

System Specifications



DETECT • RECOGNIZE • IDENTIFY

SYSTEM OVERVIEW

SYS. SPECIFICATIONS

THERMAL CAMERA

THERMAL CAMERA
PERFORMANCE

CAMERA MOUNTING

WIRING ASSIGNMENT

ORDER INFORMATION

SHIPPING CONTENTS

SYSTEM DRAWINGS

- CZ225
- CZ275
- CZ300
- CZ420
- CZ700

System Overview

Sii XR is family of powerful long range continuous zoom thermal cameras for OEM integration and long range security and surveillance applications. Sii XR allows long range observation and detection using state of the art cooled and uncooled thermal imaging technology and contrast enhancing image processing algorithms.

Sii XR configurations are named based on their thermal imager. There is one uncooled configuration available and three cooled versions available. The uncooled model (CZ225) features a 17μ 640 x 480 core with 25-225mm continuous zoom lens while the cooled models feature a 15μ 640 x 512 core with 19-275mm (CZ275), 15-300mm (CZ300), 21-420mm (CZ420), and 48-700mm (CZ700) continuous zoom lenses.

All **Sii XR** models feature AutoFocus on Demand for crisp, clear imaging.

The **Sii XR's** rugged design allows it to withstand the harshest weather and environmental conditions, including rain, direct sunlight, high humidity, dust, heat, and cold.

Sii XR Models



APPLICATIONS

- Port Security
- Airport Perimeters
- Nuclear Power Plants
- Border Surveillance
- Critical Infrastructure
- Oil and Gas facilities

MAJOR COMPONENTS

- Thermal Core - LWIR or MWIR Thermal Core
- Lens - Continuous Zoom / Autofocus
- Rugged Enclosure

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SYSTEM SPECIFICATIONS

Choose camera type to see its specifications

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THERMAL CAMERA

OVERVIEW

The Sii XR thermal camera are available with an uncooled 17μ 640 x 480 resolution camera core or a cooled 15μ 640 x 512 resolution core. The uncooled core is paired with a continuous zoom 25-225mm lens with Autofocus. The uncooled cores are paired with one of three continuous zoom lenses with Autofocus: a 19-275mm, 15-300mm, 21-420mm or 48.5-700mm. All camera systems are configurable for either PAL or NTSC video and have the option for TCP/IP Video & Comm interface.

LENS INFORMATION

CZ225 - Continuous Zoom 25-225mm (uncooled)

- High Quality f1.5 Optics
- Autofocus on Demand

CZ275 - Continuous Zoom 19-275mm (cooled)

- High Quality f5.5 Optics
- Autofocus on Demand

CZ300 - Continuous Zoom 15-300mm (cooled)

- High Quality f4.0 Optics
- Autofocus on Demand

CZ420 - Continuous Zoom 21-420mm (cooled)

- High Quality f4.0 Optics
- Autofocus on Demand

CZ700 - Continuous Zoom 48.5-700mm (cooled)

- High Quality f5.5 Optics
- Autofocus on Demand



Horizontal Field of View listings by Model			
Lens	Core	Lens	HFOV
CZ225	17μ 640 x 480	25-225mm	24.5° - 2.77°
CZ275	15μ 640 x 512	19-275mm	29.8° - 2.0°
CZ300	15μ 640 x 512	15-300mm	35.1° - 1.8°
CZ420	15μ 640 x 512	21-420mm	25.1° - 1.3°
CZ700	15μ 640 x 512	48.5-700mm	11.9° - 0.8°

