

## 协氢(上海)新能源科技有限公司

HiTS (Shanghai) Hydrogen Power Technology Co., Ltd.



Committed to Become

# the World's Leading Provider of Hydrogen-Powered Drones & Air-Cooled Hydrogen Fuel Cell Systems

# **About HiTS**

Air-Cooled Hydrogen Fuel Cells / Hydrogen-Powered Drones / Hydrogen Production & Storage

HiTS is the original innovator to develop air-cooled hydrogen fuel cell systems and the first inventor of air-cooled hydrogen fuel cells for drones in China. HiTS holds a leading R&D foundation and numerous patents in the field of air-cooled hydrogen fuel cells. HiTS has three major business divisions: air-cooled hydrogen fuel cells, hydrogen-powered drones, and hydrogen production & storage. Additionally, HiTS has established a drone R&D center in Shenzhen, a fuel cell R&D center in Chizhou, and three manufacturing bases located in Chizhou, Zaozhuang, and Zhangjiagang.







# **Air-Cooled Hydrogen Fuel Cell Products**





The HiTS series is widely used across various product applications.

#### **Compared to Lithium Batteries, Hydrogen Fuel Cells Offer 6 Key Advantages**













Eco-

Long **Endurance** 

Cold Resistance

**Fast** Refueling

Light weight

Cost **Efficiency** 

Friendly

#### HiTS Series has been certified by:

ISO9001 Quality Management System

ISO14001 Environmental Management System

ISO45001 Occupational Health Management System

EU CE

Specifications

Model

**Application** 

Operating Temp.

Lifespan

Weight

Peak Power



HiTS-400

Two-Wheelers

-10 to 60°C 6000h

> 450g 435W

130km

Start-Up Time < 5s Standard Endurance

HiTS-1000

Two-Wheelers, Mobile **Power Supply** 

-10 to 60°C 6000h

> 900g 1120W

< 5s 280km

HiTS-3000

Sightseeing Vehicles, Drones

-40 to 50°C

6000h 2400a

3325W

< 5s 3 hours (for drones)

HiTS-5000

Drones

-40 to 50°C

6000h

3800g 5432W

< 5s

3 hours (for drones)



HiTS-10000

Drones

-40 to 50°C

6000h

8000g

11070W < 5s

3 hours (for drones)





Phoenix H25

Ultra-Long Endurance

Stable Flight Operation

Customizable

Transmission **Payloads** 

Range

Phoenix H25 hydrogen-powered drone boasts optimized power and strong system integration, adapting to various mission equipment and sensors. It features an open data interface and communication protocol for seamless integration and data exchange. It is widely used in land surveying, forest security, wind power inspection, and maritime law enforcement.

#### Product Specifications

Category	Parameters
Model	Quadcopter
Wheelbase	1640 mm
Hydrogen Fuel Cell	3.6 Kw
Hydrogen Tank	12 L @ 35MPa
Empty Weight	26 Kg
Max Payload	7 kg
Max Endurance	90 min
Max Flight Altitude	3000 m
Max Flight Speed	18 m/s
Max Climb Rate	3 m/s
Max Descent Rate	2 m/s
Wind Resistance	Level 6
Operating Temp.	-40°C to 50°C
Hovering Accuracy ((GNSS Enabled)	Horizontal: ±1.5m; Vertical: ±0.5m;
Unfolded Dimensions	1250×1300×680 mm (L×W×H)
Folded Dimensions	860×660×790 mm (L×W×H)
Mission Payload	Electro-Optical Pod / Loudspeaker / Searchlight, etc.



Land Surveying





Wind Power



Maritime Law Enforcement





#### Phoenix H25 (Extended Endurance Version)

**140min** 

Ultra-Long Endurance 40°C

Stable Flight

Operation

Customizable Payloads 50km

Transmission Range

Phoenix H25 hydrogen-powered drone boasts optimized power and strong system integration, adapting to various mission equipment and sensors. It features an open data interface and communication protocol for seamless integration and data exchange. It is widely used in land surveying, forest security, wind power inspection, and maritime law enforcement.

