



SNOOP

High Performance, Fixed Wing eVTOL UAV

- Multi-Motor
- VTOL
- Lightweight Carbon Fiber
- High Endurance

CANNONDYNAMICS.CO.UK

What is the CANNON SNOOP drone?

Cannon SNOOP is a cutting edge eVTOL fixed wing aircraft, offering best in class range and performance combined with stable flight characteristics, all in an easy to manage package of convenient size.

The advanced design delivers performance normally associated with platforms of much larger size.

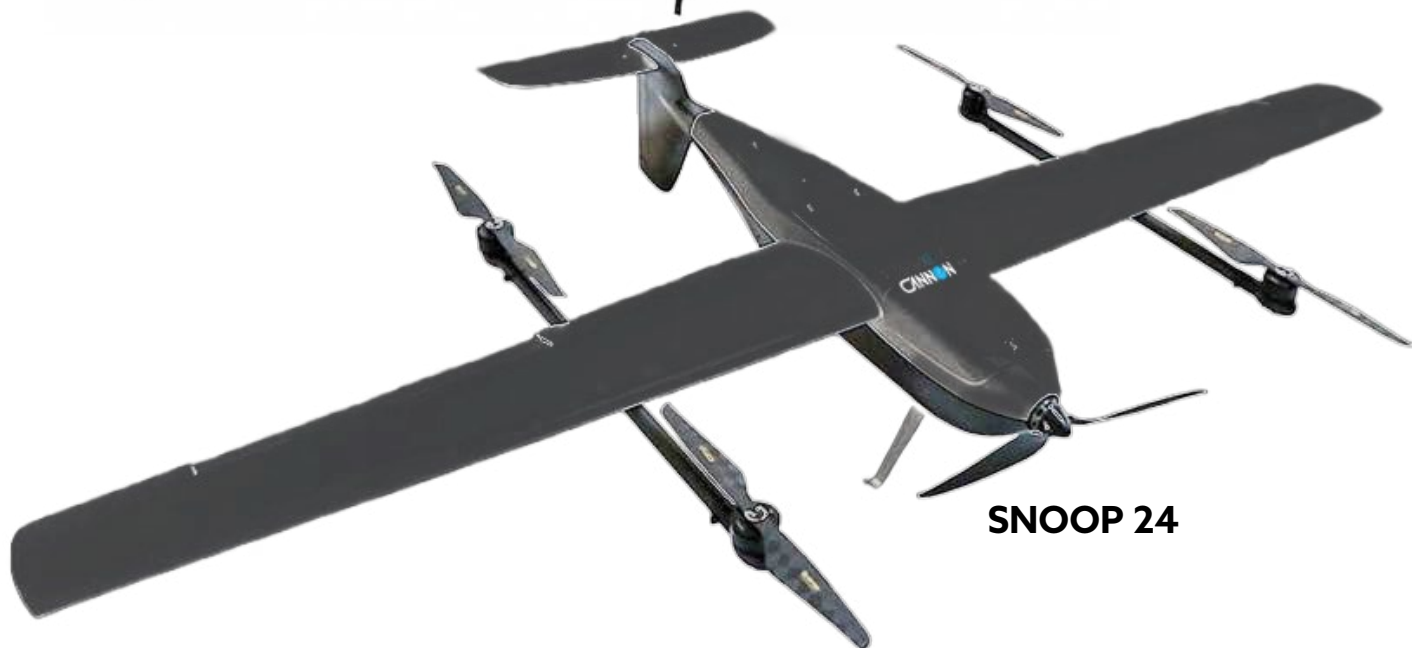
SNOOP delivers outstanding performance with easier logistics, enabling enhanced mission success in any terrain, in conditions that would defeat many other platforms.

Equipped with a Cannon SMART EYE gimbal camera, impressive ISR missions are accomplished with ease, supported by autonomous capabilities that simplify planning and mission execution, reducing pilot stress and simplifying operations.

Cannon SNOOP with SMART EYE provides new realisation and capabilities, previously unattainable with such ease.



