The Vayu HD is the industry gold standard for critical applications when superior imaging performance at the lowest weight and the highest resolution available are essential.

**Vayu HD Details:** With true 1920x1200 (Full HD) resolution from an uncooled VOx microbolometer array, the Vayu HD is the highest-resolution LWIR camera on the market. At just 450 and 520 grams (25 and 50mm lens versions) and compact enough to fit in the palm of your hand, the Vayu HD sets a new standard for superior image quality and resolution in a SWaP optimized package.

The camera features a USB3.0 raw video output for more universal compatibility, an open chassis for the lightest possible integration weight and an F/1.2 lens with a high-performance AR coating for calibrated optical performance. An onboard image processor provides H.264/H.265 encoded RTP output, advanced image processing functions, and the ability to implement optional features such as object tracking and detection with telemetry, NMEA metadata packaging and more.

**APPLICATIONS**

- Low-SWaP aerial integration
- Navigation
- Wide Area Surveillance
- Driver Vision
- Aerial Mapping
- Unmanned Vehicles
- Film production
**FEATURE SPECIFICATIONS:**

**DETECTOR**
- Detector Type: Uncooled VOx Microbolometer
- Bit Depth: 16-bit
- Array Format: 1920 x 1200
- Pixel Pitch: 12µm
- Spectral Response: LWIR 8-14µm
- Frame Rate: 60Hz
- 1-point NUC: Scene or mechanical shutter

**LENS**
- EFL: 25mm / 50mm lens models
- F#: 1.2
- Focus: Manual
- FOV: 25mm: 49.5° x 32.1°
  50mm: 25.9° x 16.4°
- Environmental: Athermalized, High-performance AR Coating

**SYSTEM**
- Video formats: HDMI (1080p), IP, USB3-UVC (raw)
- IP Video: H.264/H.265 MPEG
- Image Enhancement: Linear Histogram AGC, CLAHE, LAP, Sharpen, De-noise, Electronic image stabilization
- Camera Control: Ethernet, RS-422
- Other interfaces: Serial in/out for telemetry, GPIO

**DELIVERABLES**
- Vayu HD with 25mm or 50mm lens
- Software, documentation
- Rugged delivery/storage case
- Controlled under ECCN 6A003.b.4.b

**ENVIRONMENTAL SPECIFICATIONS:**
- Size: 25 mm: 122 mm x 77 mm x 72 mm
  50 mm: 139 mm x 77 mm x 72 mm
- Weight (approx): 25 mm: 450g (1 lbs)
  50 mm: 520g (1.1 lbs)
- Mounting: ¼-20 and M4 tapped mount points
- Input Voltage: 11-14VDC
- Power: 12 W typical
- Operating temperature: -20°C to +45°C

*Specifications and descriptions subject to change without notice.*