

SNOOP



SNOOP

High Performance, Fixed Wing VTOL UAV

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

CANNONDYNAMICS.CO.UK



What is the CANNON SNOOP drone?

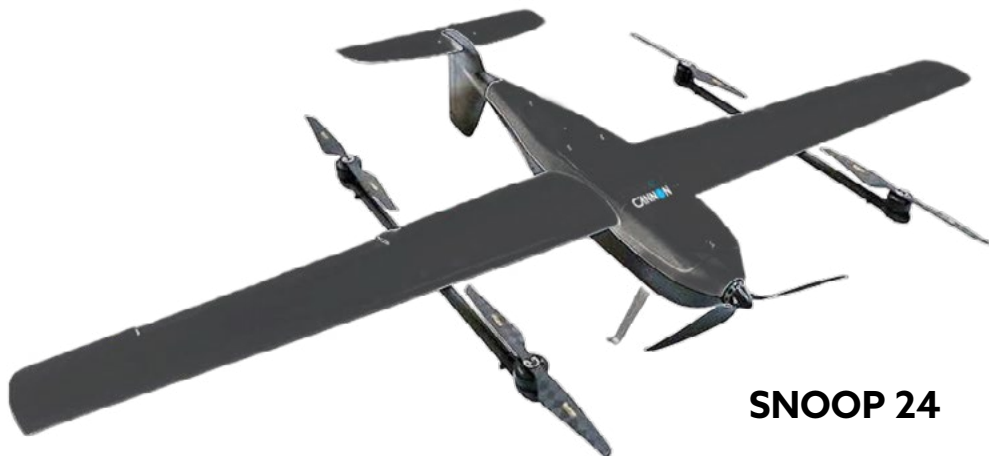
Cannon SNOOP is a cutting edge VTOL fixed wing aircraft, offering best in class range and performance combined with stable flight characteristics, all in an easy to manage package of convenient size.

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 24



SNOOP 40

KEY FEATURES

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 210 min / 3.5 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) (option)
- Fixed wing stability
- Quiet operation
- Safe, Reliable, Stable
- Fully integrated SMART EYE gimbal camera (option)

2 Types
Base Models

2.4m - 4.0m
Wingspan

Up to 3.5hrs
Flight Duration

180kmh (112mph)
Max Flight Speed

300km
Max Range

Up to 10kg
Payload Capacity

30kg
Max MTOW

*Approximate values, dependent on operating environments and parameters



CANNON SNOOP 24

MULTI ROTOR VTOL UAV

240mins

Flight Duration



180mins

Flight Duration (max payload)

5.6kg

Payload

SNOOP 24

The SNOOP 24 is a VTOL fixed wing UAV with long flight times.

SNOOP 24 is all electric, with forward and VTOL motors for seamless transition from vertical to horizontal flight

The SNOOP 24 offers a moderate payload capacity.

240km

Range

2.4m

Wingspan



CANNON SNOOP 40

MULTI-ROTOR VTOL UAV



210mins

Flight Duration

SNOOP 40

The SNOOP 40 is the bigger brother to the SNOOP 24 VTOL fixed wing UAV with even longer flight times.

SNOOP 40 shares many of the great features of its smaller sibling the SNOOP 24, but boasts a greater wingspan, operating ranges, speeds and battery life.

The SNOOP 40 also offers a greater payload capacity.