SNOOP 18



SNOOP 24

KEY FEATURES



Featuring a tilt-rotor design on the SNOOP 18 or multi-rotors on the SNOOP 24 combines the benefits of both vertical take-off and landing (VTOL) with efficient fixed-wing cruising.

SNOOP is adaptable for a diverse range of applications that require both flexibility and endurance.

- **Lightweight and Durable Frame**
Built from a combination of carbon fiber and EPP, SNOOP offers excellent rigidity for reliable performance while maintaining flexibility and reducing weight for longer, more efficient flights.
- **High (Level 5) Wind Resistance**
SNOOP is capable of maintaining stable flight even in challenging weather conditions, ensuring dependable performance in outdoor operations.
- **High-Performance ESC**
Equipped with a 80A 3-in-1 high-performance ESC, with fast response time, the design achieves a 65% weight reduction compared to traditional single ESCs.
- **Enhanced Safety Features**
Includes an onboard power management module with dual flight control backup power to ensure a safer flight. An 8V12A-UBEC provides stable power for the servo system, improving overall flight reliability and simplifying installation.



CANNON SNOOP 18

TILT ROTOR VTOL UAV

150mins

Flight Duration



120mins

Flight Duration (payload)

0.9kg

Payload capacity

SNOOP 18

The SNOOP 18 is a versatile VTOL fixed wing UAV with long endurance and flight times.

SNOOP 18 is a durable and versatile drone offering great features and flexibility.

A fixed wing, electric driven VTOL UAV, the SNOOP 18 is powerful and efficient, its lightweight frame giving it great flight characteristics.

125km

Range

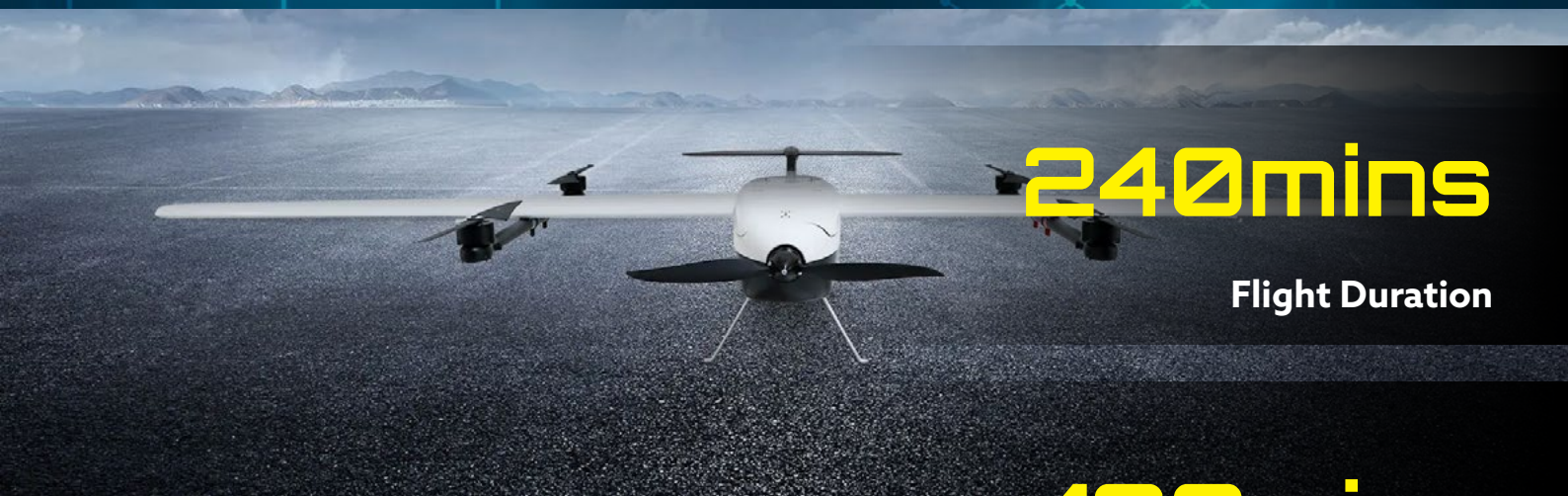
1.7m

Wingspan



CANNON SNOOP 24

MULTI-ROTOR VTOL UAV



240mins

Flight Duration

SNOOP 24

The SNOOP 24 is the bigger brother to the SNOOP 18 VTOL fixed wing UAV with even longer flight times.

