VD / GD170

Stabilised Gimbals

Gyro Stabilised Multi-Sensor Camera Gimbal

The UAV Vision GD/VD 170 is a sophisticated 2-axis, high resolution, lightweight, stand-alone gyro stabilised daylight observation system. It has been designed primarily for scout helicopters, light reconnaissance aircraft, observation balloons, and UAV's.

UAV Vision offers complete end-to-end solutions including dedicated single communication links for command and control of the GD/VD170, as well as the live video feeds for a dedicated solution that minimises the time required to integrate with other onboard systems. If you require a more tightly integrated solution, the GD/VD170 is compatible with a number of autopilots, for example the Micropilot and UAV Navigation Autopilots.

Similar to the CM160, the VD/GD170 is IP66 rated, meaning it is dust and watertight. Furthermore, it can be mounted in a number of different orientations and it is suitable for airborne platforms, land vehicles, and sea vessels. The GD170 has been flown on numerous platforms and is built with industrial-grade components.

Why Choose The VD170?

- NO ITAR / EXPORT RESTRICTIONS
- HIGH DEFINITION CAPABLE
- GYRO STABILISED
- WEATHERPROOF (DUST & WATERTIGHT)
- MOUNT IN ANY ORIENTATION
- PROVEN SAFE AND ROBUST TECHNOLOGY
- INTEGRATED WITH UAVVISION SYSTEMS OR PLUG & PLAY
- IDEAL FOR ANY PLATOFORM
  - LIGHTWEIGHT
  - POWER CONSUMPTION
  - SMALL FORM FACTOR
- NO CALIBRATION REQUIRED

Mini Gyro Dome

Payload Specifications - Customise Your Sensors

VD/GD170 DESIGN PHILOSOPHY

UAV Vision's GD170 is a sophisticated 2 axis, high resolution, lightweight, stand-alone daylight observation system that is protected against wind, humidity, and dust by the optically perfect Lexan dome.

UAV Vision's GD170 system is controlled via Micro-controller and has motor control electronics running at 250KHz which gives it extremely high reaction speeds. The system is also temperature stable as the electronics/software compensate for the fluctuations giving a very low drift rate.

The GD170 has a total weight of only 1 KG, including the EO sensor. Standard is either the SONY standard definition (SD) FCB-980SP or the High Definition (HD) FCB-H11, however, UAV Vision can support any EO camera that is suitable to be fitted physically within the GD170.

The small form factor and low power consumption, makes the system a great option for craft ranging from small, all the way up to large full sized platforms.

Sensors Technical Specifications

Choice Of:

Sensor #1a - **Daylight Camera with Zoom Lens**

Model:	FCB-EX980SP
Image Sensor:	1/4 type super HAD
Effective Picture Elements:	0.74 Megapixels
Field of View(°):	1.6 (Wide) - 42.0 (Tele)
Zoom Range:	26x Optical 3.5-91mm min F1.6 - F3.8
	12x Digital Zoom
Min. Working Distance:	320mm (wide End)
	150mm (Tele End)

Sensor #1b - **HD Daylight Camera with Zoom Lens**

Model :	FCB-H11
Image Sensor:	1/3 type CMOS
Effective Picture Elements:	Approx. 2.0 Megapixels
Field of View(°):	5.4 (Wide) - 50 (Tele)
Zoom Range:	10x Optical 5.1- 51 mm min F1.8 - F2.1
	12x Digital Zoom
Min. Working Distance:	10mm (Wide end)
	800mm (Tele)
Signal System:	1080/59.94i, 1080/50i
	720/59.94p, 720/50p

System Specifications

Gimbal Capabilities:

Position Resolution:	0.022°
Stabilisation Accuracy:	+/- 0.25°
Elevation:	+/- 90°
Azimuth:	360° Continuous
Slew Rate:	155° / sec (2.7 rad/s)
Slew Acceleration:	100°/ sec^2

Power Rating:

Input Voltage:	9-36V
Power Consumption:	4W/15W
Assorted Sensor:	SD/HD EO Sensors
Electronics:	High Speed 16bit DSP
Communication Link:	RS232/TTL Serial (38400 BAUD)

Physical Dimensions:

Weight:	980 grams
Dimensions:	170mm D x 180mm H
Temperature (C):	-20° to +55° (storage)
	0° to +40° (operation)
Relative Humidity:	0-95%






sales@uavvision.com • www.uavvision.com
Ph: +61 (0)265 811 994 • Mob: +61 (0)414 624 014
UAV Vision Pty Ltd, Port Macquarie, NSW, Australia

UAV VISION
WWW.UAVVISION.COM