REV A

DST CONTROL

The OTUS-L170
gyro stabilised dual sensor gimbal provides outstanding performance in one of the most lightweight system.

Features

- One of the smallest gimbals on the market
- All electronics embedded inside the unit
- Outstanding stability thanks to high bandwidth direct drive torque motors
- Complete 3 dimensional IMU mounted on the optical bench
- Built-in laser range finder for geo-location and geo positioning
- Optional digital video interface
- Optional fully integrate video auto-tracker
- Computational capacity for optional vehicle navigation and control

Optional gimbal integrated features

- Custom designed camera house
- Geo-positioning
- Geo-location
- Video auto-tracker
- Digital video interface
- Extended range finder range
- Vehicle navigation and control

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The OTUS-L170
gyro stabilised micro gimbal

The two axis dual sensor gimbal reach a new level of stabilisation performance thanks to purpose-built high-bandwidth torque motors implementing active vibration attenuation.

All electronics required for the advanced digital control fits within the unit shell. The user only have to connect an external power supply, a video monitor and a joystick, to have the system up and running.

A three dimensional micro-mechanical IMU and a laser range finder mounted directly on the optical bench, allows for advanced features like geo-location and geo-positioning, provided an external heading source is connected to the OTUS-L170. The powerful digital servo controller of the OTUS-L170 is even capable of providing enough computational power to drive optional features like vehicle control and navigation.

The OTUS-L170 is housing more than 500 cc electro-optical payloads. The standard version comes with a SONY block camera of type FCB-EX20DP and an uncooled thermal imager like FLIR Tau 320/640 or Thermoteknix Miracle 307K. All gimbals also fit a laser range finder.

The gimbals in the OTUS family are available in the different sizes and configurations. The gimbals have single, dual and even triple sensors capability. The gimbals can be equipped with a wide flora of sensors like; daylight cameras, uncooled infrared imagers, laser range finders, and laser illuminators.

Technical Specification

Gimbal System
Two axis gyro stabilised fully integrated direct drive gimbal with embedded laser range finder

Stabilisation
Better than 100 urad (depending on payload)

Range Finder Performance
Up to 4000 m range

Pan/Tilt Range and Slew Rate
Infinite range if payload do not require extending snout (sliprings in both axes), 120°/sec maximum slew rate

Interfaces
1 x RS485 for user interaction and external heading/position source,
1 x composite and/or 1 x component video

Feedback Performance
0.036°/±0.1° typical encoder resolution/ accuracy, 200 Hz update rate

Power requirements
18 to 36 Vdc, 20 W (typical)

Temperature
-40 to +50°C operational, -40 to +85°C storage

Weight
From 1.7 kg (depending on payload)

Dimensions
170 mm diamater x 243 mm height

Payload options (combine any two)
SONY block camera FCB-EX20DP
SONY block camera FCB-EX1010P
SONY block camera FCB-H11
FLIR Tau 320/640, 14-60 mm
Thermoteknix Miricle 110K/307K, 14-35 mm
or according to customer specification

Applications

- Unmanned Vehicles
- Law enforcement
- Surveillance
- Mapping

No export restrictions nor ITAR

Mechanical Dimensions