Multimode Radio

#### Features:

- \* Multiband Radio: 30-512 MHz Transceiver (V/UHF)
- \* AM/FM/QPSK
- \* Software Programmable Architecture
- \* Remote Control Interface
- \* Emergency Erase
- \* Full duplex voice and data
- \* Simultaneous voice and data
- \* Adjustable 50W Power Output
- \* Co-site Filtering
- \* Reliable Ad-Hoc Radio Networking
- \* Frequency hopping net scan (Up to 3 nets)
- \* Supports 25 kHz, 12.5 kHz and 8.33 kHz Channel



Mounting Table



50 Watt Power Amplifier



AC/DC Power Supply



Vehicular Wide Band Antenna

#### Spacing

- \* Advanced EPM Techniques:
  - \* Frequency Hopping (full band 30-512 MHz)
  - \* Direct Sequence Spread Spectrum
- \* High data rate up to 64 kbps
- \* Easy Man Machine Interface
- \* 10.5 – 32 V DC power supply
- \* Built-in-Test (BITE)
- \* Tactical Internet
- \* External GPS Connection
- \* 1300 preset channels• 1300 preset channels





# SANmilitary Product portfolio

**Armoured Vehicles (4x4, 6x6), riot control vehicles and trucks**



[www.sanmilitary.com](http://www.sanmilitary.com)  
Info@sanmilitary.com Tel.  
+4528268417 & +4550127757



# SANmilitary Product portfolio

## Armoured Vehicles - Tactical Wheeled Armoured Vehicle (4x4)

- High level ballistic protection
- High level mine protection
- Improvised Explosive Device (IED) protection
- High degree of operational readiness
- Fully Independent Suspension System with lower and higher wishbones helical spring and shock absorber
- 3-speed gear box
- Compact suspension system design
- Power Assisted Steering
- Disc brake system and ABS for all wheels
- Secondary (emergency) steering pump (which operates incase of engine failure)



- Rescue Winch
- Remote Operated Weapon Station
- Manually Operated Weapon Station
- Smoke Grenade Launcher/Grenade Launcher
- Day/Night Vision Systems
- Explosion Suppression and Fire Fighting System for Crew Compart
- Central Tire Inflation System (CTIS) System

### Base Vehicle Specifications

Crew	Up to 11	Engine	Cummins (300 BG@2,100 Rpm)
Length	5421 mm	Acceleration 0-40 km/h	6 sec
Width	2486 mm	Obstacle Climbing	0,5 m
Height	2300 mm	Trench Crossing	1,1 m
Ground Clearance	400 mm	Fording	0,7 m
Wheel Base	3100 mm	Gradient	70%
Gross Vehicle Weight	12.000-14.000 kg	Side Slope	30%
Max. Speed	110 km/h	Turning Radius	7,5 m
Cruising Range	600 km		



# SANmilitary Product portfolio



## Armoured Vehicles - Tactical Wheeled Armoured Vehicle (6x6)

### Performance Specifications

- For rough and difficult terrain conditions of battle
- 0,5 m step climbing
- 1,1 m trench crossing
- 70% gradient
- 40% side slope
- 8 m Turning radius
- 4 km/h minimum operational speed
- High level ballistic protection
- High level mine protection
- Improvised Explosive Device (IED) protection



### Tactical Specifications

- Low silhouette
- Minimum acoustic and thermal signature for decreasing detection possibility of the vehicle
- excellent view for the commander and the driver, by optimized optic sights,
- Low fuel consumption, large fuel tank and higher cruising range

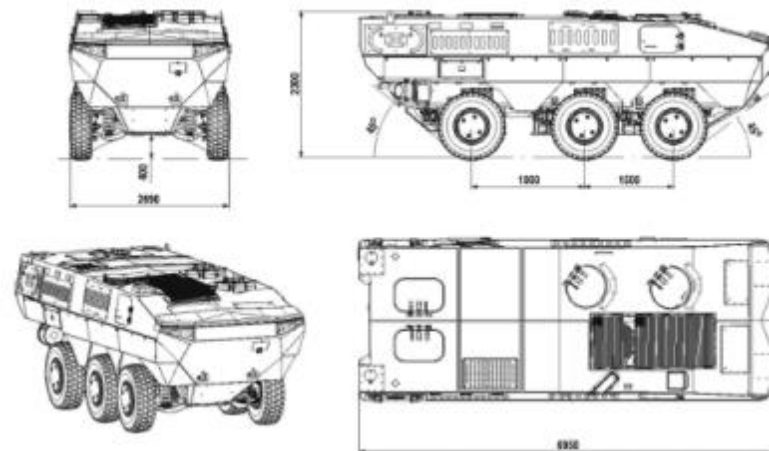
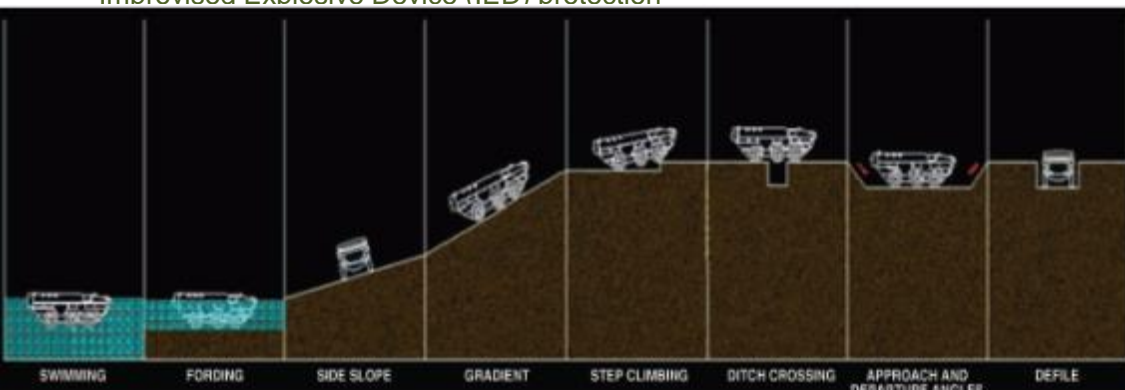
### Transportation Options

