



PERCEPTO

SPARROW

AUTONOMOUS
INDUSTRIAL DRONE



AERIAL ROBOTS FOR
AUTONOMOUS SECURITY,
SAFETY AND INSPECTION
MISSIONS

SPARROW QUICK LOOK



SAFETY ROUTES AND PROTOCOLS

Our system provides a pre-defined map of the site, including no-fly zones, free flight areas and emergency landing zones. Hard-coded site restrictions on the Sparrow eliminate the need for communication with an operator, enabling truly autonomous safe navigation.



HUMAN AND VEHICLE DETECTION & TRACKING

The Sparrow uses our machine vision technology to autonomously detect and track moving people and objects 24/7. This feature enables the drone to conduct security patrols and detect any suspicious activity within the site vicinity.



PRECISE VISUAL INSPECTION

Sparrow unique machine vision application conducts precise inspection missions in dangerous locations such as gas pipelines, high voltage towers, chimneys, shafts and rooftops.



AUTONOMOUS FIRE DETECTION

Our machine vision technology enables the Sparrow to autonomously detect fires from up to 300m (900ft), alerting the system operator. The Sparrow uses this feature at all times to provide early warnings in the event of on-site fires.



AUTONOMOUS GAS LEAK DETECTION

The Sparrow is capable of detecting gas leaks using the on-board cameras from a distance of up to 100m (300ft). The system notifies the operator and provides live video stream from the Sparrow to manage the situation.



WATERPROOF

The Sparrow is an industrial-grade, weatherproof drone capable of operating in heavy rain, snow and dust conditions.

PERCEPTOCORE™ – PROPRIETARY MODULE

The PerceptoCore™ is the heart of the autonomous Sparrow drone. Combined with powerful Percepto technologies, the PerceptoCore guides the Sparrow to safely conduct any mission and return to the Percepto Base with zero human intervention.

DAY AND NIGHT (THERMAL) VIDEO STREAMING

The Sparrow's standard payload is equipped with a dual camera set including a high resolution day camera and a thermal camera. This enables the Sparrow to operate 24/7 with no need for payload switching.

PHYSICAL CONNECTION FOR FAST CHARGING & DATA TRANSFER

The Sparrow physically connects with the Percepto Base through a serial connector mounted on the drone's leg. This enables fast charging, fast paced data transfer, and physical pre and post flight checks for assessing system health.

SPARROW AUTONOMOUS INDUSTRIAL DRONE

The Sparrow is a high performance, robust drone designed to conduct security, safety and inspection missions at industrial sites. The Sparrow is stationed on-site and is manufactured to withstand harsh weather conditions to enable year-round operations. The robust design and standard payload allow the Sparrow to be deployed on any mission 24/7 with zero human intervention.

Using cutting-edge technologies, Percepto delivers a powerful autonomous aerial robot completing complex missions around the clock.

SPARROW SPECIFICATIONS



FLIGHT TIME: Up to 38 min, full payload



CHARGING TIME: Up to 40 min



MAXIMUM FLYING RANGE: 5 km [3 mi], point-to-point communication



MAXIMUM FLYING RANGE (LTE): Unlimited



MAXIMUM ALTITUDE (REGULATED): 130 m [400 ft]



MAXIMUM SPEED: 75 KpH/46 MpH/ 40 Knots



MAXIMUM TAKE-OFF*WEIGHT: 10 kg [22 lbs]



WEIGHT (INCLUDING STANDARD PAYLOAD): 8.5 Kg [19 lbs]



MATERIAL: Carbon fiber composite



DIMENSIONS (PROPELLER TIP; DIAGONAL): 1062 mm [42 in]



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