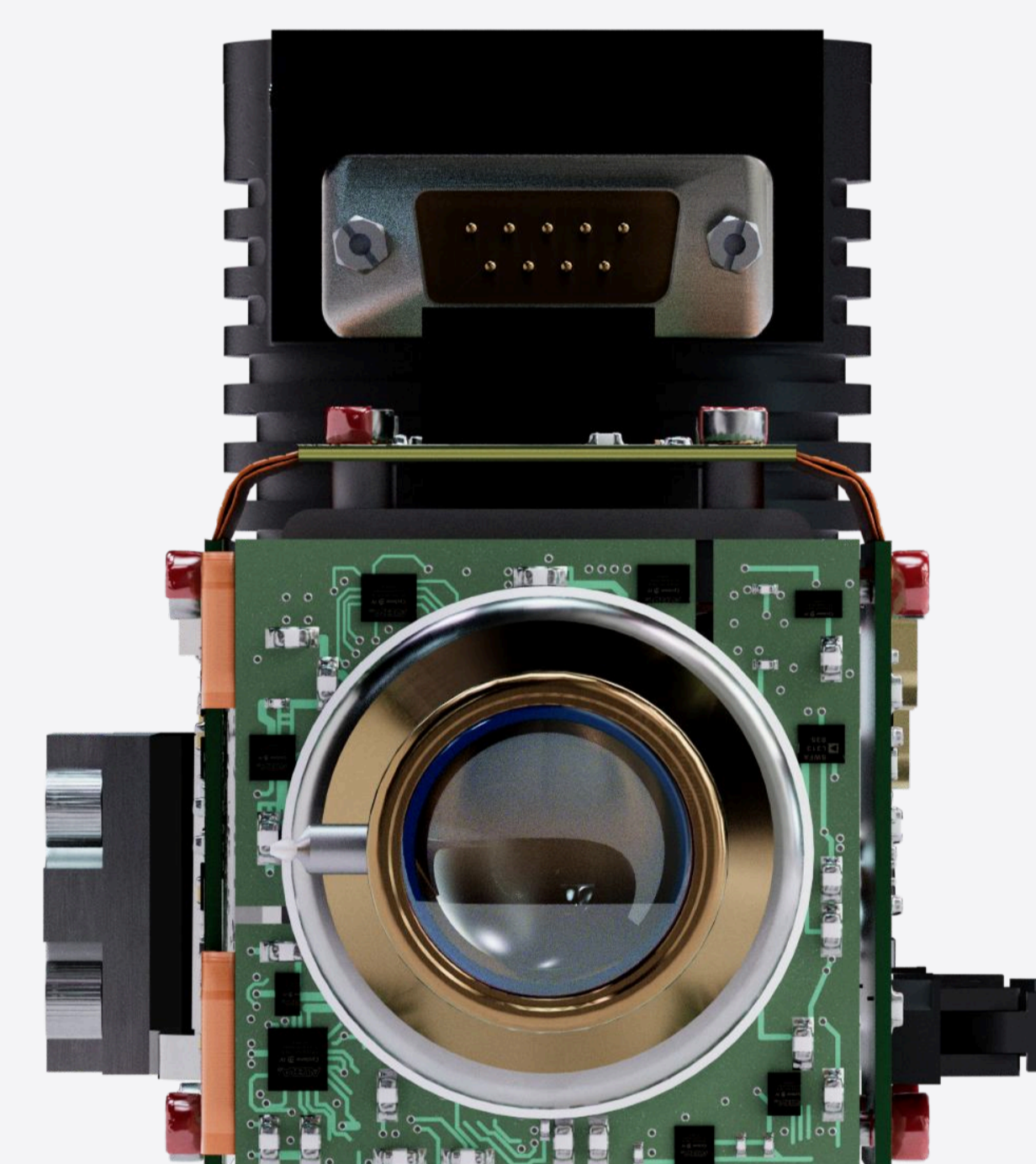