90mins

Flight Duration (max payload)

10kg

Payload



300km

Range

4.0m

Wingspan

MODULAR PROPULSION

MULTI-ROTOR VTOL UAV

Electric

Electric motor module

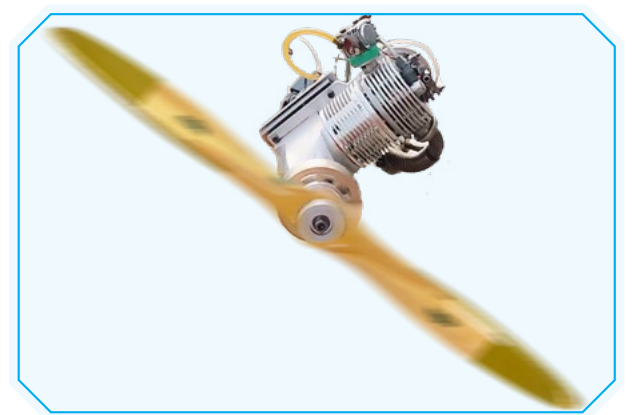
An electric motor provides reliable propulsion

With battery weight remaining constant the aircraft remains stable and manoeuvrable throughout the mission



Internal Combustion Engines

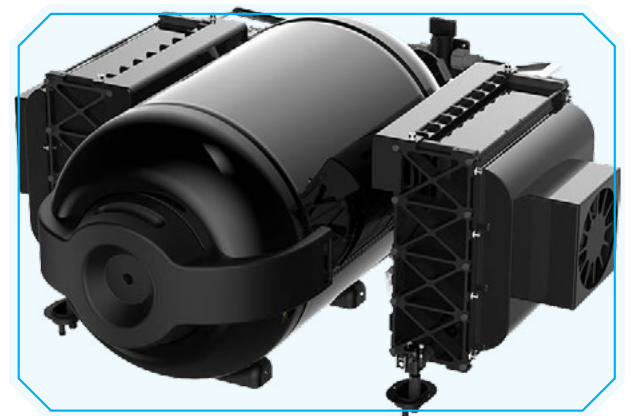
While not provided as standard, the Snoop 40 may be adapted for combustion engine propulsion, please get in touch to discuss options



Alternative Fuels

Electric motors have the opportunity to be fueled by alternative energy sources than just batteries

Hydrogen fuel cells, solar power and other alternatives can be used to supplement or in some cases replace batteries



VTOL

Vertical take-off and landing modules add the ability to launch and land without a runway

Electric VTOL is fitted as standard making the Snoop a versatile and agile UAV



MODULAR PAYLOADS

MULTI-ROTOR VTOL UAV

Definable Payload

As a modular platform, payloads are definable.

The platform payload is broken into modules and the remaining payload can be used for mission specific equipment and cargo.

The platform is dynamic and configurable to suit your needs.

* Definable payload is not free cargo capacity as engine and fuel choices determine remaining free payload

Typical Approximate Mass of Definable Options

Propulsion	Mass
Electric	1kg
20cc ICE	1.5kg
35cc ICE	3kg

Battery	Mass
10000mAh	1.4kg
20000mAh	2.8kg
36000mAh	5.1kg
72000mAh	10.2kg

Gimbal Camera	Mass
Small	0.5kg
Med	1kg
Large	2kg

Petrol for ICE	Mass
1.5L	1kg
4L	3kg
6L	4.5kg
8L	6kg

Definable Payload Capacity

Model	MTOW	Base Weight (Frame + Wings + Electronics + Propulsion)	Useful Load (Battery / Fuel + Payload)
Snoop 24 Electric	12kg	6kg	6kg
Snoop 24 ICE 20cc	12kg	6.5kg	5.5kg
Snoop 40 Electric	30kg	12.6kg	17.4kg
Snoop 40 ICE 35cc	30kg	14kg	16kg

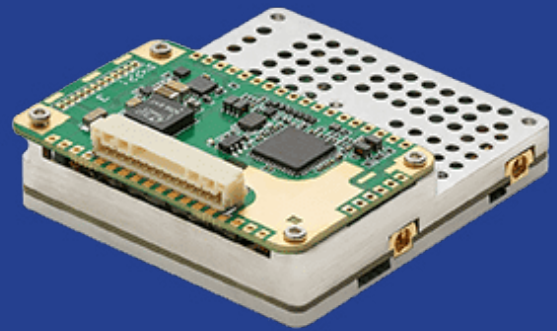
TYPICAL MISSION PACKAGES

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

UAVs 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.