SNOOP 24 shares many of the great features of its smaller sibling the SNOOP 18, but boasts a greater wingspan, operating ranges, speeds and battery life.

The SNOOP 24 also offers a greater payload capacity.

180mins

Flight Duration (payload)

2.5kg

Payload capacity



240km

Range

2.3m

Wingspan

FEATURES AND SPECIFICATIONS

BENEFITS AND CHARACTERISTICS

Features and Benefits

- Convenient, light weight frame with carry pack - easy to carry and transport
- Rapidly deployed - quick and simple tool-less assembly
- Exceptional long-range cruise (Up to 240 min / 4 hr duration)
- Autonomous flight mode option
- Electric propulsion and Battery power
- Easy VTOL take-off and landing
- Smooth transition into and out of flight-modes
- Fully integrated ISR (Intelligence, Surveillance , Reconnaissance)
- Fixed wing stability
- Quiet operation
- Safe, Reliable, Stable
- Fully integrated SMART EYE gimbal camera

Specifications

Model	SNOOP - SNP-18	SNOOP - SNP-24
Frame Length	1310mm	1250mm
Wingspan	1700mm	2300mm
Dimension in carry case	1100x500x500mm 3kg	1100x300x330mm 9.3kg (no batt)
Frame Weight		2kg
Take off Weight	5.5kg	12.5kg
Frame Material	Carbon Fiber & EPP	Carbon Fiber
Flight Time	150mins (No payload) 120mins (0.8kg payload)	240mins (No payload) 180mins (1.5kg payload)
Payload	0.9kg	2.5kg
Max Range	125km	240km
Wind Resistance	Level 5	Level 5
Working Temperature	-10C to 40C	-10C to 40C
Control Range	10 - 30km	10 - 30km
Cruising Speed	15 - 18m/s	18 - 20m/s
Max Flying Speed	25m/s	35m/s
Max Altitude	4500mm	4500m
Recommended Battery	8s, 14500mah	12s, 22000mah 12s, 27000mah 12s, 30000mah

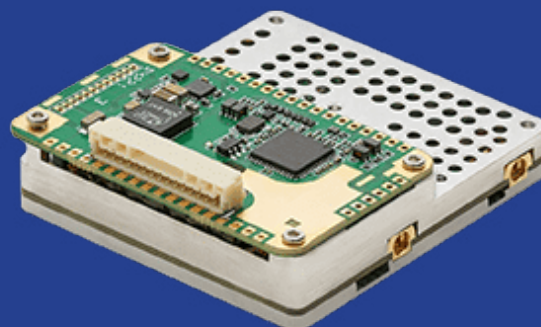
TYPICAL MISSION PACKAGES

RADIO / COMMUNICATIONS

Radio

High quality radio communications ensure a responsive and stable flight

Secure and reliable radio communications



A wide range of multi-band and single-band radios

Low Latency

Low latency, designed for reliable, long-range applications with real-time, immediate information from nodes.

Resilient Network

Built-in spectrum scanner that monitors in-band interference and provides automatic band and channel switching capabilities.

Fine-tuned filtration and frequency-band shifting techniques are designed to minimize noise and block out-of-band signals.

With an advanced interference-avoidance feature-set, can even automatically switch to cleaner channels and bands of operation.

Multi-Cast Video

In a point to multipoint configuration, provides the ability to stream high quality video to multiple receiving nodes, from drones to numerous stakeholders on the ground.

TYPICAL MISSION PACKAGES

CAMERAS AND OPTICS

Cannon SmartEye

Single, Dual or Triple-sensor gimbal cameras

10x to 40x Optical Zoom
Up to 32x Digital Zoom
Thermal imaging options
AI Object Tracking and more ...