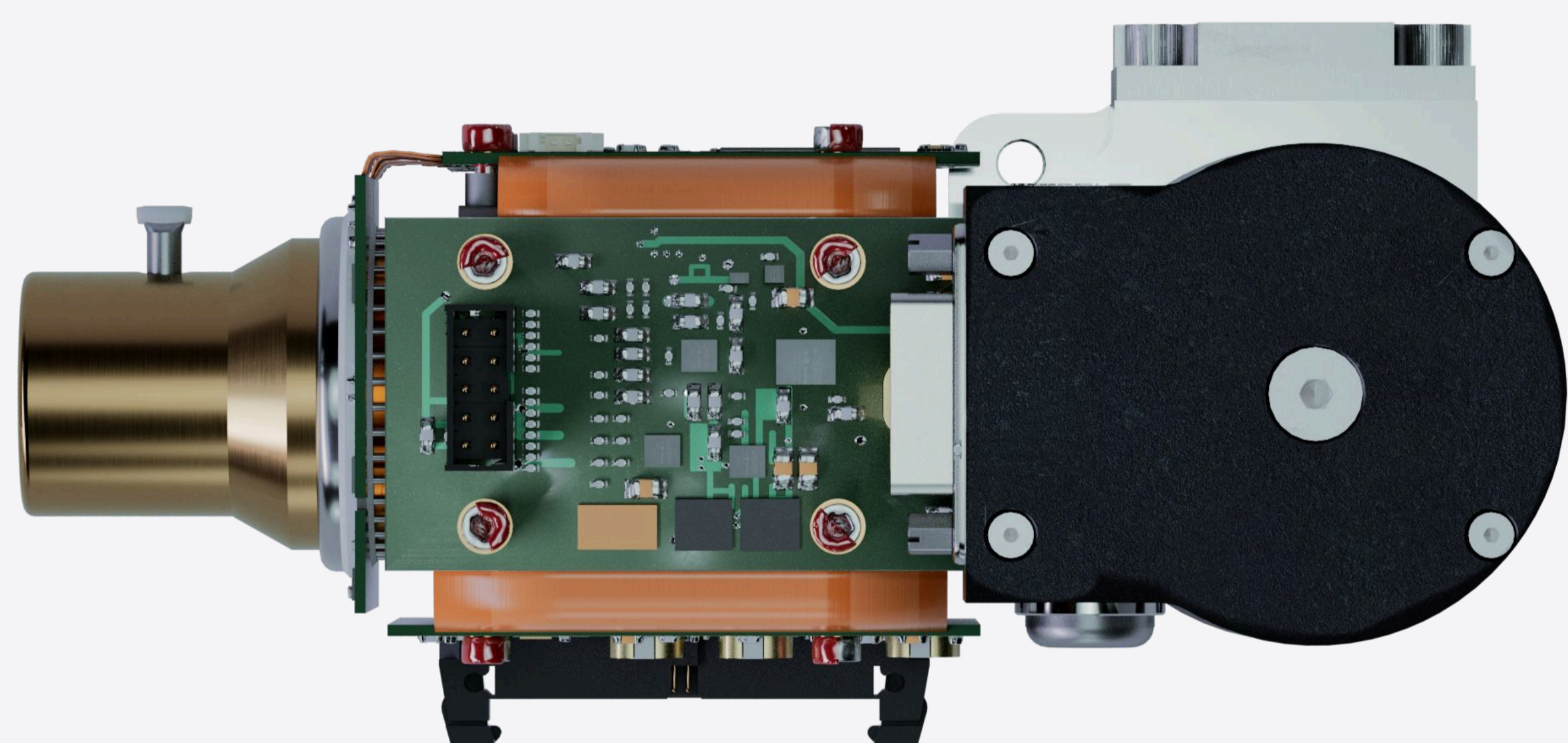
