

“HERCULES” Series

UAS System Specifications



Designed by



Locked-In-Load



Handcrafted in **USA**

Challenger Aerospace Systems

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HERCULES-H4⁺



HERCULES-H4



HERCULES-H6



HERCULES-H8

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The Hercules series of professional drones is handcrafted in the USA. All Hercules series drone come equipped with dual GPS systems and the **Challenger Aerospace Autopilot** with secure down link. Standard is our, "**Locked-in-Load Secure Payload System™**". Quick interchangeable mount system to change the function of the drone easily, simply by slide and go.

The airframes are made of lightweight materials, such as carbon fiber and aircraft-grade aluminum. It is sealed tightly to protect the power system from fire, water and dust which makes the drone meet the demand of three proofing: **Fireproof, Rainproof and Dustproof**. They are built to last!

SPECIFICATIONS

	H-4	H-4^{Plus}	H-6	H-8
Empty weight with Batteries:	10.12 Kg	19 Kg	12.15 Kg	16.15 Kg
Max takeoff weight:	21.46 Kg	32 Kg	30.29 Kg	52.43 Kg
Propulsion:	4 x CA-KU 200	8 x CA-KU 200	6 x CA-KU 200	8 x CA-KU 200
Removable Battery:	2 x 2200 mAH	2 x 2200 mAH	2 x 2200 mAH	4 x 2200 mAH
Challenger Auto Pilot:	✓	✓	✓	✓

PERFORMANCE

Flight Time	60 min	60 min	75 min	120 min
Cruise Speed	18 m/s	18 m/s	20 m/s	24 m/s
MAX Speed ASCENT	5 m/s	5 m/s	5 m/s	8 m/s
MAX Speed DESCENT	3 m/s	3 m/s	3 m/s	4 m/s
Service Ceiling	4500 m	4500 m	4500 m	4500 m
SLIDE and GO Mount	Standard	Standard	Standard	Standard
Payload	11.34 Kg (25Lbs)	18.14 Kg (40Lbs)	18.14 Kg (40Lbs)	36.3 Kg (80Lbs)

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CHALLENGER LOCKED-IN-LOAD SECURE™ PAYLOADS

- 1) Search light is designed to work in the rough environment and for various applications such as Power Utilities, Law Enforcement, Firefighting, Rescues Missions and Military.

Features:

- Up to 1000m long-distance control;
- Bundled with a wide-angle and high-definition camera with 45 degrees of adjustable pitch angle. PA speaker integrated plays a very important role in missions such as broadcasting over crowds, firefighting, earthquake rescue, police negotiation, and it is widely used by army, police force and homeland security.

- 2) Oblique Photography dome can adapt to any environment. The modular body is made of industrial grade PC material which makes it light weight and sturdy. The entire dome weighs only 2.2kg. It can withstand heat, water and ultraviolet and can adapt to the temperature change from -20°C to 100°C. We use professional Zeiss lens, and the total pixels of the camera is 120 million pixels. Its storage capacity is 320G.

- 3) Cartridge Launcher can load tear gas (38mm), smoke bombs, stun grenade, flashbang, dye bombs, dazzling bombs and so on. Each Cartridge Launcher can be loaded with three bullets and can be installed on the UAV quickly. With the embedded camera, the Cartridge Launcher can throw single or multiple projectiles to the target precisely.

- 4) Intelligent dropping system is specially engineered to be mounted on Challenger UAVs, and it can be remotely controlled, and the tightly built-in sensors can tell the payload weight in real time, thus it enables UAVs to provide different applications, such as power line stringing, payload delivery, firefighting and so on.

- 5) Gas detector, the application of UAV in environmental protection is mainly focused on two fields: investigation of the pollution range in a large area and evaluation of a landscape pattern. A UAV with the gas detector can hover over various locations, detect harmful gas and transmit the gas parameters back to the ground.
- Built-in CAN transmission is to increase the stability and reliability of data transmission.



CHALLENGER LOCKED-IN-LOAD SECURE™ PAYLOADS

- 6) **FLIR**, The ultimate drone thermal imaging solution is here. The new FLIR Duo Pro R combines a high resolution, radiometric thermal imager, 4K color camera, and a full suite of on-board, sensors to bring you the most powerful dual-sensor imaging solution in the world for small commercial drones. Capture actionable data around the clock with Duo Pro R.
- 7) **Z30 CAMERA HAS 30X OPTICAL ZOOM**. This camera features a 30x optical zoom, a major improvement over the 3.5x optical zoom of the Z3. Designed primarily for commercial application.

- 8) **10IE** is a 3-axis high stabilized gimbal with EO(electro-optical) and IR(infrared) sensors for drone inspection, surveillance, search and rescue applications.

The 10X zoom camera provides 1080P 60FPS full HD video streaming and up to 120X zoom capability, which will enable you to capture every detail in the air.

While the thermal camera allows you to detect targets in the night or low visible conditions and provides you with priceless information when you are carrying out missions like inspecting or monitoring objects.

High-performance 3-axis gimbal is developed based on FOC (field-oriented control) technology, which will give you crystal clear video footage.

- 9) The **Colibri2** is a dual EO-IR stabilized camera built for professionals needing a quality camera for day and night use. Weighing in at 180 grams [6.3 oz], the Colibri2 offers excellent image quality and sharpness to capture detailed imagery, such as license plates and faces.





HERCULES **x4** SERIES

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HERCULES+4

SERIES

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HERCULES **x6** SERIES

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HERCULES **x8** SERIES

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