

SWISSDRONES 

SwissDrones is a Swiss aviation company specialized in development, manufacturing, and operation of long-range unmanned helicopter systems for commercial and public safety applications.

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swissdrones.com



SWISSDRONES 

Enabling Unmanned Aerial Intelligence

MODEL SD0 50 V3

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Model: SDO 50 V3

MAXIMUM TAKE OFF WEIGHT	87 kg
DRY OPERATING MASS	53.8 kg
USEFUL LOAD	up to 33.2 kg (including fuel)
MAX RANGE	216 km (subject to continuous communication coverage)
MAX SPEED	49 KTAS (90 km/h)
CRUISE SPEED	39 KTAS (72 km/h)
MAX ALTITUDE	10,000 ft AMSL (3,048m)
MAX ENDURANCE	3h 02min (full fuel, no additional payload)
WIND RESISTANCE	21.6 KTAS (40 km/h)
ENGINE	Single shaft-turbine
FUEL TYPE	JET A1
FUEL CONSUMPTION	12.5 l/hour (ISA conditions)
EASA APPROVAL LEVEL	SAIL II

Key Features



Useful load up to 33.2 kg (inc fuel)



Autonomy up to 3 hours (long-range BVLOS)



Small operational footprint – 2 person crew



95% CO₂ reduction vs. use of manned aircraft



70% operational cost savings vs. use of manned aircraft



Flexible integration of sensors & camera systems



Product Description

The SDO 50 V3 is a unique twin-rotor VTOL aircraft designed as a cost-efficient, low-emission alternative to manned helicopters. It enables safe operations in conditions where manned flights are risky or not feasible, such as poor weather, darkness, or hostile environments. Supporting missions like infrastructure inspection, aerial surveillance, or search & rescue, it is versatile, rapidly deployable, and compatible with multiple payloads. With our expertise in securing BVLOS approvals worldwide, we help customers unlock new operational possibilities with confidence.

Performance Table

USEFUL PAYLOAD (kg)	FUEL ONBOARD (L)	MAX RANGE (km)	MAX ENDURANCE (H:MM)
5	33.8	188	2:37
10	27.7	151	2:06
15	21.5	115	1:36
20	15.4	79	1:06

Applications

Inspection & Monitoring

Ongoing inspections of critical infrastructure such as high-voltage power lines, gas & oil pipelines and other far-stretched assets are critical for their uninterrupted operation and security. We offer cost-effective unmanned solutions using market-leading cameras, sensors and software to address customer-specific needs for aerial data gathering and processing.



Aerial Surveillance

Unparalleled flexibility and efficiency, allowing for individual payload configurations including stabilized EO/IR cameras and missions under difficult or dangerous circumstances (e.g., bad weather, darkness, flying over hostile or otherwise unsafe areas) when manned operations are not feasible.

Search & Rescue

Agile support of SAR missions using specific camera systems and sensors to locate missing people in inaccessible or hazardous areas (land or water), also in adverse weather conditions and at night. Once target persons are located, emergency gear such as survival kits, medical devices, food, rafts can be airlifted and dropped to support their recovery and rescue.