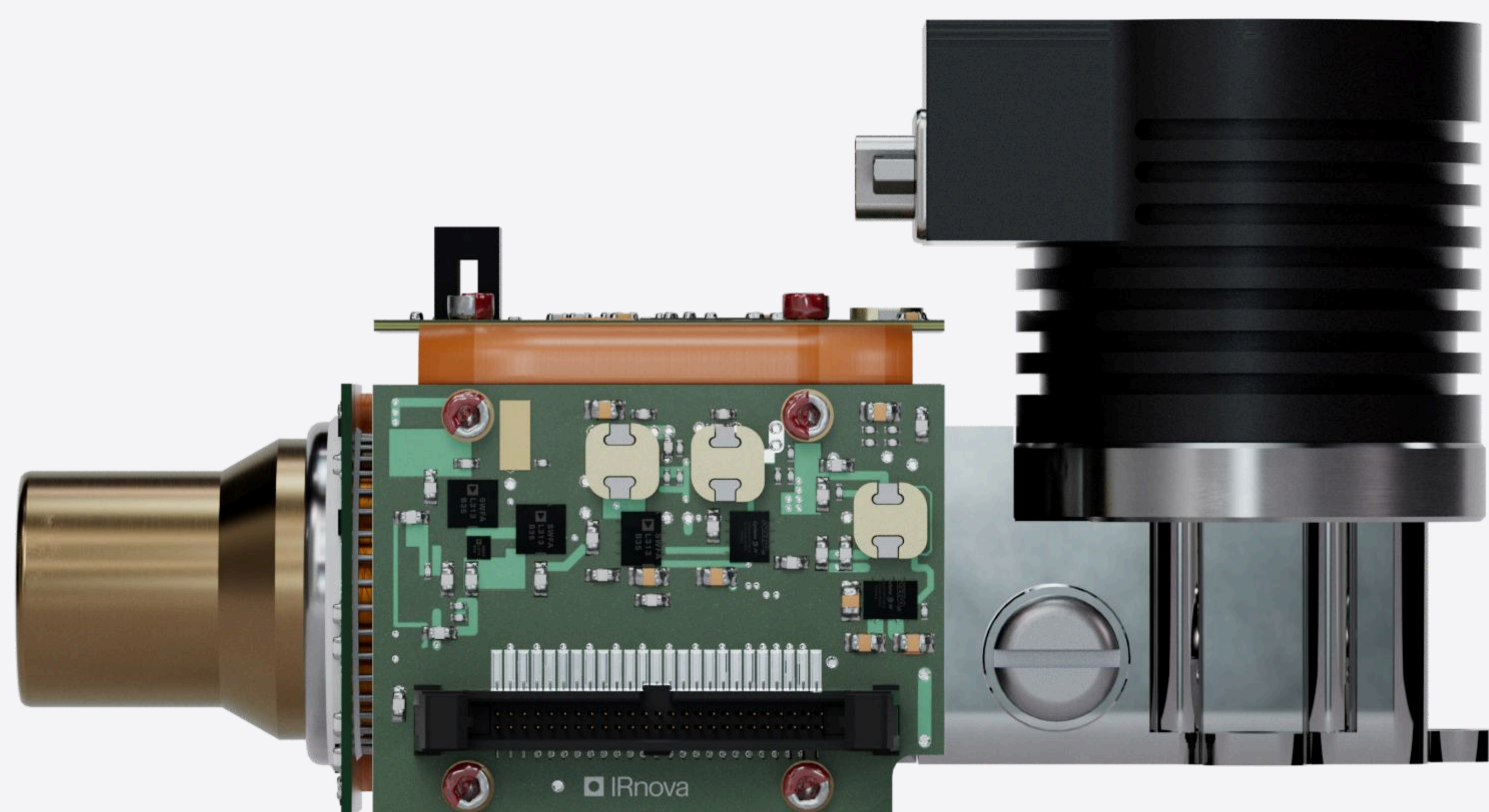


