



Tactical Observation Solutions



Dear Customer,

We are proud to introduce you to our new range of tactical observation solutions.

SESP has been designing, manufacturing and supplying various types of electronic equipment and systems for the security market since 1986.

Working closely with our Clients, to understand their particular circumstances and needs, we deliver the optimum solutions to meet with their specific requirements.

SESP's strength and success is due to a combination of several essential elements, including a team of highly qualified and dynamic Personnel; as well as the personal attention given to each and every project, and followed through with continuous after-sales technical support and service.

All SESP's products are designed to exacting standards, focusing on performance, reliability, ease of use and cost effectiveness.

We look forward to being of service to your company, and assure you of our best attention, full technical support and back up, as well as complete customer confidentiality at all times.

The SESP Group

EAGLE EYE

Thermal Imaging Surveillance System

General

The EagleEye's cooled detector enables long range performance. Designed for detection range up to 45-50 km.

Largest continuous zoom range available provides crisp image over full zoom range. Never lose sight of the target with continuous or pre-set zoom positions



Immediate clear and focused image at the touch of a button Reveals scene details missed by systems offering only histogram or linear image processing. Delivers a high contrast image even in the most challenging thermal conditions

Unmatched sensitivity and four times the resolution of mid-format systems for significantly greater range performance and image quality

Unique CDMQ™ process (Commercially Developed, Military Qualified) delivers a military quality system, designed to work 24/7/365

Supports Nexus™ and common PelcoR network control protocols for easy installation and integration into existing networks

Provides the highest fidelity VOIP possible

Combines high performance with low weight and small size. EagleEye has the lowest system weight in its class, less than 19 lb (8.5 kg) system weight

Controls the entire supply chain on the critical technology inside EagleEye systems, ensuring fast service and long term support

Main Features

- Cooled Thermal Imaging
- 12.5x Continuous Zoom
- Autofocus
- Tunable STACE™ Enhancement
- Large Format 640 x 480 Detector
- Rugged, Fully MIL-Qualified
- Network Enabled
- MPEG4 Digital Video Format
- Compact, Long Range Optics

Applications

- Force protection
- Border surveillance
- Tactical reconnaissance
- Training range applications
- Fixed and mobile security
- Target tracking
- Long range surveillance

Performance Specifications

THERMAL IMAGER OPTIONS

Sensor type	640 x 480 InSb focal plane array
Wavelength	3-5 µm response
Continuous zoom range options	Multiple options, see below
Selectable pre-set FOVs	4
Automated features	Auto Focus, Auto Adjust Focus Memory, Tunable STACE™ digital detail enhancement

COLOR CCD-TV CAMERA OPTIONS

Format	NTSC or PAL
Type	Color CCD
FOVs	Standard Range, 26x (1.6° to 42°) Long Range, 25x (0.48° to 28.7°) Ultra Long Range (0.5° to 11.8°)

LASER PAYLOAD (OPTION)

Rangefinder	Type Erbium-glass Max. range 20 km Classification Class 1 (eyesafe)
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ENVIRONMENTAL

Standards	MIL-461D; IP 65; IEC 529
Operating temperature	-26°F to 131°F (-32°C to 55°C)
Storage temperature	-40°F to 158°F (-40°C to 70°C)

POWER REQUIREMENTS

Voltage	18-35 VDC
Consumption	31 W (140 W with heater)

DIMENSIONS & WEIGHT

Size	18.6" x 7.6" x 8.8" (47.4 x 19.4 x 22.5 cm)
Weight (can vary with options)	System configuration dependant

OTHER OPTIONS & ACCESSORIES:

Digital Magnetic Compass (DMC),
GPS, Geo-Pointing & Positioning

Thermal Imager Options



6.3° to 0.5° FOV with 88 x 1100 mm lens
9.4° to 0.75° FOV with 59 x 735 mm lens



14° to 1.1° FOV with
40 x 490 mm lens



25° to 18° (2 fixed FOV) and
12° to 2° (6x continuous zoom),
with 22 x 275 mm lens

ATLAS

Medium Altitude UAV

The **ATLAS** is an all composite UAV designed for fast deployment and is capable of providing a persistent presence over a wide geographical area. Its high reliability and ease of operation enable a 24 hr orbit to be established with a reduced number of aircraft and a minimal number of operators.