SNOOP can be fitted with a range of Cannon SmartEye cameras featuring single or multiple sensors, low-light vision, IR and thermal vision, tracking and more.

All cameras are gimbal mounted, packages range from under 200g to around 2kg.



Powerfull Zoom Functions

10x Optical zoom (up to 80x available)
32x Digital zoom



AI Onboard Tracking

Identifies objects of interest using onboard AI tracking abilities

With one click the camera follows the object as both it and the aircraft move, the aircraft can be set to automatically fly to keep the object in view.
Many gimbal options and targeting are available to suit mission needs.



TYPICAL MISSION PACKAGES

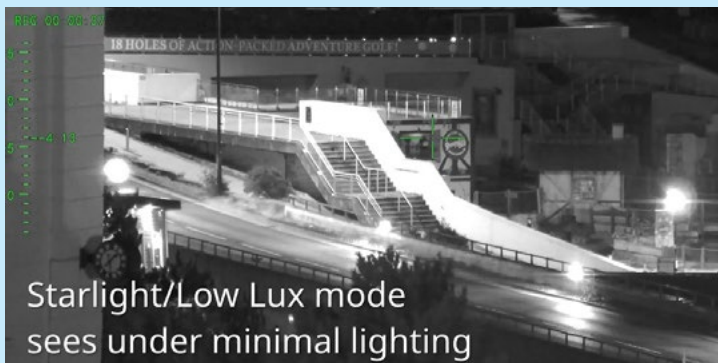
CAMERAS AND OPTICS



Picture in Picture

Identifies objects of interest using onboard AI tracking abilities

IR / EO Cameras may be used simultaneously to view scenes in both thermal and natural light, the zoom on the EO camera gives excellent details of targets from several km. The IR view makes it easy to detect hidden heat sources in undergrowth or at night.



Low -light Operation

Identifies objects of interest using onboard AI tracking abilities

IR and Low light modes, In low light conditions the EO camera goes into 'starlight' mode - it can see much better than the human eye at night, combine this with Infra-Red mode and the scene is clear, objects and targets may easily be seen at long range.



Infra-Red / Thermal

Selected models feature full infra-red and thermal vision capabilities



Features and Benefits

- SD card support

TYPICAL MISSION PACKAGES

AUTOPILOT

Autopilot

With this mission package the SNOOP can operate in autopilot mode

Pre-programmed flight paths or responsive flight instructions

Multiple autopilot systems are available

Options vary between full 'remote pilot in control' through fully autonomous autopilot options. A choice of various Autopilots and Flight Controllers are offered to suit customers' needs; from low-cost commercial to full military specification GNSS, denied mission capable systems.

Typical Features

Three Inertial Measurement Units (IMU) within the UAV autopilot system.

IMUs comprise a suite of sensors used in the Inertial Navigation System (INS).

Measuring orientation, velocity, and gravitational forces to aid navigation and control using the raw IMU measurements and sensors for extra redundancy.

The entire Flight Management Unit (FMU) and Inertial Management Unit (IMU) are housed in a small form factor housing.

Possibility to integrate alternate and multiple Global Navigation Satellite Systems (GNSS) from GPS (USA) and Galileo (EU) are available.

Clients preferring GLONASS (Russia) or BeiDou (China) can be accommodated.