QWIP Fenrir Pol

IRnova's Fenrir Pol is the world's first cooled LWIR polarimetric detector giving you the power to use its capabilities on brand-new applications. Its unique pixel-level polarization lets you see further than ever before.



Description

The Fenrir Pol has a built-in 2x2 pixel array structure. With each pixel sensitive to a distinct polarization angle (0°, 45°, 90°, and -45°), it can sense the smallest polarimetric information within any scene without optical parallax or frame rate constraints. This unique detector allows real-time capture of polarimetric video and images with high polarimetric contrast and freedom from filter induced transmission losses.

Applications

- ✓ Efficient oil spill detection
- ✓ Camouflage denial
- ✓ Improvised Explosive Device (IED) detection
- ✓ Human infrared face recognition
- ✓ Industrial applications (thermography, NDT...)
- ✓ And much more

General information

Application: Extended detection

Format: 640x512

Technology: QWIP

Pixel pitch: 15 μm

Typical detector performance

Spectral range: 7.7 - 9.1 μm

Pixel operability: 99.9 %

F number options: F/2, F/2.24

MTF: 45 %
@ Nyquist frequency

NETD: 35 mK @F/2.24, 60 Hz

Proximity electronics

Supply voltage: 5 V

Electrical interfaces: Camera Link
Cooler control and proximity
electronics included

Maximum frame rate: 60 Hz
120 Hz optional

IDDCA Parameters

Cooler options: RM3i, K508, K508N,
SRI401

Weight: 590 g

Power consumption: 5.5 W
Without proximity electronics

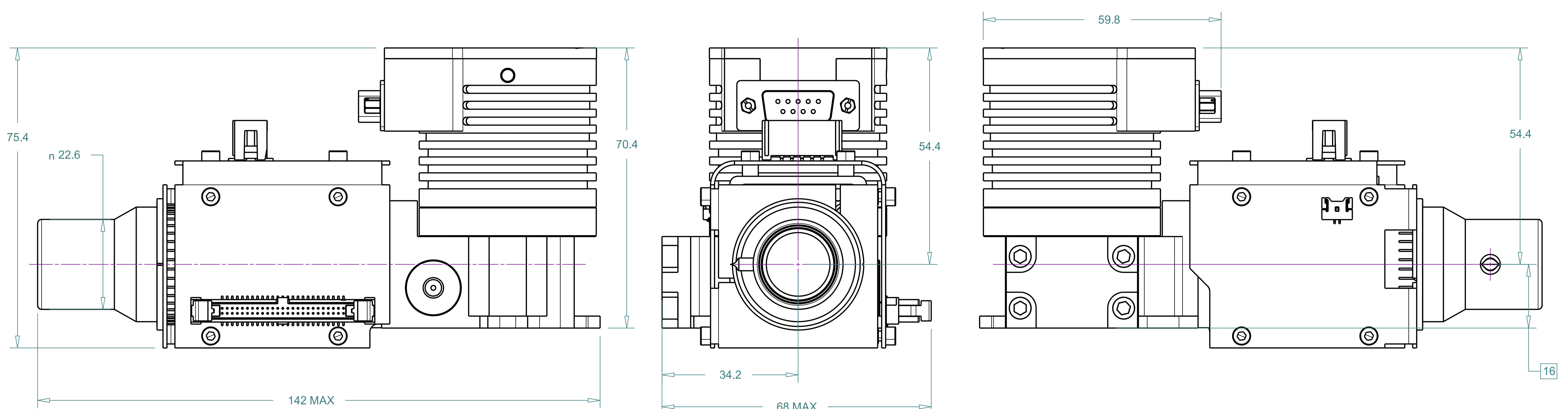
Dimensions: 142x76x68 mm

Cool down time: 5 min

Cooler MTTF: 31 500 h

Cooler voltage: 12 V
24 V options available

Environmental conditions: MIL-
STD-810



Technical characteristics described above are not contractual and may change without prior notice. This is revision 1.0.