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THERMAL CAMERA PERFORMANCE

Legend

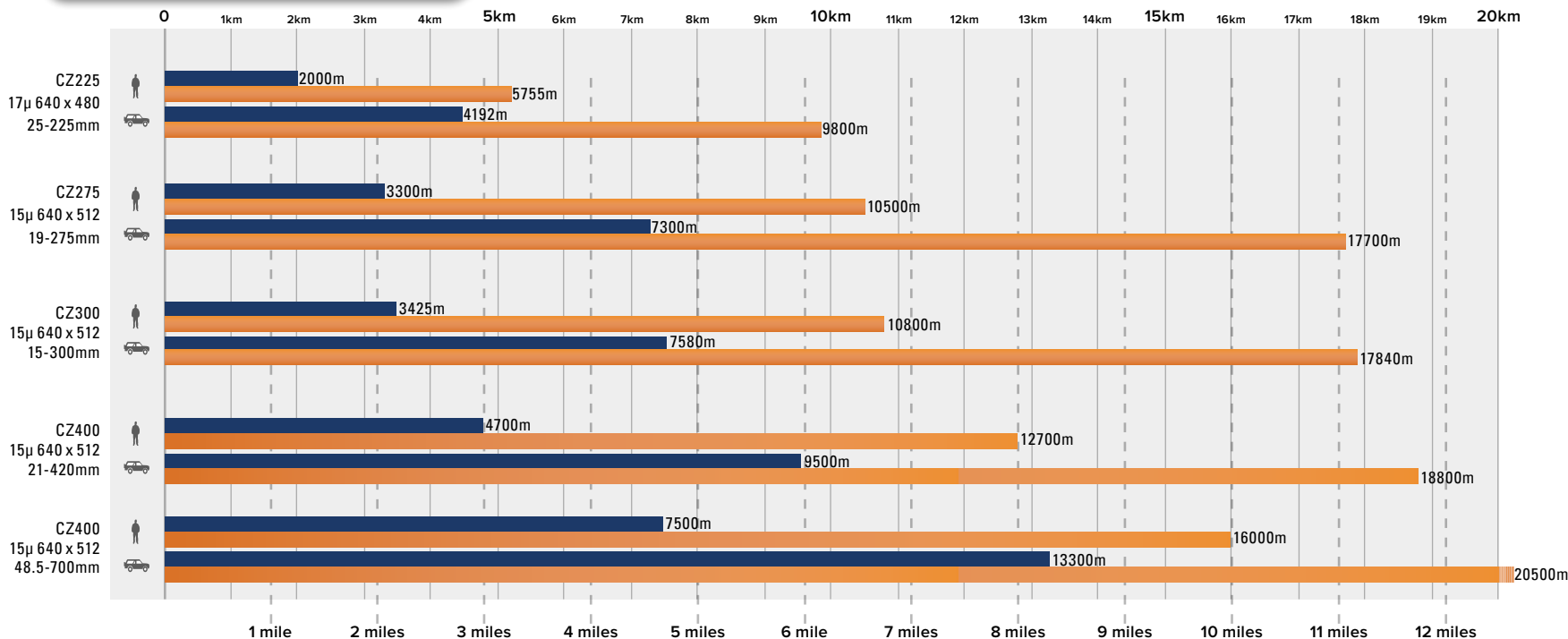
D/N Detection (Thermal) - 1.5 PoT

D/N Recognition (Thermal) - 6 VPoT

= Human Subject Size
1.83m x 0.75m

= Vehicle Subject Size
2.3m x 2.3m

Detection: 1.5 pixels across critical dimension
 Recognition: 6 pixels across critical dimension
 Critical Dimension: 0.75m (human); 2.3m (vehicle)



