

CS-10000 Aerial Digital Camera System

Corridor, Infrastructure & Area Mapping

Applications

- Railway & road surveys
- Power line & pipeline surveys
- Area mapping
- Asset management

Advantages

- Efficient imaging workflow
- Cost-effective design & performance
- Reduced downtime
- Configurable with lidar and other sensors

Unique Features

- True FMC for superior image quality
- Field-replaceable shutter
- Interchangeable lenses
- Kinematic mounting
- 80-Mpixel sensor with superior GSD capacity

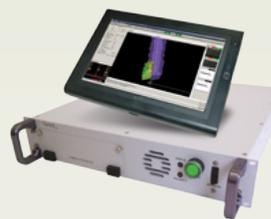


Standalone or integrated with lidar, the CS-10000 is your complete corridor and area mapping solution

With a footprint of 10,320 pixels across by 7,760 pixels along the flight line, the CS-10000 is the perfect aerial digital camera system for high-resolution engineering surveys and detailed mapping applications. Based on patented technologies and collaboration among Teledyne Optech lidar and camera experts, the CS-10000 camera system is truly optimized for both standalone imaging and lidar integration.



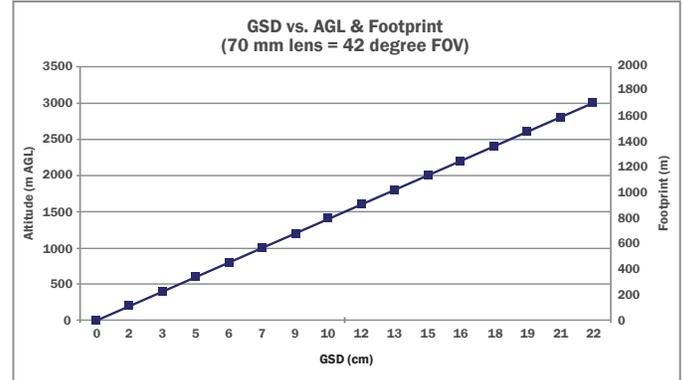
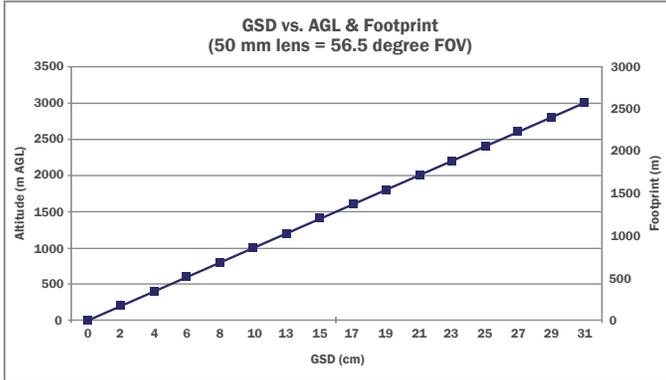
Mounts for integration with other Teledyne Optech cameras and lidar in a GSM



Universal controller with real-time monitoring and flight information



Sled mounts for integration with lidar



Parameter	Specification
Camera Module (CM-10000)	
Sensor type	80-Mpix full frame CCD, RGB
Sensor format (H x V)	10320 x 7760 pixels
Pixel size	5.2 μm x 5.2 μm
Capture rate (nominal)	2.5 sec / frame
FMC	Electro-mechanical, driven by piezo technology (patented)
Shutter	Field-replaceable focal plane 1/168 to 1/1000 sec (patented)
Aperture	Iris mechanism, f-stops: 4, 5.6, 8, 11
Lens	50 mm/70 mm/90 mm
Filter	Visible and color infrared removable filters
Dimensions (H x W x D)	250 x 185 x 130 mm (50 mm lens)
Weight	~6.0 kg
Operating temperature and humidity	0°C to 40°C including lens, non-condensing
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	~120 W and 28 VDC input (with one CM-10000)
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)

U.S. Patent No. 7,899,311
 U.S. Patent No. 7,365,774 B2
 European Patent No. EP 1 570 314 B1