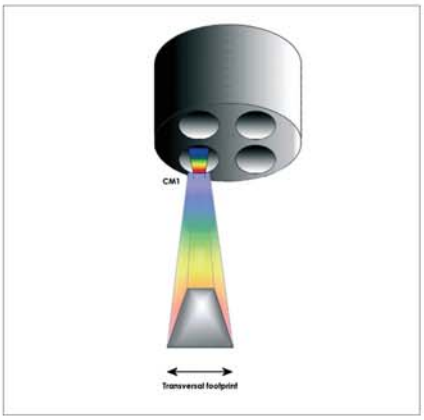
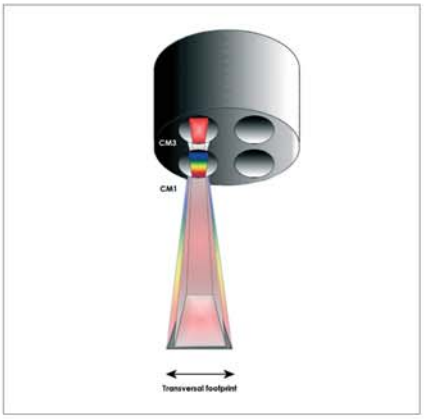
DiMAC LiGHT+

A medium footprint in a full-size form factor with upgradeable imaging capacity for both mapping and ortho

8,900 × 6,700 pixels





True FMC True Color Upgradeable

The DiMAC LiGHT+ is a medium-format digital aerial camera. It captures a footprint of 8,900 pixels across by 6,700 pixels along the flight line using a single Camera Module, and is easily upgradeable to the large-format DiMAC WiDE+.

The DiMAC LiGHT+ uses the same cylindrical camera frame (CCF) enclosure and the same control system (ITR) as the DiMAC WiDE+. This ensures an easy and cost-effective upgrade path to large-format image acquisition capacity.

The DiMAC LiGHT+ Camera Module is fully calibrated for photogrammetric applications, and can be equipped with different lenses to meet different project requirements.

The modular, upgradeable architecture of the DiMAC LiGHT+ incorporates the core DiMAC benefits of True FMC and True Color acquisition. Forward Motion Compensation technology is the only method of ensuring proper light exposure and blur-free imagery when using the highly demanding 60-MP CCD sensor with its 6-µm × 6-µm pixels.

The DiMAC LiGHT+ can be configured to acquire color and near-infrared images simultaneously. This configuration uses two Camera Modules of the same lens type to capture the same area simultaneously in both RGB and NIR.

The DiMAC LiGHT+ is the perfect solution for companies seeking to invest in digital camera technology today, with the opportunity to upgrade to a large-format system in the future.

Specifications DiMAC LiGHT+

Camera Module (CM)

Area sensor	Dalsa full-frame CCD color image sensor 8,984 × 6,732 pixels, effective 6 µm × 6 µm pixels 53.9 × 40.4 mm, effective
True FMC	Electro-mechanical, driven by piezo technology
Lenses	50 mm/70 mm/120 mm/210 mm
Shutter	Electro-mechanical iris mechanism 1/125 to 1/250 sec. f-stops: 4, 5.6, 8, 11, 16
Filter	Standard size RGB and IRC removable filters
Image output	8,984 × 6,732 pixels 8 or 16 bits per channel 24-bit RGB: 180 MB 48-bit RGB: 360 MB
Capture rate	2 sec.
Resolution (GSD)	2 cm to 1 m (<1 in to 3.3 ft)

Cylindrical Camera Frame (CCF)

Composition	Carbon fiber with thermal & vibrational isolation
Diameter	40 cm (15.75 in)
Weight	45 kg (100 lbs), including CM

IT Rack (ITR)

Control & acquisition computers	PC/104 RoHS-compliant small-form-factor embedded computers with: Intel® Core™ Duo LV2400 CPU, 1 GB RAM 4 GB flash disk local storage IEEE 1394 Firewire interface
Removable storage units	500 GB pressurized hard drives — 8,000 images
Dimensions	44 (H) × 27 (W) × 36 (D) cm (17 × 11 × 14 in)
Weight	30 kg (66 lbs)
Input voltage	24-28 VDC
Current draw	8-12 A

Image Processing Software

CaptureOne	Radiometric control and format conversion TIFF or JPEG

Fulfilling the promise of digital aerial imagery