NOTE: Performance dependent on atmospheric conditions, all calculations are geometric and do not include atmospheric attenuation.

100m = 328ft 1000m = .62 mi
500m = 1640ft 1610m = 1 mi

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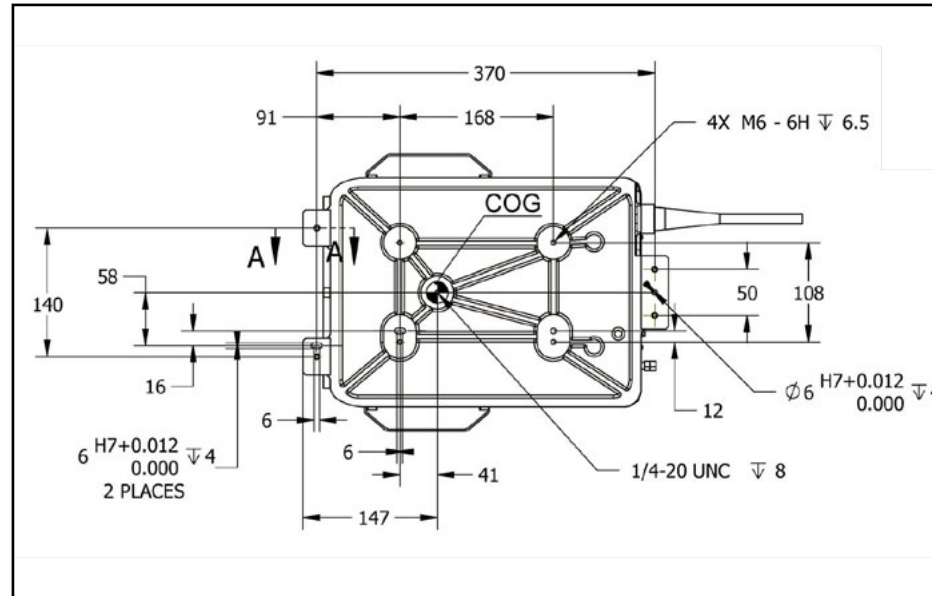
SHIPPING CONTENTS

SYSTEM DRAWINGS

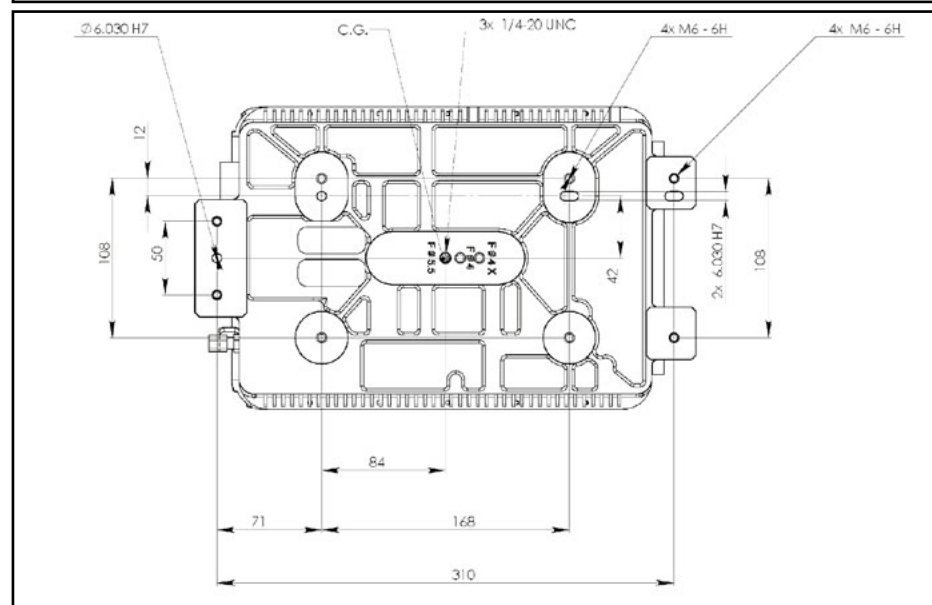
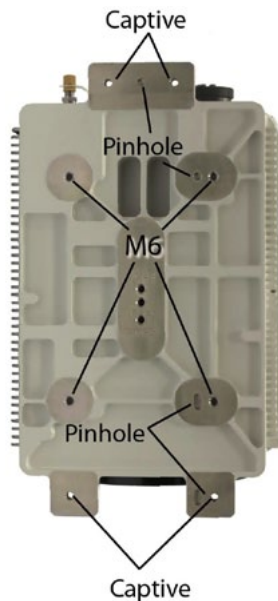
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CUSTOM MOUNTING INFORMATION