The **ATLAS** can take off from a conventional runway or it can be launched from a compact pneumatic catapult. The catapult can be towed by any standard-size road vehicle.

The aircraft has a maximum payload of 10 Kg allowing for a variety of customer-specified payload combinations

The complete system consists of:

Two **ATLAS** aircraft:

- ◆ Fully redundant flight control system
- ◆ EO / IR dual sensor payload
- ◆ 100 Km range video transmitter (frequency 2.4 GHz, optionally encrypted).



Ground Control Station:

- ◆ Video receiver
- ◆ Automatically steered direction antenna
- ◆ Grid independent power supply

Ruggedized laptop or rack type GC computer:

- ◆ With ATLAS VISION Software
- ◆ Video Capture
- ◆ Gamepad for payload control
- ◆ Option to simultaneously control multiple UAVs

Specifications

DIMENSIONS

Wingspan:	3,80 m
Length:	2,80 m

WEIGHT

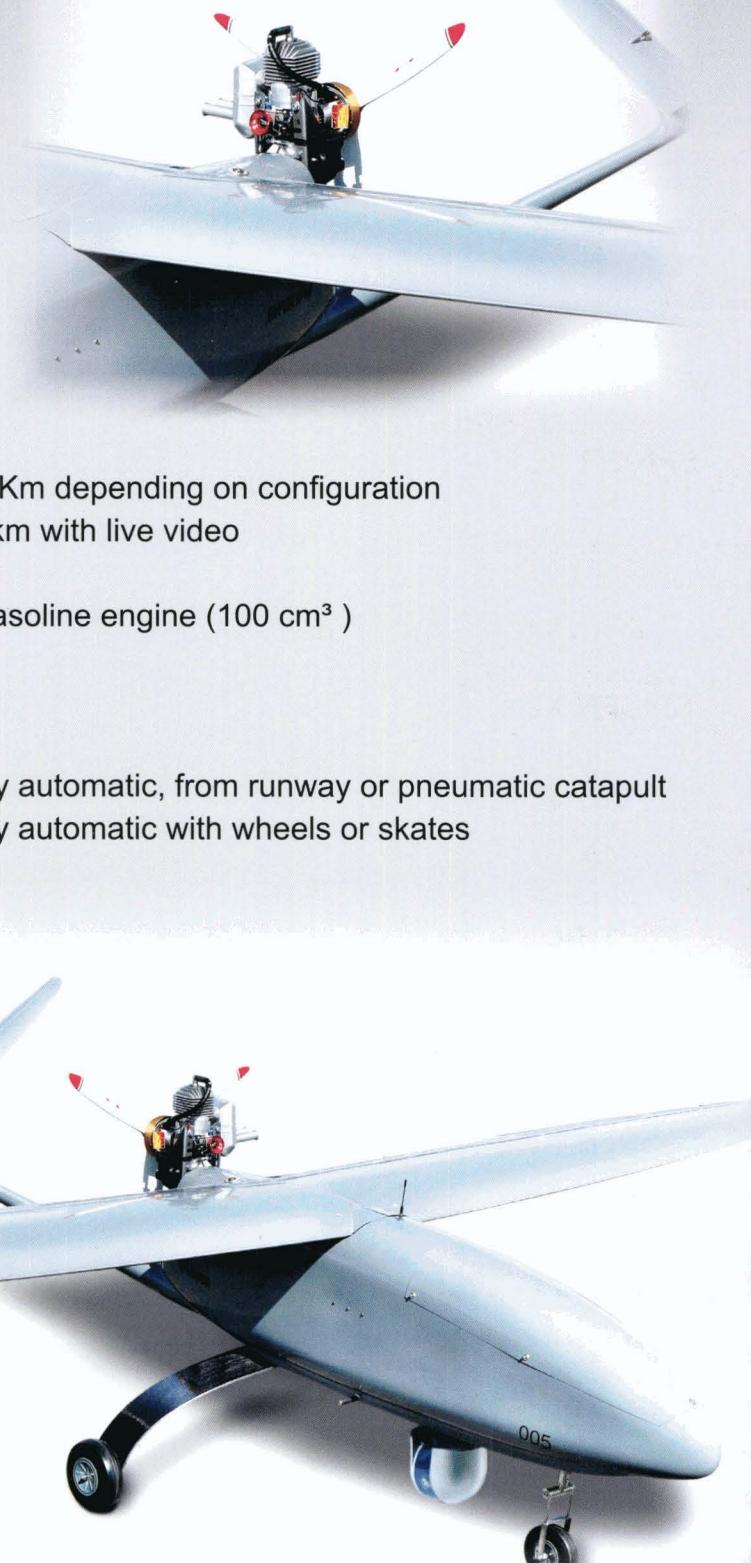
Max. take off weight:	31 Kg
Max. Payload:	10 Kg