#### **Product Specifications**

Category	Parameters
Model	Quadcopter
Wheelbase	1650 mm
Hydrogen Fuel Cell	3.6 Kw
Hydrogen Tank	19 L @ 35MPa
Empty Weight	28 Kgs
Max Payload	5 kg
Max Endurance	140 min
Max Flight Altitude	3000 m
Max Flight Speed	18 m/s
Max Climb Rate	3 m/s
Max Descent Rate	2 m/s
Wind Resistance	Level 6
Operating Temp.	-40°C to 50°C
Hovering Accuracy ((GNSS Enabled)	Horizontal: ±1.5m; Vertical: ±0.5m;
Unfolded Dimensions	1250×1330×720 mm (L×W×H)
Folded Dimensions	930×670×790 mm (L×W×H)
Mission Payload	Electro-Optical Pod / Loudspeaker / Searchlight, etc.



Land Surveying



Forest Security



Wind Power Inspection



Maritime Law Enforcement





Atlas H100

2h

Ultra-Long

Endurance

**-40°C**Stable Flight

Operation

4UK§

Customizable Payloads

**50km** 

Transmission Range

Altas H100 hydrogen-powered drone features advanced technology, strong load capacity, stable flight performance, and high-precision positioning. Its customizable payload system meets diverse application needs, making it ideal for curtain wall/solar panel cleaning, material hoisting, and forest firefighting.

#### **Product Specifications**

Category	Parameters
Model	Quadcopter
Wheelbase	2525 mm
Hydrogen Fuel Cell	7 kW ×2
Hydrogen Tank	19 L ×2 @ 35 MPa
Empty Weight	76 kg
Max Payload	40 kg (Customized Version: 60 kg)
Max Endurance	2 h
Max Flight Altitude	3000 m
Max Flight Speed	18 m/s
Max Climb Rate	3 m/s
Max Descent Rate	2 m/s
Wind Resistance	Level 6
Operating Temp.	-40°C to 50°C
Hovering Accuracy ((GNSS Enabled)	Horizontal: ±1.5m; Vertical: ±0.5m;
Unfolded Dimensions	1890×2050×1200 mm (L×W×H)
Folded Dimensions	1240×1020×1280 mm (L×W×H)
Mission Payload	Cleaning Module / Hoisting Module / Logistics Box, etc.



Curtain Wall Cleaning



Solar Panel Cleaning



Material Hoisting



Forest Firefighting





COMING SOON



Atlas H200

Atlas H400













Model	Fuel Cell Power	Max Takeoff Weight	Payload Capacity	Endurance	Flight Altitude	Operating Temperature	Data Collection	Hydrogen Tank Pressure	Wheelbase	Propulsion
Atlas H200	28 kW	200 kg	80 kg	2 h	3000 m	-40°C to 50°C	Supports multi- sensor data collection system	35 MPa	3500 mm	6-Axis, 6- Rotor
Atlas H400	56 kW	400 kg	200 kg	2 h	3000 m	-40°C to 50°C	Supports multi- sensor data collection system	35 MPa	4200 mm	6-Axis, 12- Rotor





### Hydrogen VTOL HF150

# Modular Design

Quick-release, tool-free, fast deployment

# High Safety & Efficiency

Redundant multisensor technology / full autonomy flight

# Versatile Payloads

30 kg capacity, compatible with various mission equipment

# Superior Flight Performance

Flight control, navigation, autoreturn on data link failure

Hydrogen VTOL HF150 drone features long flight time, high speed, stable structure, and high reliability. It supports a 30 kg payload with various optional mission equipment, suitable for high-altitude continuous flight. Ideal for logistics transportation, reconnaissance & Surveillance, and maritime patrol missions.

#### **Product Specifications**

Category	Parameters		
Model	VTOL Fixed-Wing		
Wingspan	6300 mm		
Dimensions	3300×6300×1200 mm (L×W×H)		
Hydrogen Fuel Cell	3.6 kW *2		
Hydrogen Tank	40 L ×2 @ 35 MPa (Standard)		
Empty Weight	120 kg		
Max Payload	30 kg		
Endurance	>6 h		
Max Flight Altitude	3000 m		
Communication Range	30 km (Optional 50 km / 100 km Communication Link)		
Max Flight Speed	160 km/h		
Cruise Speed	110-125 km/h		
Max Climb Rate	5 m/s		
Max Descent Rate	3 m/s		
Wind Resistance	Level 6		
Operating Temperature	-40°C~50°C		
Positioning Accuracy (GNSS)	Horizontal: ±1.5 m, Vertical: ±0.5 m		
Mission Payloads	EO/IR Gimbal, Cargo Pods, etc.		



