

FIELD-READY

VULCAN SX + ILX-LR1

Fly once.
Trust the data.

High-resolution aerial mapping and survey for infrastructure, construction, land management, and environmental monitoring.



- **A complete mapping system, not just a sensor on a drone.**

Vulcan SX with the ILX-LR1 delivers everything you need in one package — 61MP full-frame sensor, Gremsy gimbal, and Pix4D photogrammetry (optional). No separate hardware to mount or configure. No gaps between capture and deliverable.



- **61 megapixels. Every frame geotagged.**

The ILX-LR1 captures full-frame imagery with precise location data embedded at the moment of capture – no external GPS logger, no post-processing to assign coordinates. Your photogrammetry software gets clean data the moment you transfer files.

- **Survey-grade positioning, built into the aircraft.**

Vulcan SX includes RTK-capable, dual-band L1/L5 GNSS – no add-on hardware, no extra configuration. The positioning accuracy your survey data requires is already there.

- **Consistent coverage in real-world conditions.**

The Vulcan SX tricopter holds its line in wind that pushes quadcopters off their flight plans – so you cover what you planned to cover, not what the conditions allowed.



Blue/Green UAS
Pending Cert

Made in Montana
148 Village Center Ln, Bozeman, MT

[60 km]

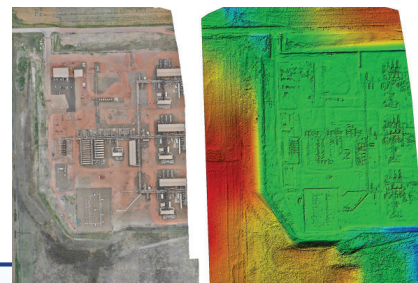
High-resolution mapping pass on a single charge.

Vulcan SX

Flight Time / Distance	65 min no payload, 60 km with Sony ILX-LR1 flying cruise-optimized mission profile
Extended Flight Kit	2 min smart battery swap, continuous operations
Operating Temp	-15°F to 115°F
Wind Resistance	14 m/s (32 mph)
Weather Rating	IP55
Max Payload	3.0 kg
GNSS	RTK-capable, dual-band L1/L5, built in
Collision Avoidance	Forward radar, active in flight
Terrain Following	Active
EMI/RFI	Armored design
Mission Software	Flight Deck — no subscription

Sony ILX-LR1

Payload / Camera Weight	0.95 kg / 243 g
Sensor	Full-frame Exmor R CMOS, 1.38 in
Resolution	61 MP (9504 × 6336)
ISO Range	100 – 32,000
Shutter	Electronic global shutter
Lens Options	24mm, 35mm, 55mm
Geotagging	In camera
Gimbal	Gremsy, fully integrated
Photogrammetry Software (optional)	PIX4Dmatic



Workflow

01 Plan



Plan your mission using Vision Aerial Flight Deck. Set your flight lines, altitude, and overlap for the coverage and resolution you need.

02 Fly



Fly Vulcan SX with the ILX-LR1 -- 61MP full-frame sensor + Gremsy gimbal + Pix4D (optional). RTK GNSS and terrain following run automatically.

03

Capture



The ILX-LR1 captures geotagged full-frame imagery throughout the mission. Every frame carries precise location data from the moment of capture.

04

Report



Transfer your files to Pix4D or your photogrammetry software of choice. Coordinates and metadata are already built in — orthomosaic, point cloud, or DSM.

Designed, manufactured, assembled, tested, and serviced in the USA.

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Rev A.1