ViO

VISION UNMATCHED

Gremsy is a global leader in designing and manufacturing gimbal and payload systems tailored to dual-use drones. With a commitment to revolutionizing multiple applications, Gremsy has consistently delivered high-quality, innovative solutions that empower professionals across industries.

- **Office:** 152-154 Street No.02, Van Phuc Residential City, Hiep Binh Phuoc Ward, Thu Duc City, Ho Chi Minh City, Vietnam
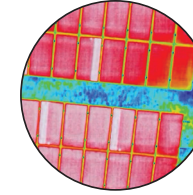- **Phone:** (+84-28) 37 205 221
- **Email:** contact@gremsy.com

Vio series is an advanced lightweight EO/IR payload, featuring a 4K zoom sensor, a 640x512 radiometric thermal camera, and an integrated 2400m laser rangefinder, ready for various industrial applications.

Researched & Developed in Vietnam

Plug-and-play Industry-leading size, only 854g

MAVLink Drone Support

4K Resolution Zoom sensor

640x512 Radiometric Thermal sensor 8x digital zoom

Laser Rangefinder up to 2400m

VERSATILE LIGHTWEIGHT EO/IR PAYLOAD

Powerful Zoom Camera

30x Hybrid Optical Zoom, Max 240x Zoom 8.51MP 1/2.5" CMOS
- Focal Length: 4.4mm to 88.4mm
- Resolution:
  - Photo: 3840 x 2160 (8.51MP)
  - Video: 3840 x 2160 (4K@30fps)

Radiometric Thermal Camera

1x to 8x Zoom Fixed Focus, 32° HFOV, 14 mm EFL
- Resolution: 640×512@60fps
- Thermal Sensitivity: ≤ 50mk

Laser Rangefinder (LRF)

- Wavelengths: 905 nm
- Precision: 0.01-0.5 m
- Laser Safety: Class 1 (IEC 60825-1:2014)
- Capability: 2 - 2400m
- Performance measure
  - 10 Hz: 700m (2 - 1200m)
  - 1 Hz: 1500m (2 - 2400m)

This thermal specs refer to Vio F1

POWERFUL ZOOM CAPABILITY

Vio offers the capability to zoom in both thermal and optical modes, catering to various applications such as mapping, inspection, surveying, and public safety tasks.

Thermal Zoom
IR 8X Zoom

Visible Optical Zoom
30X Super Resolution Zoom

RADIOMETRIC THERMAL IMAGING

Vio offers two versions with advanced 640x512 radiometric thermal sensors, featuring a remarkable sensitivity of <=50 mK (default version), delivering precise temperature detection. Well-suited for any demanding industrial applications: assets & infrastructure inspection, disaster relief, firefighting, search & rescue, urban safety and more.

EO/IR OBJECT TRACKING

Easily auto-tracks and auto-centers your selected object, ensuring it remains perfectly framed even while zooming or adjusting the gimbal position.
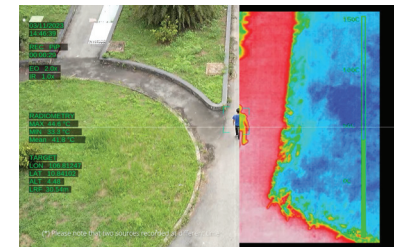
LASER RANGEFINDER & PINPOINT

Vio features a highly precise (0.1-0.5m) laser rangefinder, recommended for optimal object detection at 1200m at 10Hz, but capable of reaching up to 2400m at 1Hz. Combine the aircraft's GPS to detect the exact position of the targets for rescue missions.

2400m
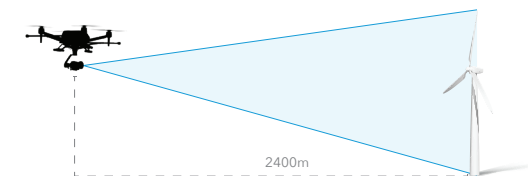
AI-DRIVEN FEATURES UNLEASHED

▪ **AI Detection**

Identify objects such as cars, humans during tracking, ensuring accurate performances.

▪ **AI Auto Zoom**

Automatically zoom in on the selected object for the best view. It adjusts the zoom level as the object moves closer farther away.