AI Onboard Tracking

Identifies objects of interest using onboard AI tracking abilities

Powerful Zoom

10x to 80x Optical Zoom
Up to 32x Digital Zoom

Low-Light Operation

In low light conditions the EO camera goes into night mode with vision better than the human eye

Infra-Red / Thermal

Selected models feature full infra-red and thermal vision capabilities

TYPICAL MISSION PACKAGES

Autopilot

Autopilot

With this mission package the UAV 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.

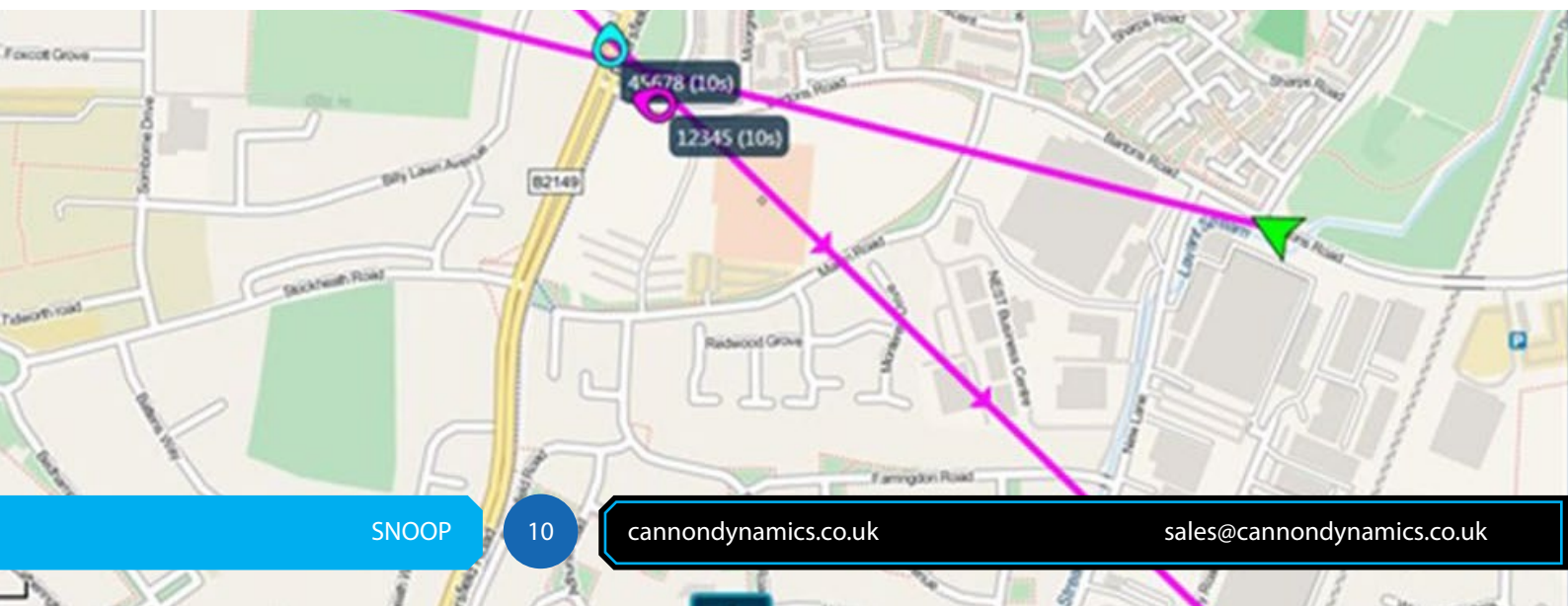
IMUs comprise a suite of sensors used in the Inertial Navigation System (INS).

