

AisaKESTREL complete compact hyperspectral system



COMPLETE COMPACT HYPERSPECTRAL
SYSTEM WITH NO COMPROMISES

AisaKESTREL complete compact hyperspectral system

AISAKESTREL 10



AISAKESTREL fits to variety of professional UAV platforms.

AISAKESTREL 16

BENEFITS OF AISAKESTREL

- Push-broom imager with high light throughput
- Outstanding spatial resolution of 2 040 or 640 pixels
- High sensitivity and SNR in the entire region of 400 - 1 000 nm or 600 - 1 640 nm
- Accurate GNSS/IMU sensor
- Complete UAV system compatible with various platforms
- Multiple system integration options:
Inside UAV either integrated in a mechanical frame or in a gyro stabilization mount, Outside UAV, in a gimbal/turret or in a stabilized mount

	AISAKESTREL 10	AISAKESTREL 16
Camera specifications		
Spectral range	400 - 1 000 nm	600 - 1 640 nm
Spectral sampling	1.75 / 3.5 / 7 nm	2.75 / 5.5 nm
F/#	F/2.4	
Smile / Keystone	< 0.5 pixels	< 0.25 / < 0.5 pixels
Polarization sensitivity	< ± 2%	
Signal-to-noise ratio (peak)	400 - 800	800
Spatial resolution	2 040 pixels	640 pixels
Frame rate	Up to 170 or 100 Hz	100 Hz
Integration time	Adjustable within frame period	
FOV	40°	
Electro mechanical shutter	Yes	
Data interface	CameraLink 12-bit	CameraLink 14-bit
Data storage	480 Gb SSD	
Total System Power, typical (camera, GNSS/IMU, DPU)	< 41 W	< 46 W
Mechanical characteristics (unmounted)		
Size (L x W x H)	Camera	127 x 180 x 225 mm (with front lens), 2.1 kg
	DPU	165 x 154 x 101 mm, 1.6 kg
	GNSS/IMU	120 x 70 x 40 mm, 0.5 kg
Total System Weight	4.75 kg	5.0kg
Environmental characteristics		
Storage temperature	- 5 ... +50 °C	
Operating temperature	+ 5 ... +40 °C, non-condensing	