Sii XR Uncooled (CZ225)



Sii XR Cooled (CZ275, CZ300, CZ420, CZ700)



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Choose camera type to see its pinout

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ORDERING INFORMATION

All **Sii XR** ship as a fully integrated system with camera, lens, and enclosure. A mating connector and backshell is also provided for camera I/O connections. If required, an integrational cable can be ordered separately.

Model	Thermal Engine	Lens	Part Number
CZ225	UnCooled 17 μ 640 x 480	Continuous Zoom 25-225mm	ES225Z17V-0A020
CZ275	Cooled 15 μ 640 x 512	Continuous Zoom 19-275mm	RS275Z15V-0A020
CZ300	Cooled 15 μ 640 x 512	Continuous Zoom 15-300mm	RS300Z15V-0A020
CZ420	Cooled 15 μ 640 x 512	Continuous Zoom 21-420mm	RS420Z15V-0A020
CZ700	Cooled 15 μ 640 x 512	Continuous Zoom 21-420mm	RS700Z15V-0A020

Vumii Accessories		
Camera Compatibility	Accessory	Part #
Sii XR Uncooled (CZ225)	Integration cable (3m length)	GLJH0200A
	115/230vac to 12VDC Outdoor Rated power supply (IP65)	880990LF
	115/230vac to 12VDC Indoor Rated power supply	5U7A0020A
Sii XR Cooled (CZ275, CZ300, CZ420, CZ700)	Integration cable (3m length)	8L9H0190A
	115/230VAC to 24VDC 5A Outdoor Rated UL power supply (IP65)	880575LF

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STANDARD ORDER - Sii XR

Fixed Sii includes:

- 1) Thermal camera
- 2) Cable Mating Connector (not shown)
- 3) Software & Documentation CD containing:
 - User Manual
 - Test & Configuration Software

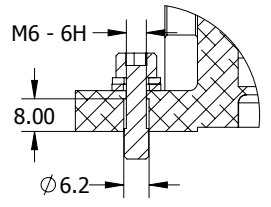
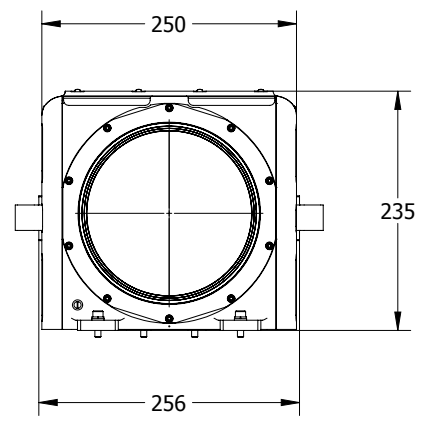
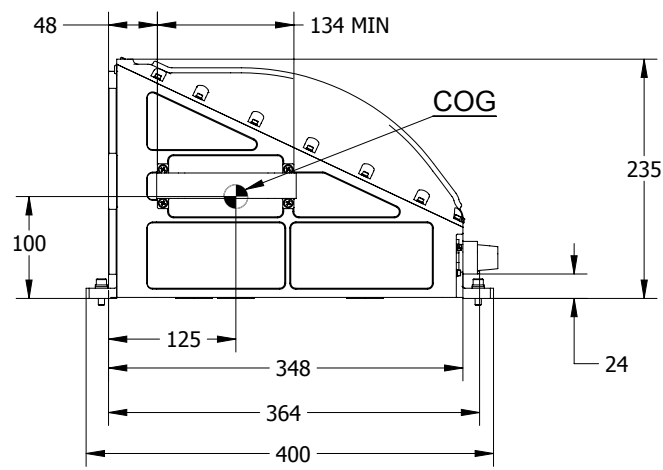
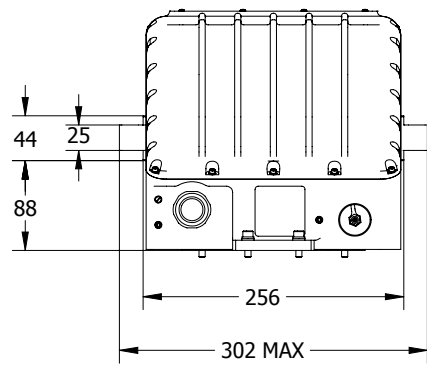
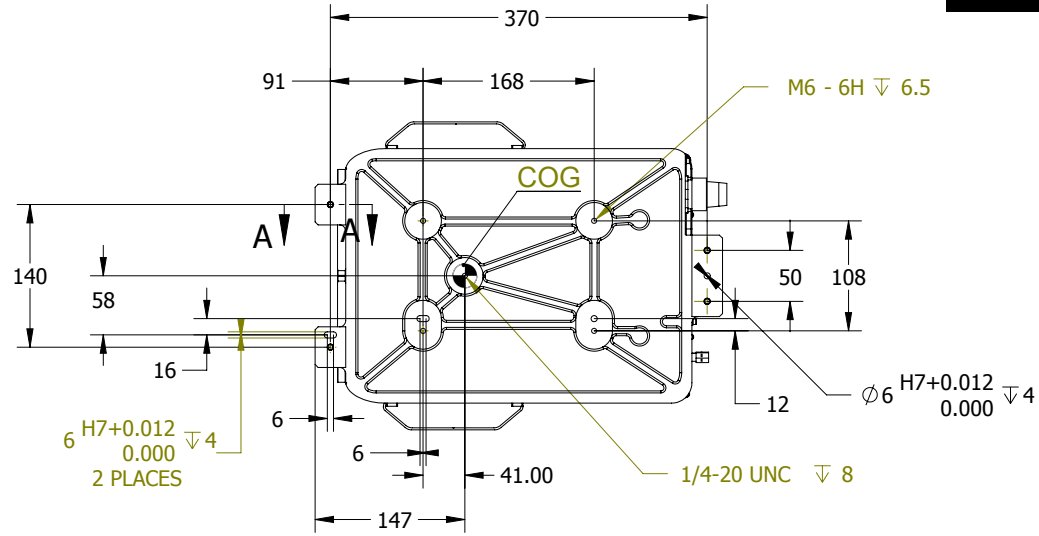
Optional Equipment:

- 4) 3m Integration Cable

Sii XR Packaging (Standard Order)

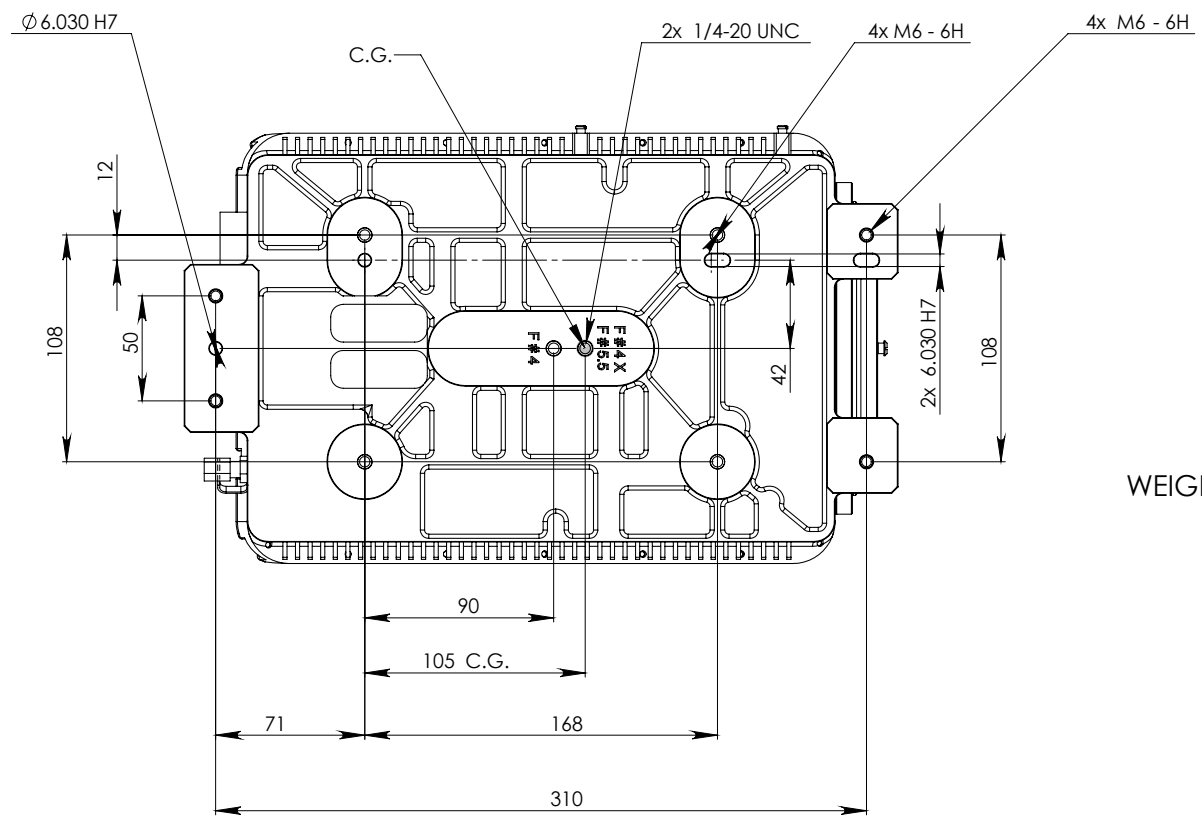
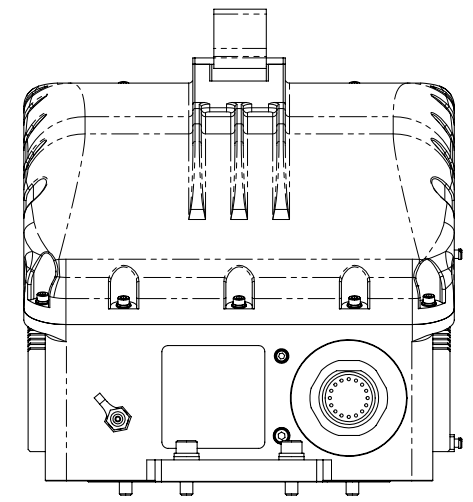
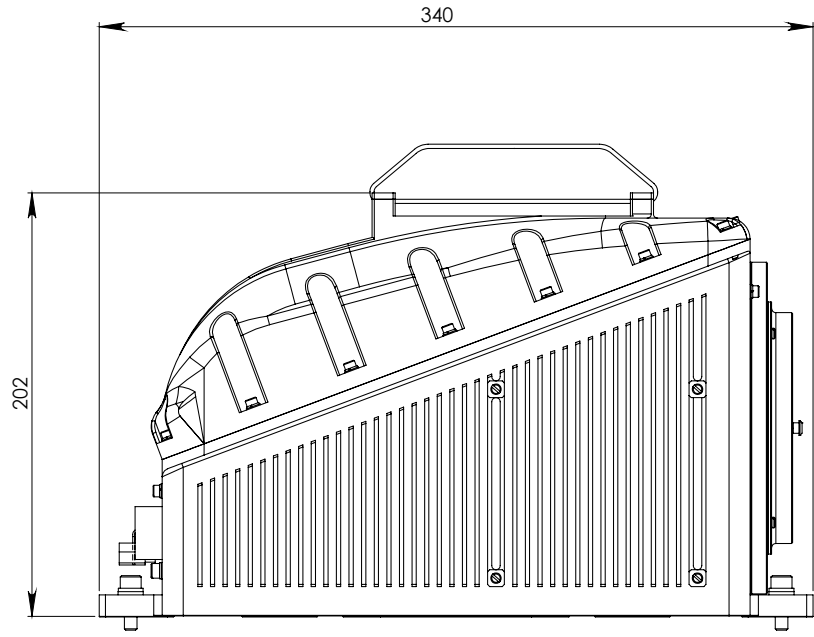
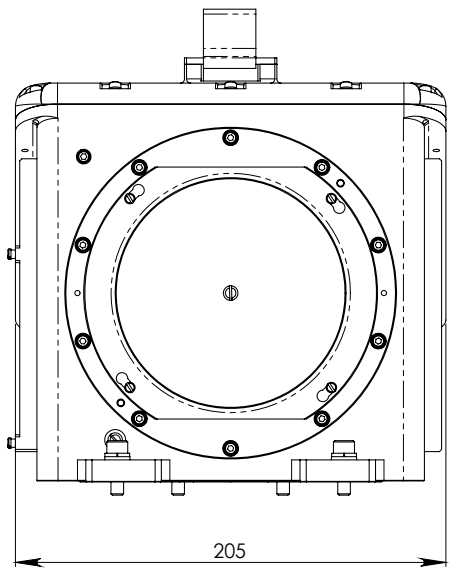


