VAYU HD-I
WEATHER RESISTANT AND VIBRATION TESTED

The VAYU HD-I is an enclosed high definition system with a water and dust resistant IP54 ingress rating. This HD infrared camera is water and dust resistant. MIL specification vibration testing makes it the most rugged camera in our catalog.

DETAILS

The Vayu HD-I was built for high definition infrared imaging in difficult environments. This field-ready camera is enclosed in a IP54 ingress protected case with sealed and locking connectors. Rigid internal design is meant to withstand vibration environments under a wide operating temperature range. The rugged encasement provides several mounting arrangements, making integration faster with minimal SWaP tradeoff for weight critical missions.

+ Weatherproof, IP54 rated enclosure for demanding environments
+ Wide operating temperature range
+ Sealed locking connectors
+ Multiple mounting orientations
+ 25 mm, 50 mm, 87mm lens options available

APPLICATIONS

+ Low-SWaP aerial integration
+ Wide area surveillance
+ Aerial mapping
+ Wildlife, wildfire, S&R
+ Navigation, surveying
+ Driver vision
+ Unmanned vehicles
+ Film production

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EXPORT CLASSIFICATION: DUAL USE

FEATURE SPECS

DETECTOR

Detector Type	Uncooled VOx Microbolometer
Array Format	1920 x 1200
Pixel Pitch	12 Micron
Spectral Response	LWIR
Frame Rate	60 Hz
Bit Depth	16-bit
NETD	50 mK

ENVIRONMENTAL

Power Dissipation	12W typical at room temperature 15W maximum
Operating Temperature	-15°C to +65°C
Sealed/Rated	IP54
Certifications	Operational vibration environment (limits TBD)
Standards/Compliance	FCC Part 15 Subpart B Class A

SYSTEM

Digital Video Output	SDI (1080p), USB3.0 UVC (RAW 16-bit)
IP Video Output	Ethernet (H.264, H.265)
NUC	Scene or Mechanical shutter
Image Enhancement	Linear Histogram AGC, CLAHE LAP, Sharpen, De-noise, Electronic image stabilization
Color Palette Options	User color palettes/LUT
Digital Zoom/Pan	1X to 16X
Symbology	User Defined
Onboard Storage	64 GB
Camera control/command Interfaces/System Control	Ethernet Serial (RS-422)
Other Electrical Interfaces	Aux serial in/out
Input Voltage	11 to 14 VDC

LENS OPTIONS

F#	1.2
HFOV by VFOV	25 mm: 49.5° by 32.1° 50 mm: 25.9° by 16.4° 87 mm: 15.1° by 9.46°
Size (L x W x H)	25 mm: 147 x 85 x 85 mm 50 mm: 138 x 85 x 85 mm 87 mm: 167 x 89 x 89 mm
Weight	25 mm: 860g (1.9 lbs) 50 mm: 861g (1.9 lbs) 87 mm: 1,174g (2.6 lbs)
Focus	Thread Focus
Environmental (coating)	All Lenses: Athermalized, high-performance AR coating