For users who desire to further expand the range of detectable objects, please contact us for additional software updates and options.
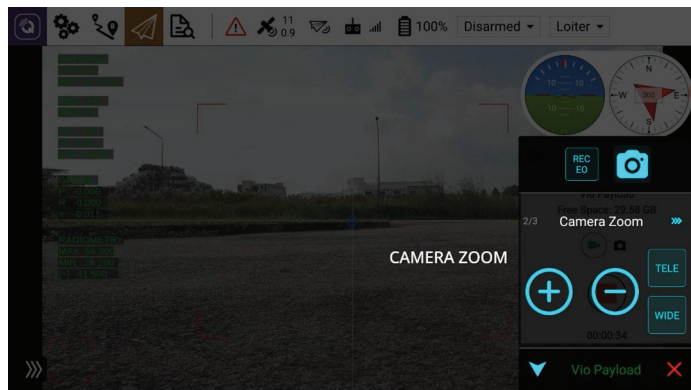

USER INTERFACE

PAYLOAD ASSISTANT APP

Gremsy introduces Payload Assistant app, an overlay software that facilitates user operation of Vio with ease, such as zoom in, select tracked objects by touching the remote screen, alter gimbal modes, take images, view videos, and more.

CAMERA VIEW MODE

Equipped with two integrated sensors, you can seamlessly engage the advanced functionalities of the camera, facilitated by a diverse and intuitive viewing mode.

EO

EO/IR

IR

IR/EO
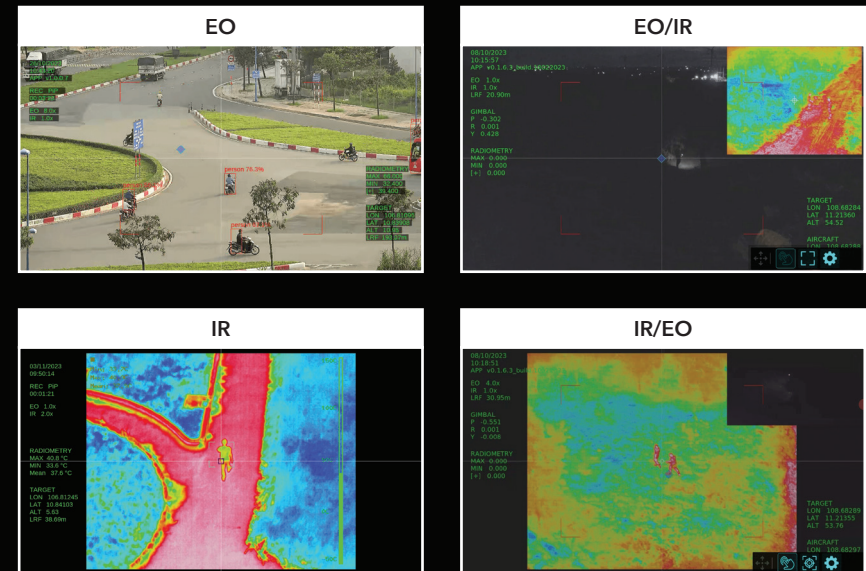
MORE FUNCTIONALITIES

GEOTAGGING

Enable data embedding into your images

DIRECT MEDIA RETRIEVAL

Easily access and retrieve media files from a device using Ethernet

PAYLOAD SDK

Access payload info and control it using available libraries for specific applications

VIDEO STREAM

Support stream video via HDMI/Ethernet RTSP

OPEN FOR CUSTOM APPLICATIONS

Our high-performing Vio chip equips us to create extensions for a wide range of features. For inquiries about custom projects utilizing these capabilities, please get in touch with us.

Choose from two models of Vio series, Vio F1 and Vio G1, for unmatched performance and precision

VIO F1

Sony 4K Block Zoom Camera

Flir Boson 640R Thermal Core

2400m LRF (*)

VIO G1

Sony 4K Block Zoom Camera

640R Thermal Core

2400m LRF (*)

VIEW SPECS

ASSEMBLY & DISTRIBUTION

VIO F1

Vio F1 is assembled in the U.S. and distributed by Gremsy U.S.

VIO G1

Vio G1 is assembled and distributed in Vietnam and can be ordered directly from the Gremsy store.