



S400E



FLAGSHIP WORKPIECE, BORN FOR HIGH INDUSTRIAL EFFICIENCY

Professional UAV Pioneer



Multi-machine Relay Networking



Millimeter Wave Radar Barrier Avoidance



58mins Max Flight Time



1K HD Infrared Camera



Portable & Compact



21TOPS Computing Power Camera

Contact:



Julia Cardoso

✉ julia.cardoso@altitudegeospatial.com

☎ +55 11 99845-0119

🇧🇷 São Paulo, Brasil

<http://altitudegeospatial.ca>

Nory Higuera

✉ nory.higuera@altitudegeospatial.com

☎ +57 300 330 5075

🇨🇴 Bogotá, Colombia

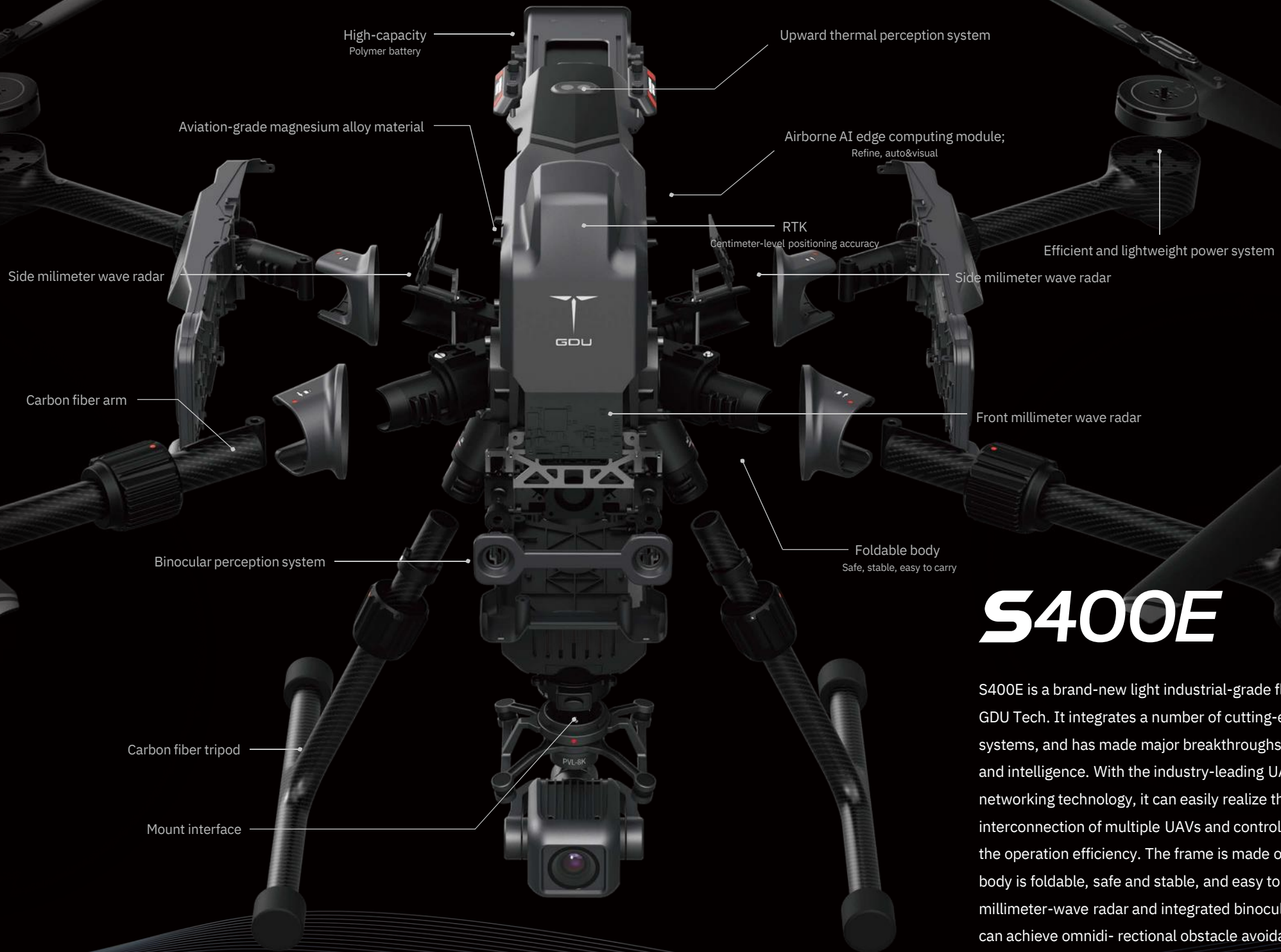
<http://altitudegeospatial.co>

58mins
Max Flight Time

3000g
Max Loading

5000m
Max Take-off
Altitude

12.5 m/
Max wind-resistance speed



S400E

S400E is a brand-new light industrial-grade flagship UAV launched by GDU Tech. It integrates a number of cutting-edge technologies of UAV systems, and has made major breakthroughs in stability, autonomy, and intelligence. With the industry-leading UAV cross-line-of-sight networking technology, it can easily realize the intelligent interconnection of multiple UAVs and control equipment, and double the operation efficiency. The frame is made of magnesium alloy, the body is foldable, safe and stable, and easy to carry. Equipped with millimeter-wave radar and integrated binocular perception system, it can achieve omnidirectional obstacle avoidance. At the same time, the on-board AI edge computing module ensures the refinement automation and visualization of the inspection process.



Multi-machine Relay Networking, Cross-barrier Communication

S400E UAV has industry-leading relay networking technology, support "One-Control -Two" (one remote controls two drones), "Two-Control-One" (two remote controls one drone) and "Star Networking" (multi-UAV linkage networking) modes. In the face of long-distance&obstacle crossing, such as mountains, buildings, and even areas without network, one piece of S400E drone is enough for signal relay, which can break through the operating boundaries of conventional drones and easily deal with complex terrain.



58mins Flight Life

S400E's 58mins long battery life brings more powerful working strength. Compared with traditional UAVs under performing the same amount of tasks, the number of battery swaps of S400 can be significantly reduced, effectively improving the efficiency of task execution.

