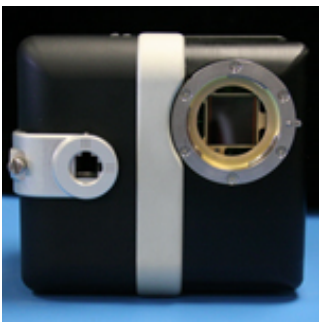


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[[images/IMG_8732.jpg](#)] Click Image To Expand



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TigerCub 3D Flash LIDAR™ with Zephyr Laser Camera

The TigerCub 3D Flash LIDAR Camera™ is a lightweight (< 3lbs), small form-factor (11x10x12cm) integrated 3D camera, capable of capturing a full array of 128x128 of independently triggered pixels per each frame allowing 16,300 3D individual range and intensity points to be generated up to 20 frames per second as 3D point cloud images or video streams per laser pulse (frame) in real-time. The 3D data output is used to provide autonomous (e.g. rendezvous, proximity, landing, etc.) operations or assist man-in-the loop imaging. ASC's 3D focal plane array and laser technologies have been tested and used in a wide range of applications and enjoy a rich heritage of success. The on-board processing in all ASC 3D cameras allows for streaming 3D point cloud and intensity output as well as camera telemetry.

The TigerCub with Zephyr configuration:

- Sensor Engine: 128 x 128 focal plane array (InGaAs + CMOS)
- 1.57um laser wavelength (1064 or 532nm versions possible)
- Bayonet mount for lenses (60°, 45°, 30°, 15°, 8.6°, 3° currently available)
- Operations up to 20 Hz (30 Hz possible)
- Dimensions (without lens): 11cm x 10cm x 12cm
- Weight: 1.4kg (3lbs)
- Power Supply/Operation 24 VDC, 15 watts
- Supported Interfaces: Ethernet, CameraLink

Licensed Software (included with initial development system):

- Camera command & control
- Camera status
- 3D and 2D data viewing software
- Data analysis (3D)
- All embedded software installed by ASC prior to camera shipment

TigerCub 3D Flash LIDAR Camera without integrated laser:

Part Number TC-BYNT-BU

The bayonet mount TigerCub requires one or more of the various lens/diffuser options (below) and weighs 0.8kg (1.8lbs). Included in the camera kit:

- Sensor Engine: 128 x 128 focal plane array (InGaAs + CMOS)
- Configured to accept 1.57um laser wavelength (1064 or 532nm versions possible)
- External laser interfaces (optical, electrical) on rear of camera
- Bayonet mount for lenses (60°, 45°, 30°, 15°, 8.6°, 3° currently available)
- Operations up to 30 Hz possible
- Dimensions (without lens): 11cm x 10cm x 8.1cm
- Weight: 800g (1.8lbs)
- Power Supply/Operation 24 VDC, 5 watts
- Supported Interfaces: Ethernet, CameraLink (optional)

The Zephyr Laser works with the TigerCub camera:

Includes:

- Fast-change diffuser port
- Dual cooling fans
- Anodized metal laser unit
- Tightly integrates with the TigerCub camera via common plate
- 1.57um laser wavelength output

Laser strength options Part Number:

2mJ ZL-1570-02

6mJ ZL-1570-06

12mJ ZL-1570-12

20mJ (Special Order) ZL-1570-20

Power: uses same supply as TigerCub (integrated);

24VDC (+/- 4V) ~10W at 20Hz

Bayonet Mount Lens/Diffusers Options:

These lenses are for use with the TE-BYNT-BU or the TC-BYNT-BU.

All lens/diffusers are designed for 1570 nm laser wavelength unless otherwise indicated and come with their own diffuser.

- 3° FOV Bayonet Mount (weight: 480g) LD-2803-BYNT
- 8.6° FOV Bayonet Mount (weight: 250g) LD-2809-BYNT

- 15° FOV Bayonet Mount (weight:

265g) LD-2815-BYNT

- 30° FOV Bayonet Mount (weight: 80g) LD-2830-BYNT
- 45° FOV Bayonet Mount (weight: 70g) LD-2845-BYNT
- 60° FOV Bayonet Mount (weight: 70g) LD-2860-BYNT

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