

DIODON HP30 2.2 SYSTEM DATASHEET

DIODON HP30 DRONE		
Max. take-off weight	1995 g	
Drone weight (w/ battery)	1200 g	
Max. range	2 nautical miles 3,6 km	
Max. flight time	30 minutes	
Max horizontal speed	28 knots 14,4 m/s 52 km/h	
Max vertical speed	3 m/s	
Max. wind resistance	25 knots 12,9 m/s 46 km/h	
IP	Equivalent IP56 (Resistant to temporary submersion)	
Semi-rigid structure	Yes	
Positive buoyancy	Yes	
Automatic seaflip function	Yes, up to sea state 4	
Max. altitude	2200 m AMSL (Above Mean Sea Level)	
Acoustics at 1 m	72 dB	
Deployment time	~60 seconds	
Operating temperatures	-10°C to +40°C	
Folded dimensions	240 x 380 x 120 mm	
Unfolded dimensions (flight configuration)	Foldable semi-rigid structure and antennas 500 x 600 x 200 mm	
Geofence	Horizontal and vertical geofence configurable by the operator in GPS No No-Fly Zone (NFZ)	
Encryption	AES 256	
Images recording	No images stored on the drone. All images are recorded on the ground control station	
Data recording	Configurable recording of GPS coordinates	
Port	ODU AMC HD (connexion)	
Numeric link	Standard frequency	2.2 GHz Channel configurable manually
	Emission power	Configurable: 100mW / 500 mW / 2000 mW
	Transmission format	H.265
	Certification	NDAA compliant
	Component manufacturing	Made in the USA/Singapore (ITAR-free)
Horizontal GPS precision	2,5 m	
Satellites	GPS, GALILEO & GLONASS	
Embarked avionics	Altimeter, internal barometer, magnetometer, autopilot	
Deployment / recovery	Deployment & recovery from the water by hand, with a navy hook and on a mobile deck of a ship in 3 axes. Return-To-Launch (RTL): Return to recorded launch point.	
Automatic return modes	Return-To-Pilot (RTP): Dynamic return to last known pilot position	
	Return-To-Coordinates (RTC): Return to a set point	
	Return-To-Home (RTH): Return to home point	
Failsafes	Radio, battery	
Aerotransportable	Yes	
Payload	2 sensors: 1 electro-optical & 1 thermal	
Electro-optical sensor	Sensor	1/3.06"
	Resolution	13 MP
	Horizontal Field Of View	28°
	Digital zoom	7x
	Real-time video	1280x720 (HD)
	Video format	.ts / .mp4 (H.264)

Thermal sensor		Recording & broadcasting from the controller.
	Picture resolution	1280x720 (HD)
	Picture format	.jpeg
	Manufacturing	Made in Austria
	Sensor	FLIR BOSON 640
	Resolution	640x512
	Horizontal Field Of View	32°
	Sensibility	<40 mK
	Refreshment rate	60 Hz; 30 Hz in execution
	Thermal detection	Uncooled Microbolomètre VOx
Payload management	Thermal range	LWIR: 7,5 µm to 13,5 µm .ts / .mp4 (H.264)
	Video format	Recording & broadcasting from the controller.
	Picture format	.jpeg
	Component manufacturing	Made in the USA (ITAR-free)
	Stabilisation	2-axis mechanically stabilised optronics sensors (roll & pitch). 3-axis numeric stabilisation (roll, pitch & yaw)
	Tilt angles	+40° to -90°

DIODON HP30 DRONE BATTERY

Type	Lithium-Ion (10S1P)
Weight	795 g
IP	Equivalent IP56 (resistant to temporary submersion)
Placement	External waterproof battery exchangeable without tools while wearing gloves.
Autonomy	30 minutes
Capacity	4000 mAh, 144 Wh
Tension	36V
Charging port	Specific, ODU
Charging time	120 minutes with standard charger
Number of cycles	>300
Certification	UN38.3
Aerotransportable	Yes
Manufacturing	Made in France

DIODON GCS Mk.2 GROUND CONTROL STATION

Dimensions	350 x 100 x 70 mm <i>Foldable antennas</i>	
Numeric link	Standard frequency	2.2 GHz Channel configurable manually
	Emission power	Configurable: 100mW / 500 mW / 2000 mW
	Transmission format	H.265
	Certification	NDAA compliant
	Component manufacturing	Made in the USA/Singapore (ITAR-free)
Max. communication range	3 nautical miles 5,5 km	
IP	Equivalent IP67 (Resistant to submersion at 1 m for 30 minutes)	
Physical interface	2 x 2-axis Hall-effect joysticks, 8 x Momentary press buttons, 1 x 3-position selector	
Integrated screen	Yes	
Screen interface	Touch screen (one touch)	
Screen size	10"	

Screen resolution	1024 x 600
Operating temperatures	-10°C to +40°C
Ports	USB-3 (connexion), Ethernet RJ-45 (broadcasting), SOURIAU (charge)
Data storage capacity	40 Go
Piloting interface	DIODON HYSTRIX v23.1 (Linux)
Satellites	GPS, GALILEO, GLONASS
Horizontal GPS precision	2,5 m
Mass	2500 g
Battery type	Lithium-Ion (3S2P)
Autonomy	240 minutes / 150 minutes in full use
Capacity	6200mAh, 67 Wh
Tension	10,8V
Charging time	200 minutes for 240 minutes of use. Controller usable while in charge
Aerotransportable	Yes
Manufacturing	Made in France

*Characteristics may vary upon configuration of the drone, usage, state of the battery, environment and operational conditions. They may be modified without notice by manufacturer to improve performances, reliability, design, or any other reason.