16400 mAh

80_M
SENSITIVE
BARRIER AVOIDANCE

15_{KM}
HD VIDEO
TRANSMISSION



Professional & Powerful & Lightweight

With a super load capacity of 3kg, it can carry a variety of payloads, meet the professional operation needs of different industries such as utility, fire-fighting, environmental protection, law enforcement, and comprehensive social management. The professional-grade S400E with super powerful performance with a backpack size, which is light and convenient, and user-friendly in field operations.



Millimeter Wave Radar Perception, Day & Night Obstacle Avoidance, Cable Obstacle Avoidance

"Visual obstacle avoidance + millimeter wave radar" dual obstacle avoidance fusion technology endows the S400E with day and night omnidirectional environmental perception and obstacle avoidance capabilities.





21T computing power quadra-sensor camera

It has 21TOPS computing power, which greatly improves the computing speed and accuracy of target recognition, motion analysis, and image processing. It can be used for power defect recognition, human face recognition, motion detection, etc.



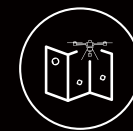
1K HD Infrared Camera

S400E is equipped with a new self-developed 1K infrared dual-sensor camera, with an effective infrared pixel of 1280*1024, the industry-leading "the eye of infrared", insight and perception of more details; dual-light fusion imaging, showing a clearer edge than single infrared and outline details.



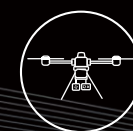


One Machine for Multiple Purposes, Speeding Up the "Sharing Economy" Era



Multi-scenarios Application

With the flexible applicability of UAVs, it can simultaneously cover application requirements of remote "regular inspection" and "detailed inspection", and share UAV models in different operating scenarios to maximize economic benefits.



Support dual mount

It provides dual gimbal interfaces, with a maximum load of 3kg. It can support two independent payloads for comprehensive operations at the same time, and can also cope with complex operation requirements.

