



AR100-H | Dual Micro-Gimbal HD | with Super Wide Angle Camera

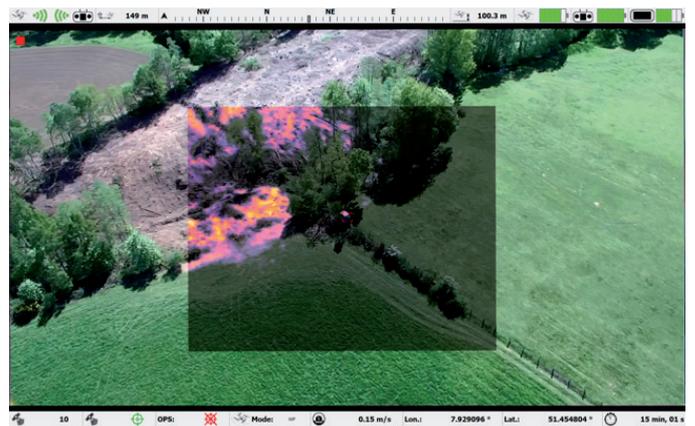
The multi-mission Dual Micro-Gimbal HD maximises payload efficiency with multi-mission sensors in a SWaP format. The power of the Micro-Gimbal HD lies in the highly accurate real-time fusion of Full HD Daylight and Thermal imagery. The fusion functionality can be toggled or set to varying transparency levels, in real-time, during flight operations. The three-axis stabilized payload can easily be replaced without tools.

The Fused (EO/IR) video, in full HD, enables the user to detect difficult targets of interest in complex terrain and lighting conditions. In addition, the system features a temperature-accurate search mode function highlighting targets within configurable temperature threshold ranges set by the user in real-time.

- ▶ 80x zoom daylight camera
- ▶ Radiometric thermal image camera (non ITAR)
- ▶ IR target marking laser
- ▶ Super wide angle camera (optional)

The super Wide-Angle Camera provides better user orientation in challenging terrains and significantly simplifies

UAV operations in urban environments.



The Dual Micro-Gimbal HD records raw radiometric IR/EO data at 30Hz using an internal SD card.

Time-synchronized raw data collected from the on-board SD card can be evaluated in the field using the AR GCS HD software. This enables playback with full control of all platform imagery and settings, including fused imagery, the same as real-time flight operations.

Part number: AR100H-20

Dimensions: 125 x 116 x 122 mm

Weight: 450 grams

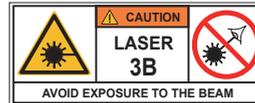
Resolution : daylight | 1.920 x 1,080 Pixel (1/3-Type CMOS)
 thermal image | 640 x 510 Pixel (12 µm – LWIR)
 super wide angle (optional)

Zoom: daylight up to 80x | optical 10x (super high zoom levels for stationary reconnaissance)
 thermal image up to 80x | digitally scaled to daylight image
 super wide angle | fixed focal length (optional)

Field of View: daylight | 58.2° – 0.8°
 thermal image 13 mm | 32.9° x 26.6° — thermal image 19 mm | 22.9° x 18.4°
 super wide angle | 200° x 200°

Gimbal swivel range: 260° horizontally (can be operated while being on the ground)

IR laser module: laser class 3B (classified according to DIN EN 60285-1:2015-07)
 power 20mW | wave length 850nm | Nominal Ocular Hazard Distance (NOHD) 45m
 Labellings according to DIN EN 60285-1:2015-07:



Electronic stabilization: 3-axis stabilized gimbal

Digital image stabilization: yes, automatically

Tracking modes: human, vehicle, scene

Target coordinates: on request

Recording: 1,920 x 1,080 (Full HD) | 30 Hz

Encryption: AES256

Data storage: 32 GB MicroSD | removable, can be deleted by keystroke in AirRobot-GIS

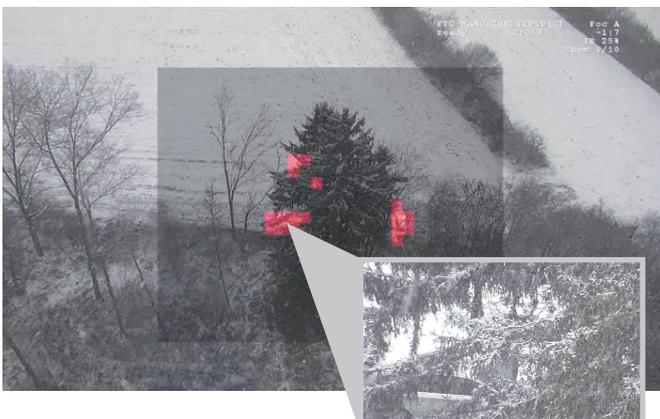
Operating temperature: -19°C to +49°C

IP rating: IP53



Real-time, temperature-accurate search

* Subject to changes



Temperature-accurate automatic marking with AirRobot search mode (e.g. people and vehicles)



Temperature-accurate AirRobot search mode (e.g. animals) without active marker