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

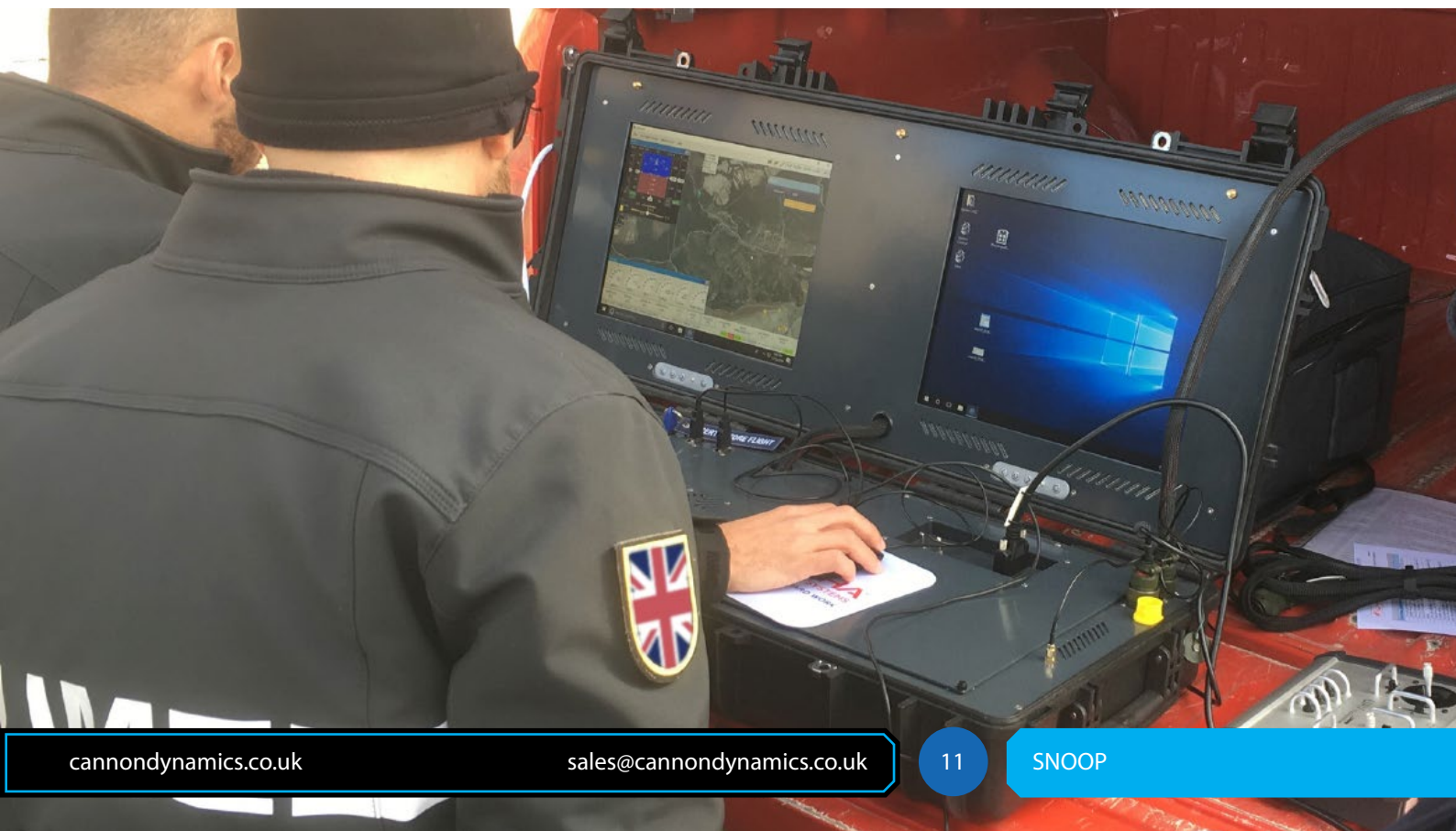
Multiple models available

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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