*Packaging may differ from shown

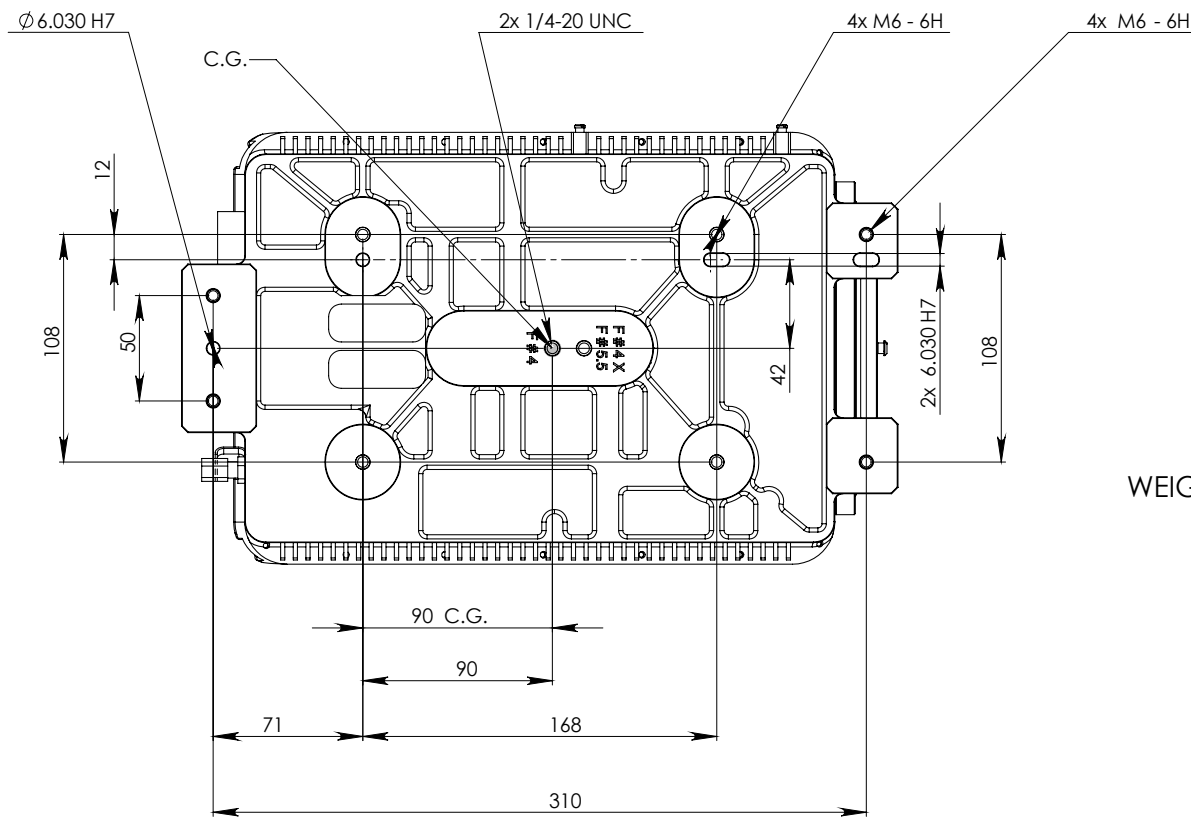
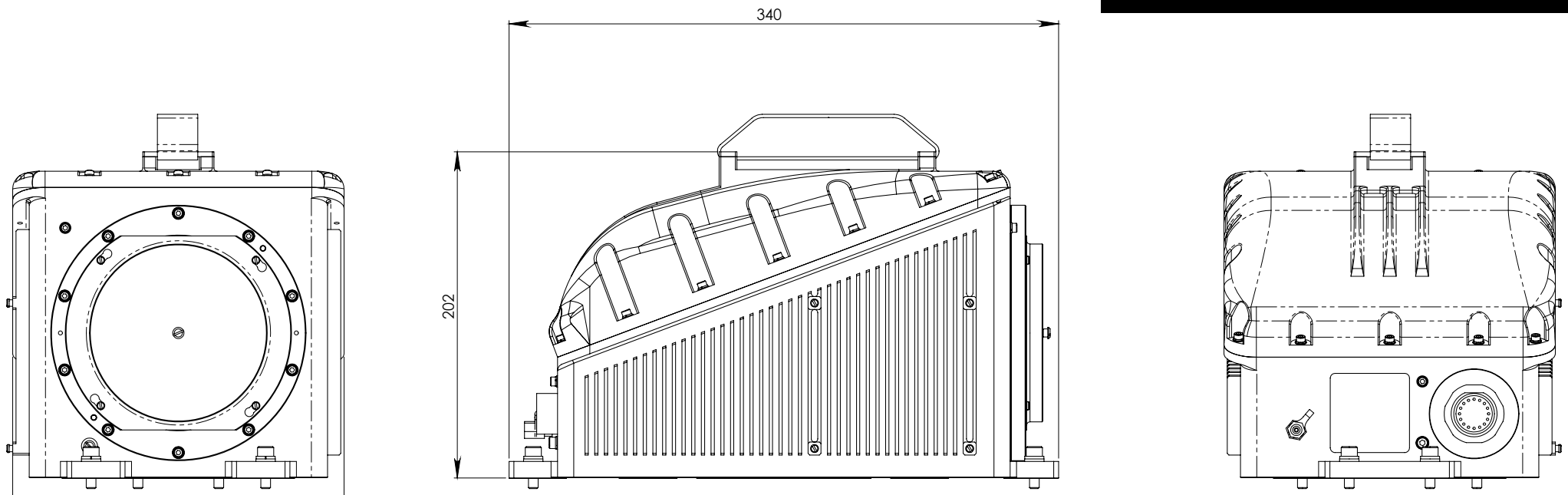