- By Tactical Transport Aircraft (C-17, C-130, An-70 and A400M)
- By rail-ways in accordance with International Standards
- By Military and Civil Transportation Vehicles
- By Vessel

### Operational Readiness

- Easy use
- High degree of operational readiness
- Easy maintenance
- Cost effectiveness for operations, maintenances and services

Satisfies "A2, A3, B1, B2, C0 and C1" climate categories according to Stanag 2895



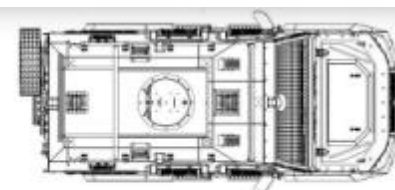
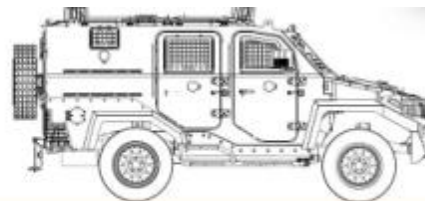
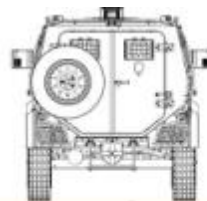


# SANmilitary Product portfolio

## Armoured Vehicles - Armoured Interior Security Vehicle (4x4)

### Features

- Ballistic protection
- Special body design against hand grenade explosions under belly
- Easy use gun port.
- Recovery Winch
- Manually Operated Weapon Station
- Smoke Grenade Launcher/ Grenade Launcher
- Day/Night Vision Systems
- Fire Suppression System



### Base Vehicle Specifications

<b>Crew</b>	9 personnel ( 2 front+ 7 back )	<b>Engine</b>	4.7 Liter, V8 Engine
<b>Length</b>	5.500 mm	<b>Max. Power</b>	272 HP @ 3.600 Rpm
<b>Width</b>	2.210 mm	<b>Max. Torque</b>	650 @ 1.600-2.800 Rpm
<b>Height</b>	2.250 mm	<b>Suspension</b>	Front: Double wishbone Back: 4 wishbone with helical and damper
<b>Ground Clearance</b>	400 mm	<b>Fording</b>	0.7 m
<b>Wheel Base</b>	2.850 mm	<b>Gradient</b>	% 60
<b>Gross Vehicle Weight</b>	5.800 kg	<b>Side Slope</b>	% 30
<b>Max. Speed</b>	110 km/h	<b>Turning Radius</b>	7.5 m
<b>Cruising Range</b>	400 km		

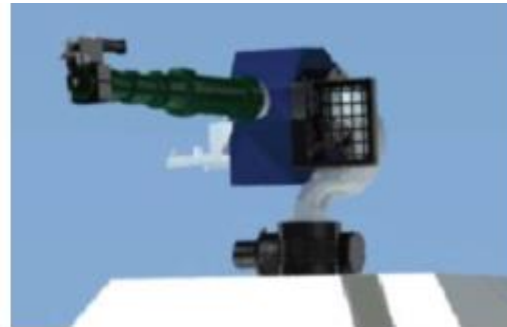
# SANmilitary Product portfolio

## Armoured Vehicles - Riot Control Vehicle (4x4)

### Features

#### Water Cannon System

- Monitor system with computer interface
- 60 m water stream range
- 360° angular motion in azimuth
- Angular motion between  $-18^\circ$  and  $+60^\circ$  in elevation
- Angular velocity of  $25^\circ$  per second
- 3 different operational modes: short/long/continuous pulse
- Different combinations of water, dye, tear gas and foam mixtures



#### Vehicle Protection Systems

- High ballistic protection
- Cabin protection against tear gas
- Gas Spray System (creating a cloud of tears gas) to prevent approaching of rioters
- Ballistic-protected critical sub-systems
- Special vehicle design to prevent climbing of rioter on to vehicle
- Remote Controlled bulldozer to remove the barricades on road
- CCTV system, video recorder DVR system,
- Recording of the zoom camera coaxial with the water cannon Announce, siren and lighting system
- Cage Protection for equipments and ballistic glass against stones and impacts
- Fire extinguisher foam - can be used with water cannon, in order to extinguish the fired roadblocks and other vehicles
- Fire extinguishing foam nozzles over and under the vehicle to prevent the vehicle against Molotov cocktails or flammable materials

