Optech

CS-6500 Aerial Digital Camera System

Corridor, Oblique & NIR Solutions

Applications

- Oblique surveys
- Corridor mapping
- UAV support
- Intelligence, Surveillance and Reconnaissance (ISR)

Advantages

- Market differentiation
- Lidar integration
- Flexibility and cost savings
- Revenue growth
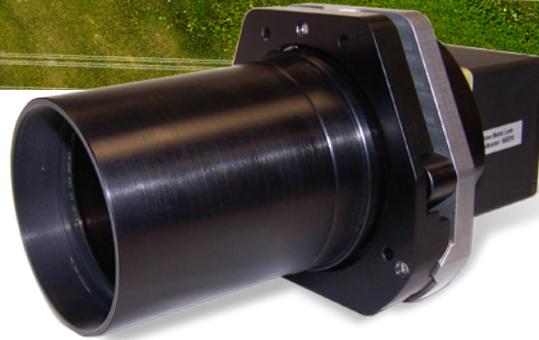
The CS-6500 is part of a new portfolio of airborne survey products that creates value by expanding your business opportunities

The new compact CS-6500 has an image footprint of 6,500 pixels across by 4,300 pixels along the flight line, enabling a wider field of view for more efficient flights. The CS-6500 is designed to be seamlessly integrated with numerous Optech products to create a unique airborne imaging solution that matches your expanding business needs.

With no moving parts, the reliable CS-6500 is a highly efficient camera that offers an extremely fast cycle time, an electronic shutter, interchangeable lenses, and a metric quality data result. Its footprint is designed for smooth integration with all of Optech's CS-series cameras and lidar sensors.

The CS-6500 is a stable, scalable and versatile camera in a small and reliable form factor.

The bonus? It's all backed by Optech's industry-leading global 24/7 support.

## The CS-6500 is a complete solution that delivers business value...every time


Nadir/Photogrammetry

Near Infrared and Visible

Oblique Imagery

GSD vs. AGL & Footprint
(50 mm lens = 40 degree HFOV)

GSD vs. AGL & Footprint
(85 mm lens = 24 degree HFOV)
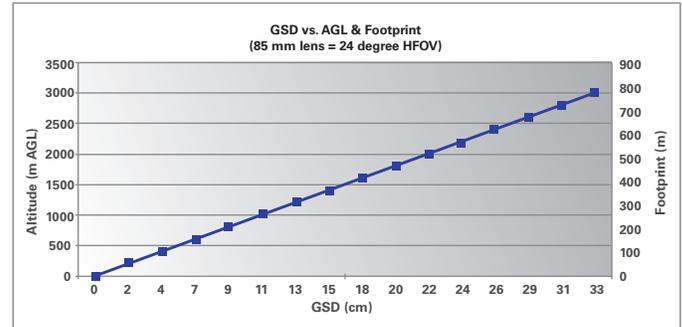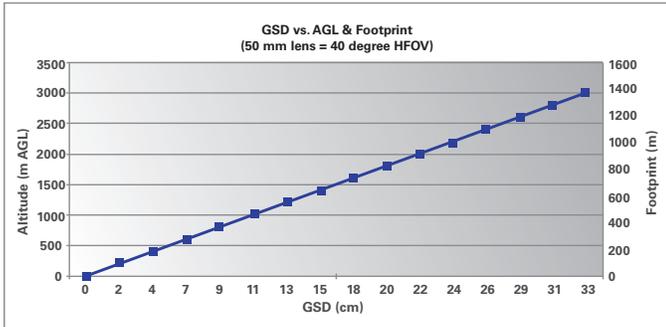
Parameter	Specification
Camera Module (CS-6500)	
Sensor type	29 Mpix interline CCD, RGB/panchromatic, 12 bits
Sensor format (H x V)	6,600 x 4,400 pixels
Pixel size	5.5 µm x 5.5 µm
Capture rate	> 1 frame/second
Shutter	Electronic
Lenses	25 mm/35 mm/50 mm/85 mm/135 mm/180 mm with optimized aperture
Dimensions (H x W x D)	167 x 110 x 106 mm (50 mm lens)
Weight	~1.9 kg (50 mm lens)
Operating temperature and humidity	0°C to 40°C including lens, non-condensing
Storage temperature	-40°C to +85°C
Camera Controller (CC-R)	
Number of supported cameras	Up to 2 Camera Modules
Removable storage unit	Up to 2 solid state drives (300 GB each factory standard, 600 GB optional)
Power consumption	~110W (with one CM-6500), 28VDC nominal input
Dimensions (H x W x D)	2U full rack; 88 x 448 x 493 mm
Weight	~9.5 kg (~14 kg with cables)
INS support	Supports a wide variety of INS systems and IMUs
Operator display	12.1" LED backlit touchscreen, 1280 x 800
Operational control software	Camera flight parameter control with real-time tracking, thumbnails, and histograms
Operating temperature and humidity	0°C to 40°C, non-condensing
Flight management system	Compatible with Optech FMS and third party flight management systems
Image Pre-Processing Software	
PixelPhysics	RAW Converter with radiometric correction and image adjustment options
Image Data Formats	JPEG; Uncompressed TIFF (8 or 16 bits)

Lenses are designed for flying altitudes of up to 10,000 ft AGL.