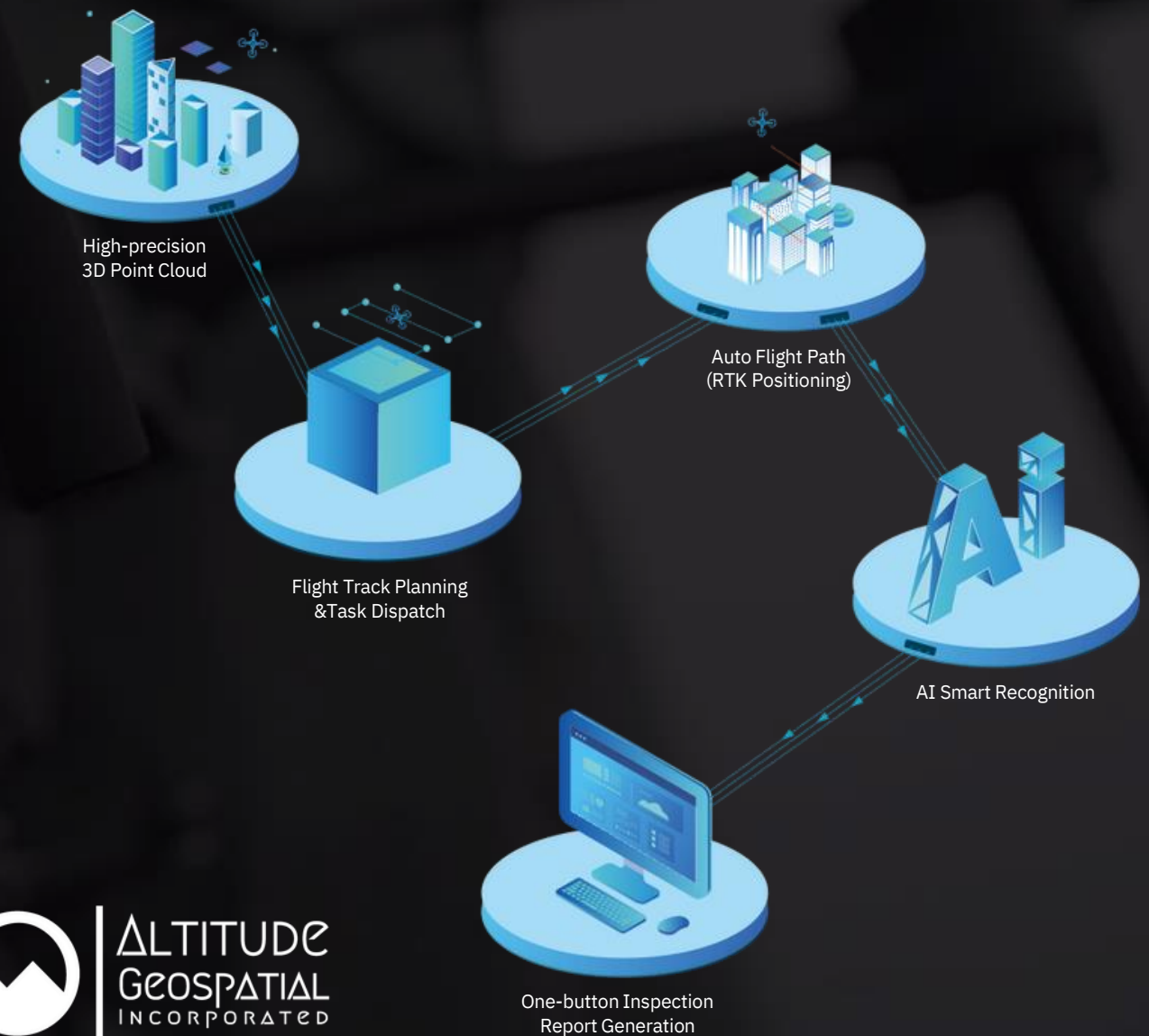
GDU Flight II

GDU Flight II App is the flight software for S400E, which integrates various professional functions, and easy to use. The flight planning function can be used to set the route, control the drone to operate autonomously, simplify the work process and improve the work efficiency.



Work Flow

Based on a variety of leading technologies such as stable flight control, AI edge computing module, highly sensitive perception system, RTK high-precision positioning, combined with 3D point cloud, automatic route construction, thermal imaging detection and other advantageous functions, the system efficiently completes firefighting, oil pipeline, automated inspection operations such as autonomous flight, AI intelligent identification, and one-click report generation in the fields of electric power and environmental protection.



UAV Management Platform

It integrates information aggregation, information processing and synchronization functions. GDU Flight II can transfer data to the cloud, data exchange, and expand the capabilities of UAV.

- Cloud deployment access anytime, anywhere
- Data cloud synchronization, one-click live-streaming Open registration, share information among team members
- One-stop operation and maintenance monitoring, real-time control of drone operation





Compatible Payloads



PQL01 quadra-sensor camera

It perfectly combined wide-angle, visible light, zoom, infrared thermal camera and the long-distance precise laser camera, and the intelligent linkage and complementary advantages between multiple types of sensors provide more power for the industrial drones, break the visual limitations, and not missing area and details. A UAV can be applicable for multiple applications.

Zoom camera Thermal camera
Temperature measurement mode
Temperature measurement range
Wide-angle camera Laser ranging
Weight Dimensions Stabilization accuracy

Photo resolution: 48mega pixels, 18X optical zoom
Resolution: 640*512; 13mm Fixed focus athermalization
Full®ional -40°C~150°C(high gain) -40°C~550°C(low gain)
Photo resolution: 48mega pixels Measuring range
5~1500m ; Wavelength 905nm ≤930g
153.5mm*163mm*179.7mm ≤0.005°



PDL-1K dual-sensor camera

It combines 1K infrared, 1-inch CMOS visible light camera, resolution is up to 48mega pixel, and can catch clear picture in day or night, and is widely used.