PERFORMANCE

Range:	Up to 800 Km depending on configuration
Operational range:	Up to 100km with live video
Fuel capacity:	12 L
Motor engine:	2 stroke gasoline engine (100 cm ³)
Endurance:	6-8 hours
Cruise Speed:	120Km/h
Ceiling:	4.000 m
Take-off:	Completely automatic, from runway or pneumatic catapult
Landing:	Completely automatic with wheels or skates

OPTIONS

- Radio-altimeter
- Laser-altimeter
- Emergency pneumatic parachute
- Transponder (Types S, C, 4)
- PLB Beacon
- Tri-Sensor Video Payload
- Cooled IR
- Shelter GCS



SPIDER XL

Tactical Rotor UAV

The SPIDER XL delivers two important advantages of any Rotor (helicopter) UAV:

- Autonomous Vertical Takeoff/Landing and Hovering
- Long endurance flight operation

In addition, its much larger lifting ability enables it to simultaneously carry multiple payloads, such as dual sensor gimbals, laser range finders / target designators and high resolution photographic cameras.

Compared to full size helicopters, the **SPIDER XL** significantly reduces life-cycle costs and provides operational advantages, while being able to perform the same type of missions.

A variety of payloads are available to ensure mission success: day, low light, night vision or IR. The **SPIDER XL** can also integrate most customer supplied payloads.

The **SPIDER XL** can complete its entire mission fully autonomously, from takeoff to landing.

System Components:

Two **SPIDER XL** aircraft:

- ◆ Fully redundant flight control system
- ◆ EO / IR dual sensor payload
- ◆ 25 Km range video transmitter (frequency band options: 900 Hz, 1.3 GHz, 2.4 GHz, optionally encrypted).

Ground Control Station:

- ◆ Video receiver
- ◆ Automatically steered direction antenna
- ◆ Grid independent power supply

Ruggedized laptop or rack type GC computer

- ◆ With SPIDER XL VISION Software
- ◆ Video Capture
- ◆ Gamepad for payload control
- ◆ Option to simultaneously control multiple UAVs



