

# **Patria** SKY

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Multi-Mission Unmanned Aerial System



**Battlefield and Critical Systems**

**Patria SKY** is a new multi-mission long-range UAS designed in cooperation with professional security industry operators for demanding and high-level security use. Now there is also XL version available with more performance capabilities.

The UAS is designed, tested and built in Finland. The manufacturing and maintenance process have been inspected and approved by the Finnish authorities.

## Skycontrol GCS

- SkyControl GCS with 7" 750 cd/m<sup>2</sup> screen that is usable with gloves on
- IP 65 with drop protection up to 1.5 m
- All critical flight functions designed for physical switches and it's easy to use in demanding conditions
- The software integrated by Nordic Drones Oy enables easy use of flight functions with one device
- MIL-STD-810G
- Battery hot-swap
- Live feed. Operator can monitor the image visible to UA and control the UA EO/IR gimbal
- Near real time video transmission

## System packaging

- Transport cases meet the most demanding quality classifications and standards such as MIL-STD-810F and FED-STD-101C
- IP67
- Flight case outer dimensions 62.5 x 50 x 36.6 cm
- Battery case outer dimensions 62.5 x 50 x 21.8 cm



## Features

- Vertical take-off and landing
- Man portable, packable into a small case or even to a tactical backpack
- Carbon fiber IP-rated airframe with 3D-printed titanium core
- Capable of fully automated missions including take-off and landing
- Includes automatic return to launch (RTL) function
- No pre-flight calibrations needed
- Bright on/off LED lights for easy navigation
- IR- navigation light
- Compatible with different payloads with easy and quick assembly
- Tether capability
- Automatic safety checks before flight
- The UA is connected to a GCS from which data can be routed out
- UAS does not require registration nor do any updates to the external network unless the user wants to
- UA flight path and command programming
- Secure encrypted control and video information exchange channels
- Recorded data can be transmitted to another user via radio communication equipment
- Capable of programmable flight mode beyond line of sight
- Alternative navigation: visual
- Option: ADS-B transponder
- Allow the coordinates and other required information of the surveilled object to be set to correct the artillery fire

## Tactical backpack

- Lightweight and durable
- Dust and splashproof, IP65 rated
- Protects the components from minor impacts
- Dimensions 58 x 57 x 22 cm (without payload)
- Weight: 3,2 kg (without contents and payload)
- Assembly and disassembly under 3 minutes
- Payload to be carried in a separate case.



# Specifications

## Radio

- Encryption AES 128/256-bit
- Radio frequency lists can be provided to the end user
- Transmission power adjustment 100 mW (standard) - 2000 mW
- Range up to 10 km
- Adjustable transmission bitrate, at least 5 Mb/s
- Video Streaming over network
- Can be operated inside vehicle and while on the move

## NextVision DragonEye2

- Lightweight, only 115 g
- EO resolution 1280 x 720, zoom X40 (20X + 2Xdigital)
- Thermal resolution 640 x 480, LWIR uncooled, 4X digital zoom
- Object Detection and Classification
- Static and moving object tracking
- Video recording
- IPX4
- Operating temperature -20 °C - +55 °C
- Offering unparalleled long range observation capability
- Transport cases meet the most demanding quality classifications and standards such as MIL-STD-810F and FED-STD-101C
- Optional 3-axis version

## NextVision Raptor

- Weight 640 g
- EO resolution 1920 x 1080, Zoom X80 (40X + 2X digital)
- Thermal resolution 1280 x 720, LWIR uncooled, 8X digital zoom
- Object Detection and Classification
- Static and moving object tracking
- Video recording
- IPX4
- Operating temperature -20 °C - +45 °C
- The Raptor represents NextVision's constant technological advancement that combines the features of an optical zoom and a thermal camera
- A lightweight long range dual EO-IR stabilized camera turret



- Transport cases meet the most demanding quality classifications and standards such as MIL-STD-810F and FED-STD-101C
- Supports KLV standard
- UA flight control and visual image reception
- UA gimbal operation (during the recording of video, taking photos, controlling camera tracking direction and image zooming)

## Elistair tether stations

- Elistair tethers offer more options for drone operators who need a permanent aerial position
- The systems manufactured by the French company Elistair give unmanned devices unlimited operating time
- Designed to withstand harsh transport conditions and are deployable on any type of terrain

### LIGH-T 4

- 70 m
- 1.2 kW
- T-monitor
- 20 kg
- Set-up time less than 5 minutes
- Operating temperature -10 °C - +40 °C

### SAFE-T 2

- 100 m
- Fiber Optic and BPL datalink
- Dual-Comms option
- IP54
- 2.8+kW
- Set-up time less than 5 minutes
- Operating temperature -20 °C - +50 °C



## Patria SKY specifications

- Empty weight 2.2 kg
- Weight flight ready 4.0 kg
- Max payload 2,5 kg
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- MTOW 6.5 kg
- IP43 motors and airframe
- Dimensions 58 x 58 x 37 cm
- Operating temperature -30 - +45 C
- Endurance up to 64 min
- Controlled operational range 15 km, flight distance 40 km
- Max speed 22 m/s
- Lithium Polymer (LiPo) battery
- 18" x 6.5" carbon fibre propellers with quick locks

## OPTION XL Kit for Patria SKY

- Motor arms and motors
- 22" x 7.0" propellers, no quick locks
- Max payload 5 kg
- Separate transport case for XL Kit
- Dimensions for XL kit case 82 x 37 x 18,5 cm

### SKY with XL Kit

- Dimensions 66 x 66 x 37 cm
- Weight flight ready 4.4 kg
- MTOW 9.4 kg
- Max speed 22 m/s
- Endurance 70 min
- Flight distance 42 km

**Patria - Extreme conditions embedded.**

**Patria**

When it is not an option.

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