

EVENT 38

UNMANNED SYSTEMS

E455 Mapping Drone

The E455 is a fixed wing vertical take-off and landing UAS operating on battery power at up to 65lbs. It uses a removable payload bay with open architecture at the center of gravity to allow maximum utility. It is capable of flying for over 2 hours or carrying up to 15lbs of payload. Event 38 designs and builds the E455 in house, maintaining maximum control and flexibility over both the hardware and software. The E455 is NDAA 848 compliant.



Designed and Built in Ohio, USA



Sony A6100 / RX1RII / A7R IV

- Up to 62 megapixels
- RTK/PPK Optional
- Onboard Geotagging Optional



MicaSense Rededge / Altum-PT

- Multispectral with Optional PPK
- 2.4cm/pix RGB at 120m AGL
- 34cm/pix thermal at 120m AGL



LiDAR

- RESEPI Hesai
- System Precision: 2-3cm
- Inertial Labs IMU-P



NextVision Nighthawk

EO/IR

- Zoom: 40x optical, 2x digital
- Image Stabilization
- Object Tracking

Radio

- 2.4GHz
- 256-bit AES Encrypted

AIRCRAFT SPECIFICATIONS

Nominal Payload	5 lbs (2.3kg)
Endurance	150 <u>Minutes</u>
Cruise Speed	39 mph (17.5m/s)
Airframe Construction	Carbon Fiber Composite
One-Way Flight Range	81 miles (131km)
Range (RFD900)	5 miles (8km)
Range (Microhard)	GCS Dependent 3-20mi
Nominal Weight	55lbs (25kg)
Max Weight	65lbs (29.5kg)
Max Payload	15lbs (6.8kg)
Dimensions	14.2ft (4.3m) Wingspan 7ft (2.1m) Length
Wind Resistance	22 mph (10m/s)
Weather	Designed to IP53 5-110°F (-15-43°C)
Optional PPK Onboard GPS	GPS/QZSS L1C/A, L2C GLONASS L1OF, L2OF BeiDou B1I, B2I Galileo E1-B/C, E5b

E38 Ground Control

- Intuitive mission planning
- Automated preflight checks
- Flight monitoring and controls
- Link: 900MHz, 868MHz, 2.4GHz