Logistics Transportation



Reconnaissance & Surveillance



Maritime Patrol







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Iris L2 Series





2T

Iris L2 series drones feature a streamlined, compact, and portable design with powerful performance. Equipped with a robust power system and comprehensive industry applications, they offer autonomous flight with precise obstacle detection and automatic return-to-home when signals weaken or are lost. Their excellent obstacle avoidance ensures a reliable flight experience, adapting flexibly to complex environments and various operational needs.

#### **Product Specifications**

Category	Parameters
Wheelbase	486 mm
Weight / Max Takeoff Weight	1750 g / 2300 g
Max Flight Time	45 min
Max Ascent / Descent Speed	8 m/s; 6 m/s
Wind Resistance	Level 6
Max Flight Altitude	6000 m
Communication Range	15km (FCC); 8km (CE/SRRC/MIC)
Wide-Angle Visible Light Camera	1/1.49" CMOS, 50 MP
Telephoto Visible Light Camera	1/2" CMOS, 48 MP Optical Zoom: 10x; Hybrid Zoom: 160x
Infrared Camera (L2T)	640×512 @30fps
Hovering Accuracy (RTK)	Vertical: ±1.0 cm + 1 ppm Horizontal: ± 1cm + 1 ppm



Park Patrol



Power Line Inspection



**Event Security** 



**Aerial Inspection** 





Iris L7

# 63min Level 7 3kg

Long Endurance Wind Resistance Max

Payload

Transmission Range

**15km** 

Iris L7 is a newly launched lightweight industrial flagship drone developed by HiTS. It integrates multiple cutting-edge drone system technologies, making significant breakthroughs in stability, autonomy, and intelligence. Equipped with advanced multi-drone collaborative networking technology, it enables seamless smart communication between multiple drones and control devices, significantly enhancing operational efficiency.

#### **Product Specifications**

Category	Parameters
Model	Quadcopter
Wheelbase	725 mm
Max Takeoff Weight	7 kg
Max Payload	3 kg
Max Flight Time	63 min
Communication Range	15 km
Max Flight Altitude	5000 m
Max Flight Speed	23 m/s
Max Climb Rate	4 m/s
Max Descent Rate	3 m/s
Wind Resistance	Level 7
Protection Level	IP45
Operating Temperature	-20°C to 50°C
Positioning Accuracy (GNSS)	Horizontal: ±1.5 m, Vertical: ±0.5 m
Positioning Accuracy (Visual)	Horizontal: ±0.3 m, Vertical: ±0.3 m
Obstacle Avoidance System	Omnidirectional Obstacle Avoidance
Unfolded Dimensions (Without Propellers)	549×592×424 mm (L×W×H))
Folded Dimensions (With Landing Gear)	347×367×424 mm (L×W×H)



Smart City



Power Line Inspection



**Event Security** 



Forest Security





Phoenix L25

45min -20°C

Long Endurance °C 10kg

Stable Flight

Operation

Customizable Payloads

Transmission Range

Phoenix L25 drone has an optimized power system with strong integration capabilities, supporting various mission equipment and sensors. It features open data interfaces and communication protocols for easy integration and data exchange. Widely used in land surveying, forest security, wind power inspection, and maritime patrol.

#### **Product Specifications**

Category	Parameters
Model	Quadcopter
Wheelbase	1640 mm
Power Battery	12S 22Ah (Standard)
Max Takeoff Weight	25 kg
Max Payload	10 kg
Max Flight Time	45 min
Communication Range	15 km (Optional 50 km Link)
Max Flight Altitude	3000 m
Max Flight Speed	18 m/s
Max Climb Rate	3 m/s
Max Descent Rate	2 m/s
Wind Resistance	Level 6
Operating Temperature	-20°C to 50°C
Hovering Accuracy (GNSS Enabled)	Horizontal: ±1.5 m; Vertical: ±0.5 m
Unfolded Dimensions	1250×1300×680 mm (L×W×H)
Folded Dimensions	860×660×790 mm (L×W×H)
Mission Payloads	EO/IR Gimbal, Loudspeaker, Searchlight, etc.

