Dynacam is a fully featured ‘time tagged digital camera system’ designed for use as a ‘stand alone’ or ‘fully integrated’ mobile digital image and video mapping system.

Capable of recording 10 frames per second at 5 megapixels or 30fps at 1080p HD resolution, per camera, the system can both ‘stream continuous video or provide HD digital images on demand’. Systems are available with one, two, three or up to 10 cameras. Each camera is uniquely addressable and each has on board storage sufficient for up to 64 hours of data recording.

No PC or external computer is needed to initialise or operate the system. Using an ‘on board’ Linux operating system, the Dynacam features an embedded web user interface allowing full resolution video preview, configuration control and diagnostics via any web browser.

Interface is via ethernet with a WiFi option. Dynacam is easily mounted using a standard 5/8th UNC survey adapter. Dynacam is IP 68 rated for all weather operations and weighs only grams.
Standard Dynascan Camera – Key Features

- Three, 5 mega pixel max resolution cameras contained within a single environment proof enclosure, designed to externally mount onto an existing Dynascan pod cover as an optional add-on component.
- Left, right and rear looking un-obscured views.
- Three miniature self contained embedded high definition digital cameras and recorders contained within a single housing.
- No external PC required for stand-alone operation
- Each sensor factory aligned in pan, pitch and roll while attached to a complete Dynascan system.
- Hidden interconnection with base unit through the pod cover so no external connectors.
- Max resolution 5MP (2592 W x 1920 H) at 10 fps x 3 = total 15MP
- Maximum frame rate 60fps at 720p HD resolution (1280 W x 720 H)
- M12 micro lens, EFL= 7.5 mm, 55 deg diagonal FOV with IR filter
- Every video frame time stamped at source in real time using high accuracy GPS timing and PPS synch allowing data latencies to be minimised
- Each camera contains its own digital recorder and full resolution video is automatically saved to a mass storage flash device allowing offline transfer to PC over a common Ethernet interface and internet connection
- 64 hours of full resolution, full rate recording
- Standard avi. Format video file compatible with common PC video editing software
- Option to generate snapshot files in raw or JPEG format with embedded EXIF data
- Embedded FTP client with automatic file transfer to host PC or server
- Simultaneous live video at full (or reduced) resolutions streamed to host PC over Ethernet using standard RTSP internet protocols and allowing easy, optional integration into 3rd party software
- Video compression H.264, MPEG4 or JPEG
- Commercial quality, automatic exposure and white balance
- Embedded web user interface allowing full resolution video preview, configuration, control and diagnostics via internet explorer web browser
- Input voltage range 9 to 32 volts, 10 W at 12 V
- Basic module dimensions, excluding DS adapter foot: 130 x 130 x 70 mm
- Real time operating system with spare system capacity for future requirements

Embedded web user interface, sample root page

Expanded full resolution view, streamed live 1080 p at 30 fps
MDL Dynascan S250

The S250 achieves a greater accuracy whilst retaining all of the characteristics of the current range of Dynascan systems; reliable, rugged, portable, lightweight (under 40lbs), simple to use, and affordable.

This model is available in either single head or X-Plane (twin head) model formats. Single head S250 models incorporate a ten degree offset laser angle, to produce a 160 degree ‘scanning cone’. This allows easier vehicle installation without excessive mounting overhang and brings some of the benefits of the Conic design to a single head product.

An all-weather IP65 design makes the S250 suitable for use on any land and sea mobile platform.

Technical Specifications

- Classification: Class 1 (FDA / IEC) (Class 2 with red dot pointer)
- Range: up to 250 metres (750’)
- **Accuracy**: ± 1 cm
- **Range resolution**: 1 cm (0.4”)
- **Scanner field of view**: 360°
- **Scanner angle resolution**: 0.01°
- **Scan rate**: up to 20 Hz at 1800 rpm (single head)
- **Pulse measurement rate**: 36 kHz (single head)
- **Cone angle**: 160°

Environmental (°C):

- Operating temperature: -20 / +60
- Storage temperature: -20 / +70
- Water & dust resistant

Key

- A - GNSS antenna
- B - Radio antenna for GNSS
- RTK corrections: IP65

Power & Dimensions

- **Power**: 12 to 36 volts DC (50W to 100W)
- **Weight**: 16.6 Kgs (36.5 lbs)
- **Size**: L 702 mm x W 332 mm x H 231 mm
- **Dual GNSS antenna heading**: 0.1°
- **VRS (Virtual Reference Station) ready**
- **External RTK input (standard)**