Thermal camera Optical camera
Temperature measurement mode
Temperature measurement range
Temperature measurement accuracy
Weight Dimensions

Photo resolution: 1280*1024
Photo resolution: 48mega pixels
Full®ional -
20°C~150°C/0°C~550°C ±2°C
±2%(Max) ≤1200g
178mm*157.5mm*193.3mm



PDL-300 dual-sensor camera

The details of the shooting target can be caught clear, whether it is day or night. It can be used clearly at night, it meets industrial applications high standards on image quality and light weight.

Thermal camera Optical camera
Temperature measurement mode
Temperature measurement range
Temperature measurement accuracy
Weight Dimensions

Photo resolution: 640*512
Photo resolution: 48mega pixels
Full®ional -40°C~150°C/-
40°C~550°C ±2°C or ±2% (Max
) 388±5g
103.4mm*107.6mm*129.6mm



PVL-8K camera

It can easily take pictures up to 48mega pixels and video up to 4K@30fps, and perfectly applicable in safety, forestry, transportation, power grid.

Camera
Sensor size
Focal distance
FOV Weight
Dimensions

Photo resolution: 48mega pixels
1 inch 12.8mm FOV63.4° <
290g 95mm*89mm*102mm

LiDar

Oblique camera

Megaphone

Floodlight

Gas detector



Application



Power Inspection



Enviromental Detection



Police Law-enforcement



Fire-fighting&Rescue



Smart City

Product Parameter

Index	Content
Unfolded dimensions	549 × 592 × 424mm(exclude paddle)
Folded dimensions	347 × 367 × 424mm(including tripod&paddle)
Max take-off weight	7kg
Symmetrical motor wheelbase	725mm
Max loading	9kg(Max loading, Max safe flight speed 15m/s)
Max horizontal flight speed	23m/s (sport mode, horizontal /no wind)
Max take-off altitude	5000m
Max wind-resistance speed	12.5m/s
Max flight time	58mins(no wind/light wind, hovering test battery runs from full capacity to out of capacity)
Hovering accuracy(GNSS)	Horizontal: ±1.5m(GNSS on)
	Vertical: ±0.5m(GNSS on)
Hovering accuracy(Vision positioning)	Horizontal: ±0.3m(vision positioning on)
	Vertical: ±0.3m(vision positioning on)
Hovering accuracy(RTK)	Horizontal:±0.1m(RTK on)
	Vertical: ±0.1m(RTK on)
Positioning accuracy	Vertical: 1cm+1ppm
	Horizontal: 1.5cm+1ppm
IP level	IP45
Video transmission range	15km(Flying at an altitude of 200 meters without any interference)
Omnidirectional barrier avoidance	Obstacle perception range(Buildings, trees, utility poles, towers over 10m) Front:0.7m~40m (80m max detectable distance for large metal objects) Left&right:0.6m~30m (40m max detectable distance for large metal objects) Up&down&back:0.6m~25m
	Work environment: rich texture on the surface, sufficient lighting conditions (>15lux, indoor fluorescent light normal illuminate)
AI function	Target inspection, follow, recognition
Flight safety	ADS-B function, Can sense surrounding civil aviation aircraft information for evasion

About GDU

GDU, a leading professional drone brand, was established in 2015. It is a high-tech private enterprise integrating R&D, production, sales, operation and maintenance and data operation. It is also one of the few in the industry that has full system autonomy IP companies. GDU has always been at the forefront of scientific and technological development. Based on UAV technology, 5G infrastructure, big data technology, and cloud platform technology, it is committed to the development of low-altitude flight area economy.

GDU is based in Wuhan, Hubei, and sets up marketing&sales centers in more than 30 cities around the world, nearly 500 employees in total, of which more than 60% are R&D personnel. GDU has the most complete UAV product line in China, including multi-rotor UAV, VTOL, UAV docking station, UVER UAV sharing platform, a full range of payloads, multi-dimensional ground stations, data link, unmanned equipment dispatch command cloud and other systems. Committed to providing auto, unmanned and customized products and solutions for various industries.

GDU has the R&D capabilities of the whole industry chain of drones, and continues to develop forward-looking and deep technology R&D. Now it has 442 trademark authorizations and a total of 315 patents, including 101 invention patents(out of 7 global invention patents), as the participant of UAV industrial rule making, GDU continuously innovates UAV industries, solutions.

Stable and reliable, with the spirit of craftsmanship, GDU will continue to promote the global scientific and technological revolution in safe&professional drones, along the path of industrialization and large-scale development to expand the industry segmented application market, continue to improve products and services, and actively explore UAV+UAV docking station+ 5G/AI/IoT/ cloud computing/Beidou and other cutting-edge technologies, with global partners, GDU wish to create the era of low-altitude flight area sharing economy.



- 101** Patent
- 168** Practical IP
- 39** Exterior Design
- 45** Software Copyright