

AlphaAir 10 AIRBORNE LIDAR SOLUTION

(+)

MAPPING & GEOSPATIAL CHCNAV



NEW GENERATION AIRBORNE LIDAR SYSTEM

AlphaAir 10 is a new generation of mid-range airborne LiDAR system totally launched by CHCNAV. Based on the design concept of "strong penetration, high precision", AlphaAir 10 integrates high-performance LiDAR, high-precision inertial navigation and full-frame camera which are equipped with UAV, CoPre and CoProcess software to provide "high precision, high efficiency, low cost" 3D data acquisition and processing of the whole process solutions for customers in terrain surveying, engineering survey, power line inspection and other industries.

SPECIFICATIONS

	and the second secon	
General	system performance	
Absolute Hz accuracy	< 5 cm RMS	Operating temper
Absolute Z accuracy	< 5 cm RMS ⁽¹⁾	Storage temperat
Accuracy conditions	Without control points, @150 m flight altitude AGL with 7 m/s speed	IP rating Humidity (operation
Mounting	quickly install & release design	
Weight of instrument	1 55 kg	Input voltage Power consumption Power source
Dimensions of instrument	1.55 kg 210 mm x 112 mm x 131 mm	
Data storage	512 GB (optional upgrade to 1 TB)	
Coping speed	80 m/s	
L.	aser scanner	
Laser class	1 (in accordance with IEC 60825-1:2014)	CoPre pre-proces
Max. range, reflectivity >80%	800 m	software CoProcess point
Minimum range	10 m	processing softwa
Accuracy (2)	10 mm	* All specifications are subject
Precision (3)	5 mm (1σ)	
Field of view	72°	
Maximum scan rate	Up to 500,000 pts/sec	
Scan speed (selectable)	50 ~ 250 scans/sec	
Return numbers	Up to 8	
Angular resolution	0.001° (5 Hz)	
Positioning	and orientation system	
GNSS system	GPS: L1,L2,L5 GLONASS: L1,L2 BEIDOU: B1,B2,B3 GALILEO: E1,E5a,E5b QZSS: L1 C/A,L5	
IMU update rate	500 Hz	
Attitude accuracy after post-processing	0.006 degrees RMS pitch/roll 0.019 degrees RMS heading	
Position accuracy after post-processing	0.010 m RMS horizontal, 0.020 m RMS vertical	

Environmental		
Operating temperature	-20°C ~ +50°C	
Storage temperature	-20°C ~ +60°C	
IP rating	IP64	
Humidity (operating)	80%, non-condensing	
	Electrical	
Input voltage	DC 13 ~ 32 V	
Power consumption	45 W	
Power source	Depending on UAV battery or by Skyport (DJI M300).	

Equipped software		
CoPre pre-processing software	Data copy, POS solve, Adjust & Refine, Generate point cloud	
CoProcess point cloud processing software	Terrain module, road module, extraction module, volume module	

All specifications are subject to change without notice.

© 2023 Shanghai Huace Navigation Technology Ltd. All rights reserved. The CHCNAV and CHCNAV logo are trademarks of Shanghai Huace Navigation Technology Limited. All other trademarks are the property of their respective owners. Revision August 2022.

WWW.CHCNAV.COM | MARKETING@CHCNAV.COM

CHC Navigation Headquarter

Shanghai Huace Navigation Technology Ltd. 577 Songying Road, Qingpu, 201703 Shanghai, China +86 21 54260273

CHC Navigation Europe

Infopark Building, Sétány 1, 1117 Budapest, Hungary +36 20 235 8248 +36 20 5999 369 info@chcnav.eu

CHC Navigation USA LLC

6380 S. Valley View Blvd Suite 246 Las Vegas, NV 89118 USA +1 702 405 6578

CHC Navigation India

409 Trade Center, Khokhra Circle, Maninagar East, Ahmedabad, Gujarat, India +91 90 99 98 08 02