TYPICAL MISSION PACKAGES

GROUND CONTROL STATIONS

Ground Control Station

For control of your UAVs

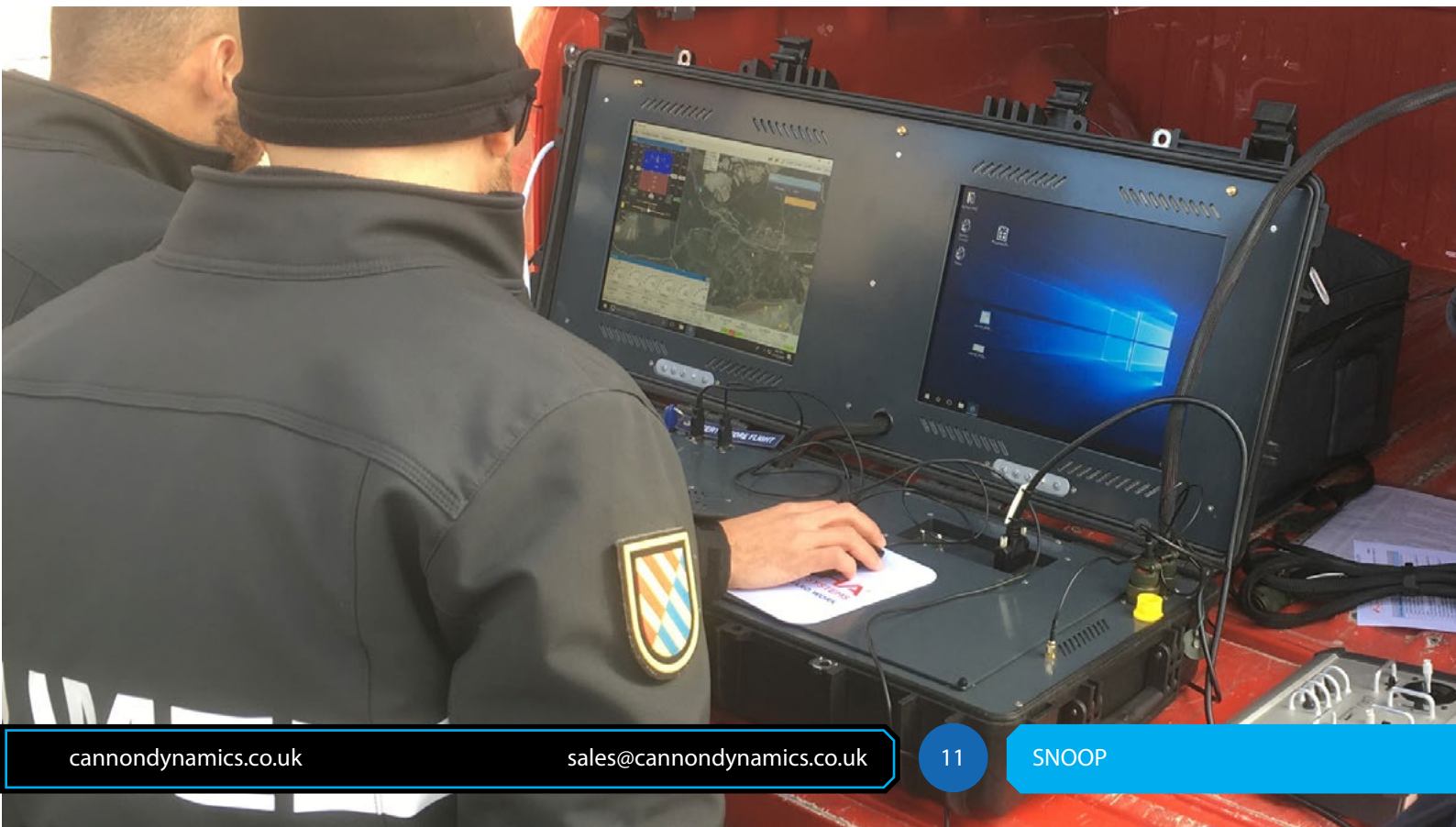
Multiple models available

From a simple laptop or android handset to a full 40-foot container based mobile command and control center - Cannon Dynamics can provide a system that suits your needs

The Cannon Technologies Group has been making Command and Control rooms for 40 years and has a wealth of experience in providing cutting edge data platforms in the most extreme of environments.

A Basic Configuration includes the components necessary for mission planning, control battery replacement and charging facilities, field level configuration changes, level maintenance and repair solutions including the necessary tools and spares.

Further configurations include anything from generators to operator basic accommodation to airconditioning if required and is completely scalable to the desired deployments.





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