SECTION A-A
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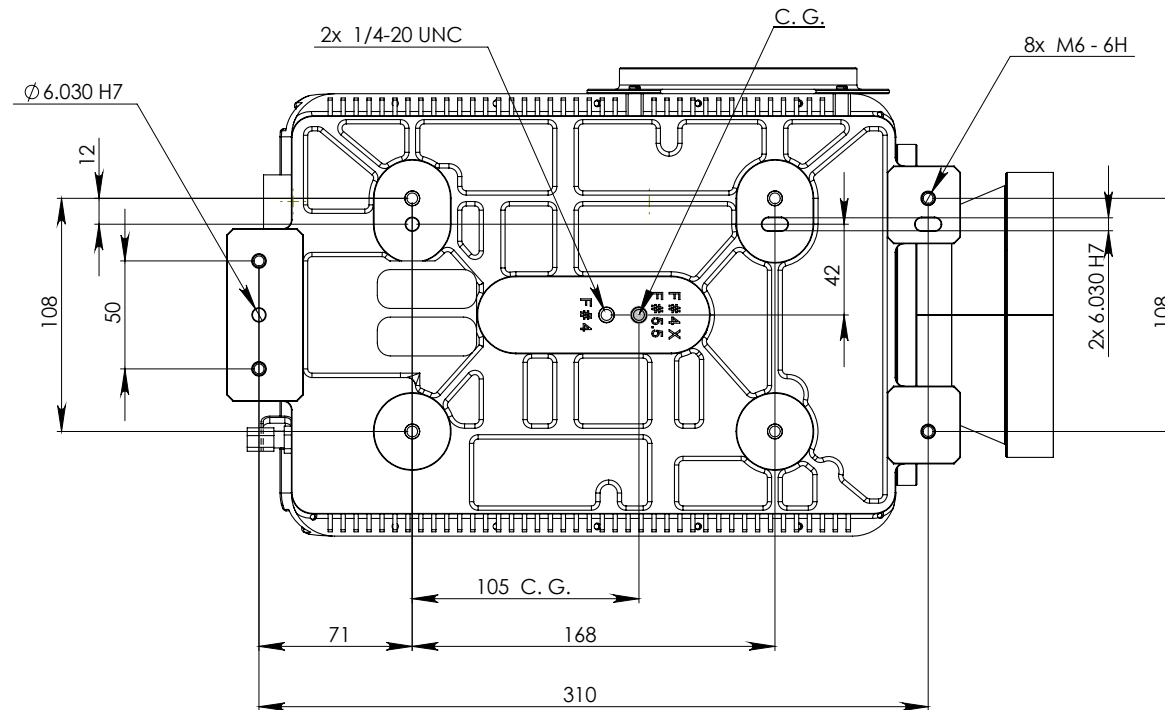
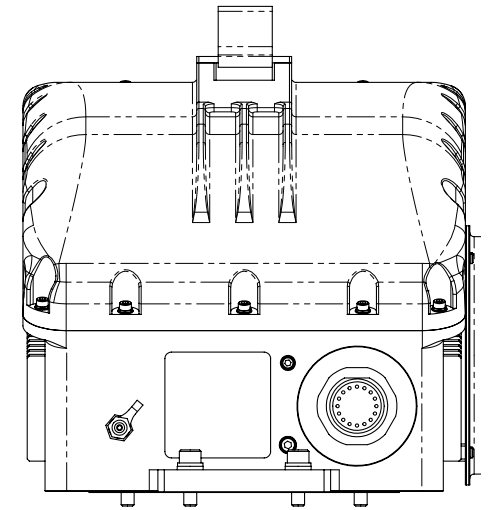
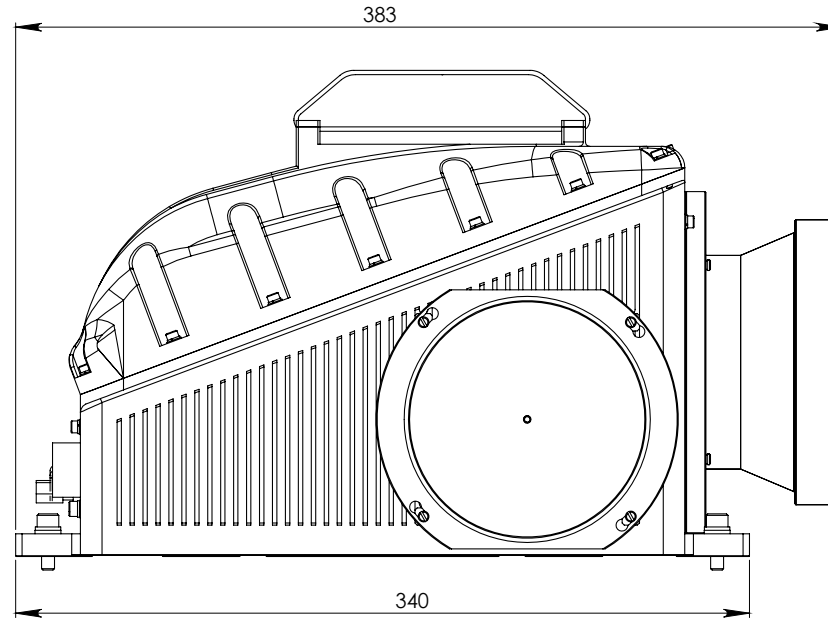
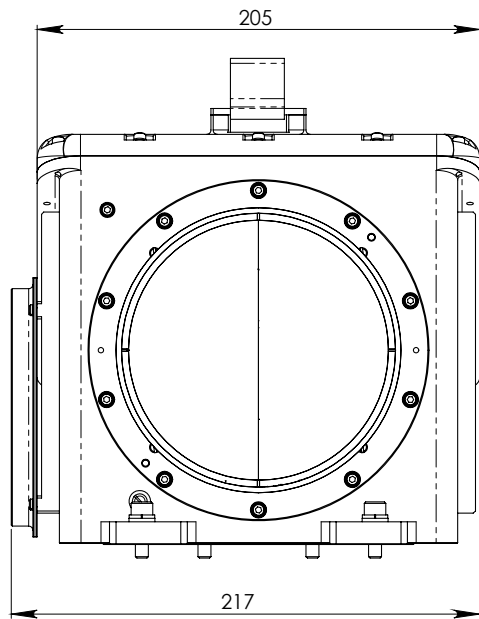
4 PLACES



