



SPECIFICATIONS

FLIGHT PERFORMANCE

Flight Time	55 minutes
Range	60 km
Cruise Speed	40 kt (74 km/h)

PAYLOAD

Maximum Payload Weight	1.5 kg
Payload Volume	200 x 275 x 135 mm (L x W x H)
Cargo Module	Default
Medical Payload	Insulated for cooled transport
First Response Payload	Nighthawk 2

DIMENSIONS

Wingspan	2400 mm
Length	1300 mm
Height	500 mm
Transport Case Dimensions	2000 x 600 x 600 mm

WEIGHT

Maximum Takeoff Weight (MTOW)	12 kg
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POWER

Battery Type	Lithium Polymer (LiPo)
Cells	6S
Battery Capacity	30.000 mAh

SAFETY & COMPLIANCE

Features	Redundant comms link independent of range and quadchute
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OPERATING CONDITIONS

Maximum Wind Speed (Cruise)	16 kt (30 km/h)
Water Resistance	Light Rain
Temperature Range	0° C / +40° C

OPERATIONS

Mission Planning	Avy Mission Planner
Autopilot	Based on PX4
Flight Mode	Autonomous mission or manual mode
Communication Type	Primary LTE - Secondary link RF - Satcom opt.
Communication Range	Unlimited Range
Safety Backup System	Quadchute
Transponder	ADS-B IN (ADS-B IN-OUT optional)

ORGANISATION

Year founded:	2016	Licenses:	ROC OA
Employees:	35		EVLOS in CTR
Headquarter:	Amsterdam		Pilots: RPA-L A+H
Partnerships:	Auterion	Grants & Awards:	EIC accelerator
	Iris Automation		ESA BIC
	European Space Agency		Blue Tulip Awards
	TU Delft		Lake Kivu Safety Award

TRACK RECORD

Produced

17

Flighthours

670

Countries flown

9

MISSION REPORT

Medical Drone Service

Avy is the technology partner of the Medical Drone Service (MDS), a consortium consisting of ANWB MAA, PostNL, Sanquin and Erasmus MC. We acknowledge the challenges of getting medical goods to patients on time now that roads are getting more congested and medicine more centrally distributed. The MDS will explore how the Avy Aera can be used for urban healthcare logistics.

The medical drone and organisation became BVLOS compliant and certified from the Dutch CAA in 2019. We achieved compliance by proving that operations have mitigated the risks through procedures and redundancy and fail-safe measures integrated into the aircraft design, ensuring reliability and safety when performing BVLOS flights in European airspace.

WeRobotics

With Avy's mission focused on doing good and making an impact, we became the technology partner of WeRobotics and FlyingLabs. We share the same values and vision of commitment to localization and building capacity for those who have difficulties accessing the healthcare they need, due to infrastructural and geographical challenges.

Together we explore how the Avy Aera can contribute to last mile delivery of healthcare commodities, by (i) setting up operations, (ii) training a local team and (iii) handing over technology, so that the local team is empowered to continue medical deliveries with drones independently.

Lake Kivu Challenge

Avy took part in the African Drone Forum 2020, a stakeholder platform to advance equitable and safe development of drone economies within Africa. We were one of the VTOL drone finalists at the Lake Kivu Challenge, flying in the emergency package competition. Delivering a cold chain payload to a remote island in Lake Kivu - 20km from mainland and flying back without recharging the battery.

Avy was put to the test as an operator over 3 weeks of scrutineering, demonstrations, test flights and competitions. We successfully proved to be faster than delivery by boat: 11mins vs. 45mins.

Should you have any questions, please do not hesitate to contact us: hello@avy.eu