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Land Surveying



**Forest Security** 



Wind Power Inspection



Maritime Patrol





Atlas L100

30min -20°C

Long Endurance Stable Flight Operation **6UKg** Customizable

ustomizable Payloads Transmission Range

Atlas L100 drone uses advanced technology and materials, offering strong load capacity, stable flight performance, and high-precision positioning. Its customizable payload system meets diverse application needs. Widely used in curtain wall/solar panel cleaning, logistics hoisting, and forest firefighting.

#### **Product Specifications**

Category	Parameters
Model	Quadcopter
Wheelbase	2310 mm
Power Battery	18S 30Ah
Max Takeoff Weight	100 kg
Max Payload	60 kg (Dual-Battery Version: 46 kg)
Max Flight Time	30 min (Customizable Dual-Battery Version: 45 min)
Communication Range	15 km (Optional 50 km Link)
Max Flight Altitude	3000 m
Max Flight Speed	18 m/s
Max Climb Rate	3 m/s
Max Descent Rate	2 m/s
Wind Resistance	Level 6
Operating Temperature	-20°C to 50°C
Hovering Accuracy (GNSS Enabled)	Horizontal: ±1.5 m; Vertical: ±0.5 m
Unfolded Dimensions	1740×1870×820 mm (L×W×H)
Folded Dimensions	1150×870×950 mm (L×W×H)
Mission Payloads	Cleaning Module, Hoisting Module, Logistics Box, etc.





Curtain Wall Cleaning



Solar Panel Cleaning



Material Hoisting



Forest Firefighting





#### VTOL Fixed-Wing LF12

#### Modular Design

Quick-release, tool-free, fast deployment

# **Enhanced Performance**

High-performance control, EMI and vibration resistant

#### High Reliability

Excellent aerodynamics, low noise, easy maintenance

# **Fully Automatic**

One-key takeoff/landi ng, safe and convenient

VTOL (Electric Vertical Takeoff and Landing) Fixed-Wing LF12 adopts a modular design and integrated operating system with fully automatic one-key takeoff and landing. It simplifies the user operation process, suitable for single-person operations. Therefore, it can be applied to land surveying, search & reconnaissance, maritime patrol, and power line inspection.

#### **Product Specifications**

Category	Parameters
Model	VTOL Fixed-Wing
Wingspan	2500 mm
Fuselage Length	1450 mm
Power Source	Lithium Battery
Takeoff and Landing Method	Vertical Take-Off and Landing (VTOL)
Max Takeoff Weight	12 kg
Max Payload	2 kg
Max Endurance	>2 h
Max Flight Altitude	3000 m
Communication Range	15 km (Optional 50 km Link)
Flight Speed	65 - 100 km/h
Economic Cruise Speed	70 - 90 km/h
Max Climb Rate	5 m/s
Max Descent Rate	3 m/s
Wind Resistance	Level 6
Operating Temperature	-20°C to 50°C
Positioning Accuracy (GNSS)	Horizontal: ±1.5m; Vertical: ±0.5m;
Mission Payloads	EO/IR Gimbal, Mapping Equipment, etc.





Land Surveying



Search & Reconnaissance



Maritime Patrol



Power Line Inspection





#### VTOL Fixed-Wing LF30

#### Modular Design

Quick-release, tool-free, fast deployment

# High Safety & Efficiency

Redundant multisensor technology / full autonomy flight

# Versatile Payloads

10 kg capacity, compatible with various mission equipment

# Superior Flight Performance

Flight control, navigation, autoreturn on data link failure

VTOL LF30 drone features long flight time, high speed, stable structure, and high reliability. It supports a 10 kg payload with various optional mission equipment, suitable for high-altitude continuous flight. Therefore, it can be applied to land surveying, search & reconnaissance, maritime patrol, and power line inspection.

