

UAV multispectral imager

ATH9600

Features

- 4-mesh or 6-mesh cameras, the imaging time is absolutely synchronized.
- Multiple bandwidths are optional.
- Contains 12-14 bands: 405, 430, 450, 490, 525, 550, 560, 570, 630, 650, 685, 710, 735, 850nm
- Capable of capturing high-resolution multispectral images of 1mm or even 0.5mm per pixel.
- Spectral image resolution is 800w (3600*2200) pixels.
- Sensors can be customized upon request.
- The lens is made of all metal and glass, which is less affected by the environment.

Application

- Agriculture and Crop Management
- Environmental monitoring
- Land Use and Planning
- Natural Disaster Monitoring
- resource exploration
- fields such as climate research, ecology, archaeology and remote sensing
- Water eutrophication detection
- Black and odorous water body monitoring
- Pine wood discoloration monitoring

Description

ATH9600 is a multi-spectral imager independently developed and designed by Optosky. The system covers 12-14 band spectral images from visible light to near-infrared. ATH9600 relies on the multi-eye lens and can complete the acquisition of various bands without mechanical operation; in addition, ATH9600 also has a built-in lithium battery, a central processing unit, etc., and an optional auto-focus system. It also has high-resolution, high-definition, high quality and other characteristics.

ATH9600 adopts high-resolution CCD imaging device, which has clear imaging and less noise, and images of various bands are simultaneously imaged without obvious offset, which is especially suitable for high-altitude and large-scale imaging.

The ATH9600 camera adopts advanced optics and image processing technology to provide multi-spectral imaging capability of at least 12 channels.

Model	Feature
ATH9600-12	Number of bands: 4 lenses, 12bands
ATH9600-14	Number of bands: 6 lenses, 14 bands



1.ATH 9600 Selection Guide

Model	Feature
ATH9600-12	12 bands in the 405-850 nm range
ATH9600-14	14 bands in the 405-850 nm range

MULTISPECTRAL 12 A7Rii/iii/iv – version 1

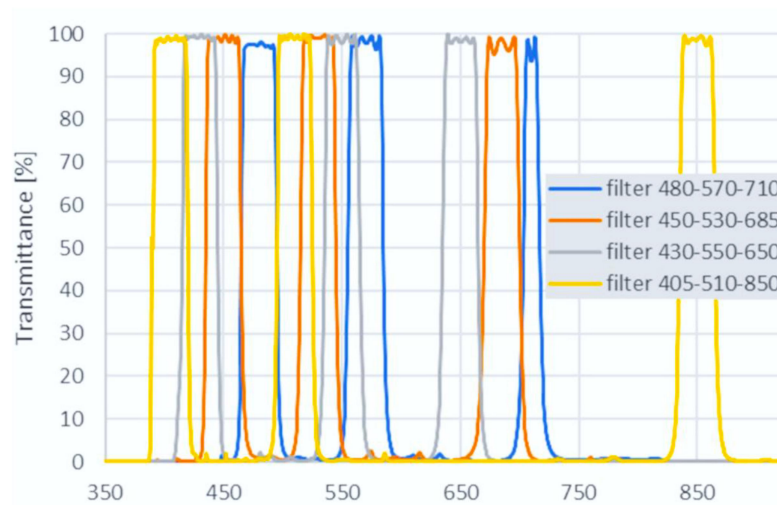


Figure 1 Band distribution of ATH9600-12

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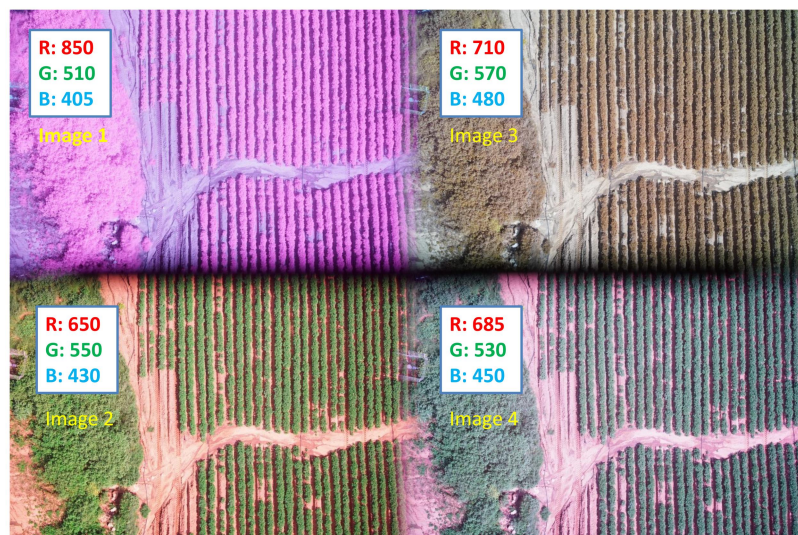


Figure 2 The imaging band of ATH9600-12

2. Performance parameter

Number	Index	ATH9600-12	ATH9600-14
Spectral performance	Spectral range	405~850 nm	405~850 nm
	Band distribution	405、430、450、480、510、530、550、570、650、685、710、850nm	405、430、450、490、525、550、560、570、630、650、685、710、735、850nm
	Spectral resolution	Superior to 15nm	Superior to 15nm
	Multispectral Chromaticity Band Resolution (Single Lens Composite)	3600 x 2200	2780 x 2650
	Number of spectral channels	12	14
	Dynamic Range	12bit	16bit
Imaging lens	Imaging lens	Auto focus	
	F#	6.0	5.6
	Effective focal length	25mm	21.8mm
	H-FOV	35°	25°
	V-FOV	26.6°	25°
	D-FOV	45.9°	32.4°
Electrical properties	Imaging speed	20 bands/s	20 bands/s
	Lithium battery life	>6 h	>6 h
	Data storage	SD Card (256GB, 512GB optional)	
	Data interface	USB3.0	
	Power supply	12VDC, 3A	
	Visible light camera resolution	>800 CMOS	>750 CMOS
Flight system	Flying platform	Customized version of long-time high-load large 6-rotor UAV	
	PTZ	Three-axis DC brushless motor high stability gimbal	
	Number of rotors	6 rotors	
	Take-off and landing mode	VTOL	
	Wheelbase	1500 mm	
	Maximum load	6 Kg	
	Ceiling	5000 m	
	Drone size	1650 X 1410 X 500 mm	
	GPS positioning accuracy	1.5 m	
	Modify imaging parameters remotely	No	
	Endurance flight time	>45minute	
	Ground Station Working Distance	5 Km	