

System Introduction

Parameter Name		Tech Parameters	
Intelligent Airport Cabin	Mechanical parameters	Transport size	≤2820*2300*1400mm (L*W*H)
		Weight	≤1500kg
	Environmental perception	Environmental perception	Support the collection of environment temperature, humidity and wind
		Electrical parameters	Input voltage
	Power consumption		5000W (with temperature control module)
Other	Charging power	20A	
VTOL Fixed-wing UAV	Size	Wingspan	3200mm
		Fuselage Length	1780mm
	Operation radius	≤45km (below 1000m @ standard load, 25°C, ground wind 3 level)	
	Endurance	≤85min (below 1000m @ standard load, 25°C, ground wind 3 level)	
	Standard load	≤1.5kg	
	Max. wind resistance	4 level	
Payloads	PTZ	Frame	Triaxial stabilization
		Stability accuracy	≤0.03°
	Visible light camera	Lens	30x zoom
		Video output	2MP, 1080P 30Hz
	Infrared camera (optional)	Resolution	640*512
		Wavelength	8~14μm
External interface	Communication interface	RS232	
	Electrical parameters	≤50W @12V	
Communication Link	Working frequency	1430~1444MHz, ≤6Mbps	
	Max. intervisibility distance	≥50Km @ intervisibility	
	Power consumption	≤20W	
	Transmitting power	33dBm	
Remote Transmission	Communication mode	4G	
	Video input	1080p/720p	
	Network interface	TCP/IP、HTTP, etc.	
Working Environment	Working temperature	0~45°C, -10°C~55°C (with temperature control module)	
	Storage temperature	-20°C~60°C (without battery)	
Monitoring Software	UAV control software	During the operation, the battery status and aircraft status are monitored in real time to control the UAV operation	
	Airport control software	Real time statistics of the status of the cabin and its surrounding environment.	

The system has the functions of unattended, remote control, automatic charging, automatic withdrawal, environmental awareness, etc., which can meet the needs of long-distance and large-scale UAV survey and monitoring in border inspection, forest fire prevention, pipeline inspection and other

VTOL Fixed-wing UAV Unattended System



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Advantages and Characteristics



Remote Control
Based on 4G or private network, microwave, etc., the communication between equipment and command center is established to realize unattended.

Security
The system is equipped with professional environmental monitoring unit, and three security strategies are adopted. It's covering the whole operation process. Compared with traditional applications, it greatly reduces personnel operation errors, and improves equipment security.

Cluster Operation
In the future, the application of UAV will tend to multi aircraft cooperation mode. The efficiency of single person commanding a large number of UAVs will be greatly improved, and the convenience of unattended equipment operation is more conducive to the realization of cluster operation.

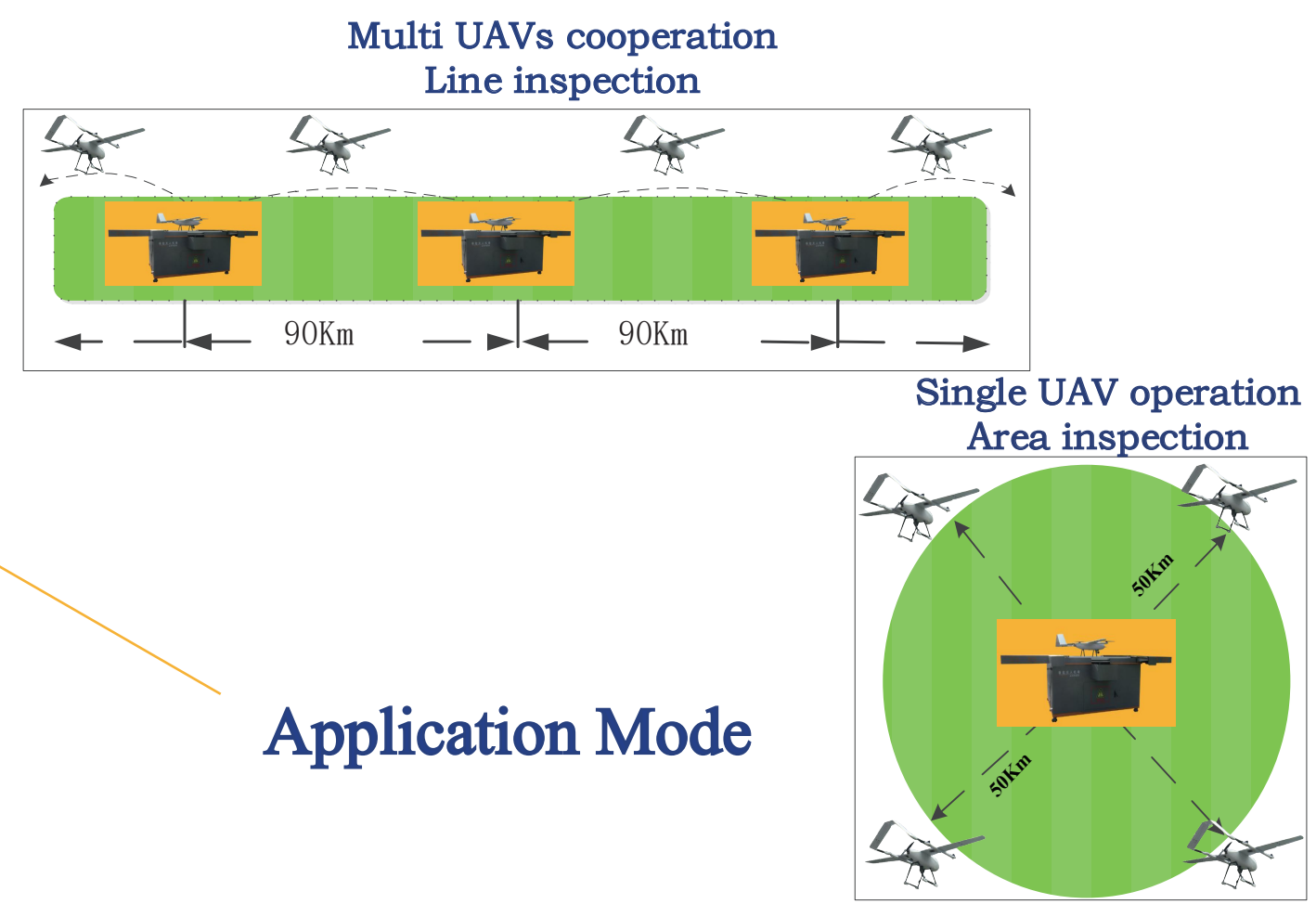
Unattended
The system subverts the existing UAV applications. The traditional manual deployment, inspection, planning, withdrawal, charging and other links are all replaced by intelligent airport cabin, and the automatic scheduled operation, fixed point operation and fixed area operation.