#### **Product Specifications**

Category	Parameters
Model	VTOL Fixed-Wing
Wingspan	3600 mm
Fuselage Length	1820 mm
Power Source	Lithium Battery
Takeoff and Landing Method	Vertical Take-Off and Landing (VTOL)
Max Takeoff Weight	30 kg
Max Payload	10 kg
Max Endurance	>2 h
Max Flight Altitude	3000 m
Communication Range	15 km (Optional 50 km Link)
Flight Speed	80 - 120 km/h
Economic Cruise Speed	80 - 95 km/h
Max Climb Rate	5 m/s
Max Descent Rate	3 m/s
Wind Resistance	Level 6
Operating Temperature	-20°C to 50°C
Positioning Accuracy (GNSS)	Horizontal: ±1.5m; Vertical: ±0.5m;
Mission Payloads	EO/IR Gimbal, Mapping Equipment, etc.





Land Surveying



Search & Reconnaissance



Maritime Patrol



Power Line Inspection





#### Racing Drone C7

# High-Speed & Agile

Max flight speed up to 215 km/h

# Compact Design

Highly modular design, light weight structure

#### Multiple Flight Modes

Supports sport, stabilization, and altitude hold

#### Modular Components

Expandable with various accessories

The racing drone features high speed, agility, a compact frame, simple structure, and low cost. After modification, pilots can operate it using custom VR goggles, providing real-time situational awareness and responsive control. It is widely used in aerial cinematography, racing competitions, and integrated recon and strike.

#### **Product Specifications**

Category	Parameters	
Model	Quadcopter	
Frame Material	Carbon Fiber + Aerospace Aluminum	
Power Source	Lithium Battery	
Battery Pack	6S 6500mAh	
Max Payload	2 kg	
Empty Weight (Excluding Battery)	0.42 kg	
Max Endurance	30 min	
Max Flight Altitude	5000 m	
Max Flight Speed	215 km/h	
Video Transmission Frequency	5.8 GHz	
Video Transmission Range	3 km to 5 km	
Video Transmission Latency	20 ms	
Adjustable Transmission Power	25 mW – 2500 mW	
Wind Resistance	Level 6	
Operating Temperature	-20°C to 50°C	





Aerial Cinematography



Racing Competitions



Integrated Recon and Strike





#### Racing Drone C10

# High-Speed & Agile

Max flight speed up to 186 km/h

# Compact Design

Highly modular design, light weight structure

#### Multiple Flight Modes

Supports sport, stabilization, and altitude hold

#### Modular Components

Expandable with various accessories

The racing drone features high speed, agility, a compact frame, simple structure, and low cost. After modification, pilots can operate it using custom VR goggles, providing real-time situational awareness and responsive control. It is widely used in aerial cinematography, racing competitions, and integrated recon and strike.

#### **Product Specifications**

Category	Parameters
	Quadcopter
Frame Material	Carbon Fiber + Aerospace Aluminum
Power Source	Lithium Battery
Battery Pack	6S 8000mAh
Max Payload	3.5 kg
Empty Weight (Excluding Battery)	0.78 kg
Max Endurance	30 min
Max Flight Altitude	5000 m
Max Flight Speed	186 km/h
Video Transmission Frequency	5.8 GHz
Video Transmission Range	3 km to 5 km
Video Transmission Latency	20 ms
Adjustable Transmission Power	25 mW – 2500 mW
Wind Resistance	Level 6
Operating Temperature	-20°C to 50°C





Aerial Cinematography



Racing Competitions



Integrated Recon and Strike

# Payloads & Functional Attachments



















Gimbal Camera

**Dual-Lens Gimbal** 

Quad-Lens Gimbal

LiDAR

Firefighting Module

dule Cleaning Module

Drop Module

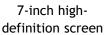
**Hoisting Module** 

#### **Payload Introduction**

To support applications like inspection, logistics transportation, emergency rescue, and firefighting, HiTS has developed various practical mounting devices. The rich gimbal control interfaces are compatible with many third-party products. Customized development can be made to meet customers' specific needs, offering integrated, full-scenario solutions.









Qualcomm 8-core CPU 4G RAM, 64G storage



Dual controls remote relay



15KM 1080P dual-channel image transmission

## **Handheld Ground Station**

The new generation of industrial-grade handheld ground station features a 7-inch high-definition, high-brightness display, a dual-channel full-HD digital transmission system expandable up to 50 km, and a high-end Android configuration with 4GB RAM and 64GB storage. Additionally, it supports optional dual-control mode and remote relay control. With rich interfaces and powerful expandability, it can be widely applied in UAVs, unmanned vehicles, unmanned ships, and intelligent robotics.



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