

DUO+, Dual Sensor Gimbal

The Duo + payload provides high precision pointing accuracies, electro optical (EO) and infrared (IR) imager in a small, lightweight package. Multi-mission payload combines the capabilities to record and live-stream data with a smooth, stable video capability. Capable of 10 megapixel still images, it carries onboard vision processing technology giving a click-to-track functionality.

It also has a built in laser illuminator that allows users with night vision optics to see illuminated points. Dual sensor gimbal onboard with an optional laser pointer (LP).

Key information

- Enhanced 640 EO/IR Imaging
- Target Tracking
- Video Surveillance
- Capture and store high-resolution imagery
- Target geo-location
- Net-centric UAV system
- EO and/or IR sensor
- Optional live Video Output
- 2 axis active stabilization, passive vibration isolation

Specifications

- Elevation Travel Limit: +45°/-190°
- Roll Travel Limits: ± 20°
- Yaw: For stabilizing purposes, vehicle will yaw to provide 360 degree coverage.
- Rugged carbon fiber shell
- Gyro stabilized (20 Hz bandwidth)
- 10 MP EO camera
- Weight: 252 grams
- IR camera: Quark 2, 640 with 19mm lens with 8x Digital Zoom
- IR White-hot / Black hot modes
- Optional 100mW laser pointer or illuminator (400 - 2000 nm)
- Full suite of OnPoint OnBoard computer vision features
 - o Image stabilization
 - o Target position
 - o Moving/Stationary object Tracking
- 5X digital zoom on EO imager
- Plug 'n Play integration with Kestrel autopilot and Virtual Cockpit GCS including Click n' Fly operational mode
- Water resistant
- STANAG 4609 compliant digital video out
- Ethernet command and control interface
- Ethernet firmware updates
- Built-in web server for configuration and diagnostic testing
- Bias-free, track-centered rendering for motion free video