



# KESTREL FLIGHT SYSTEMS

FLY LIGHT WITH KESTREL ONBOARD

**LOCKHEED MARTIN**

*We never forget who we're working for®*

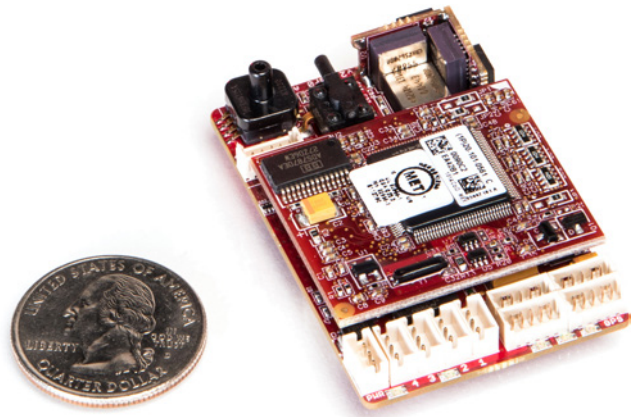


# FLY LIGHT WITH KESTREL ONBOARD

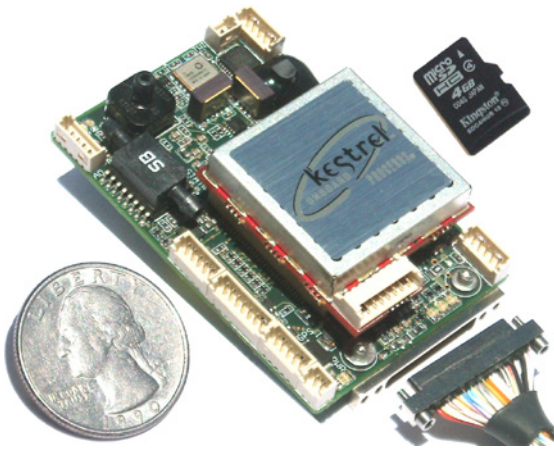
The highly integrated Kestrel Autopilot is small and light, yet powerful. Sacrificing nothing for its compact, weight-saving design, the Kestrel Autopilot integrates all flight sensors, communication and payload interfaces into a simple, elegant package.

## KESTREL AUTOPILOT V2.4 FIXED WING

- Advanced fixed wing controller and navigation algorithms provide responsive control in all attitudes and flight modes.
- Microhard Nano modem support features multiple frequencies.
- Improved guidance algorithms for smooth landings and semi-autonomous guidance modes.
- Mature, robust autopilot has been proven by thousands of flight hours.



Kestrel Autopilot v2.4  
2" x 1.37" x .47"  
17 grams



Kestrel Autopilot v3.1  
2.26" x 1.46" x .67"  
24 grams

## KESTREL AUTOPILOT v3.1 VTOL/FIXED WING

- Provides high-bandwidth control for unparalleled stability in windy/inclement weather.
- Integrated GPS/INS enables high-accuracy geo-location and precise payload control and targeting.
- Offers aggressive climb, descent and forward flight maneuver capability.
- Features include extensive input/output, high speed servos and onboard data logging.
- Expandable avionics architecture enables a wide range of integrated payloads.

## VIRTUAL COCKPIT™ v3.0

- Features highly intuitive 3D graphical user interface (GUI) and easy-to-use click/drag 3D waypoints and 3D streaming maps from disk or online.
- Multi-agent support available for vertical take-off and landing (VTOL) and fixed wing unmanned aerial vehicles (UAV).
- Built-in OnPoint™ OnBoard GUI provides multiple video streams.
- Agent and flight path trail are rendered in full-context 3D.
- Provides intuitive multi-function display and vehicle health monitoring.





## COMMBOX

Robust wireless communications device links Virtual Cockpit ground control station (GCS) software and Kestrel Autopilot.

- Commbox – aluminum enclosure:
  - RS232 interface
  - Microhard, MaxStream modem support
  - External GPS interface
  - Video overlay
  - Radio control (RC) transmitter link
  - Internal 8 cell 2500mAh NiMH,  
External 9-14 V
  - Rugged, durable



Procerus Commbox  
5" x 3.7" x 2"  
16 oz



Lockheed Martin Procerus Hand Controller

## HAND CONTROLLER

- For small UAS; fixed wing and VTOL
- Stand-alone, untethered operation
- Secure digital data link
- Windows 8.1 based operating system
- Onboard recording of HD video and stills
- Small ergonomic design with large outdoor readable touchscreen
- Ruggedized and weather resistant
- Lightweight: 2.7 -3.3 lb
- Long run time (4 - 8 hours)

# WE'RE ENGINEERING A BETTER TOMORROW

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