Specifications

DIMENSIONS

Length:	1,80 m
Height:	0.71 m
Rotor Diameter	2.15 m

WEIGHT

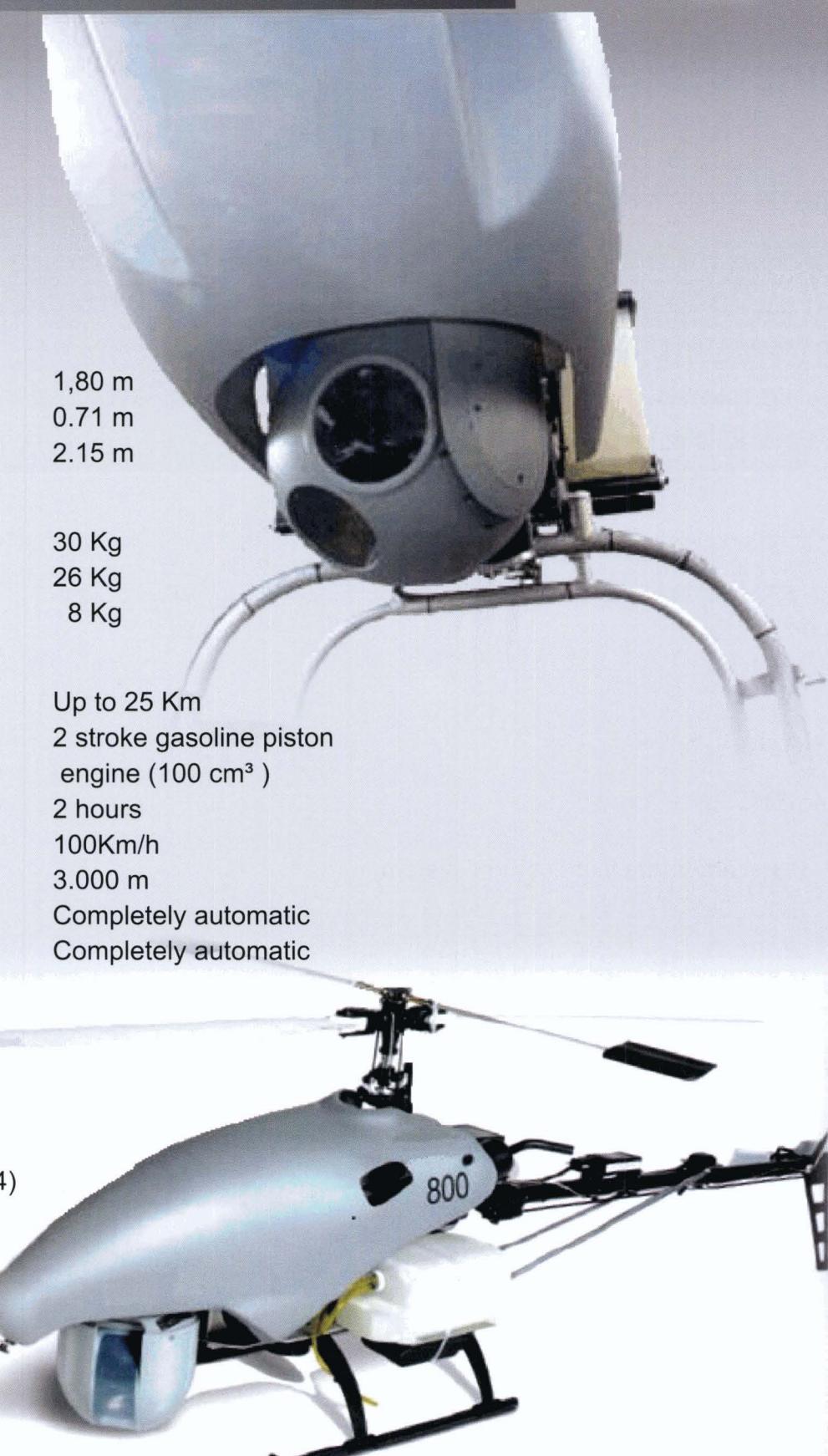
Max. take off weight:	30 Kg
Standard Mission weight	26 Kg
Max. Payload:	8 Kg

PERFORMANCE

Range:	Up to 25 Km
Motor engine:	2 stroke gasoline piston engine (100 cm ³)
Endurance:	2 hours
Max. Speed:	100Km/h
Ceiling:	3.000 m
Take-off:	Completely automatic
Landing:	Completely automatic

OPTIONS

- Radio-altimeter
- Laser-altimeter
- Emergency pneumatic
parachute
- Transponder (Types S,C, 4)
- PLB Beacon
- Tri-Sensor Video Payload
- Cooled IR
- Shelter GCS





Other Security Solutions from the SESP Group

SESP has earned a global reputation for its expertise in the field of **RF JAMMING**; developing and manufacturing a comprehensive range of state-of-the-art very high power vehicular, tactical and fixed installation jamming solutions for military, police and VIP security applications.

For special intelligence operations, SESP also offers its **DOMINATOR SYSTEMS** for real time interception and monitoring of GSM traffic; with the ability of intercepting and recording all outgoing and incoming calls, voice and SMS.

Utilizing the latest and most advanced technologies, customer requirements are engineered into leading edge designs – outstanding in quality, reliability, functionality and value.

Please do not hesitate to contact us for information on our range of **jammers and interceptors**; or for any additional information required on the group of surveillance products described in this catalogue.

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