Easy Operation
Each UAV does not need to be equipped with a remote controller, operation and control by one key, which is convenient and efficiency. The operation training time is shortened to less than 1 hour to realize quick operation.

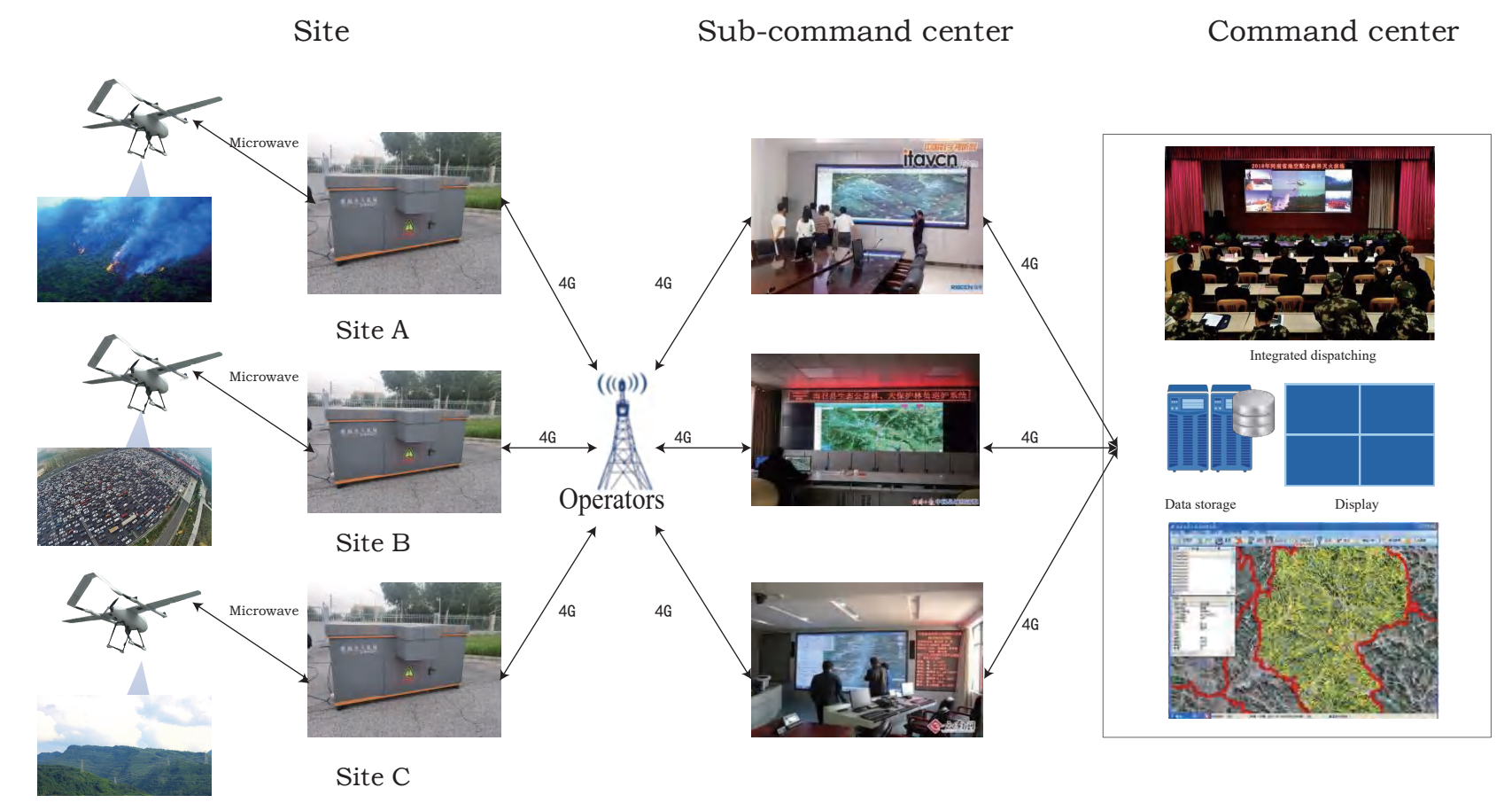
Large-scale
The operation mode maximizes the endurance of the UAV. There are 4G / microwave and other modes to adapt to a variety of operation environments, and the deployment cost per kilometer is 1/3 of that of competitors, which is more suitable for large-scale inspection.

- Routine inspection
- Intensive monitoring
- Fixed point monitoring
- Mobile monitoring
- Pipeline inspection
- Power inspection
- Traffic monitoring
- Emergency monitoring

Application Scenarios



Application Mode



Operation flow