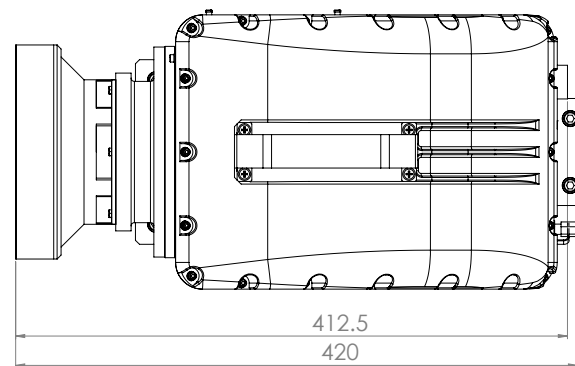
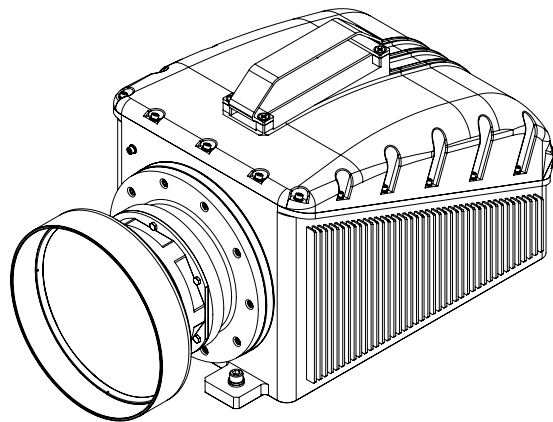
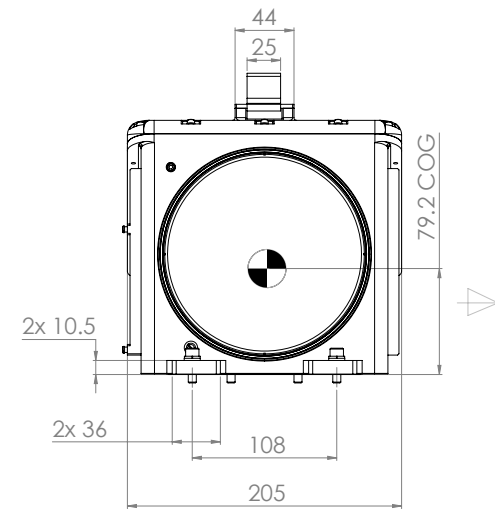
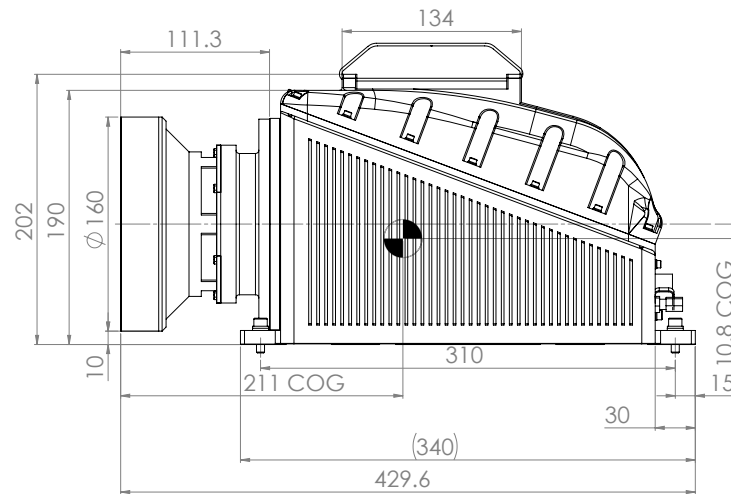
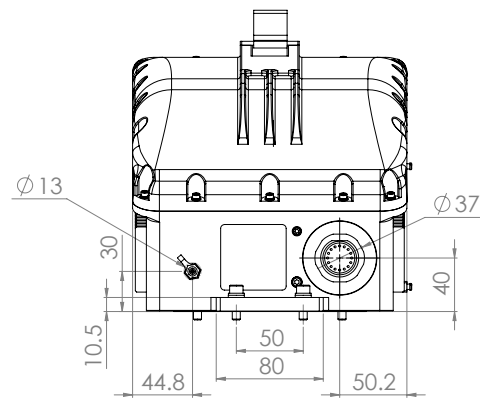
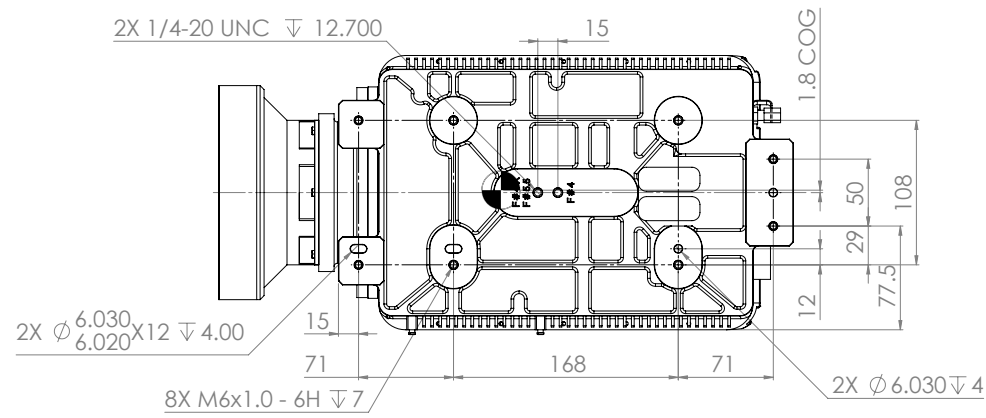
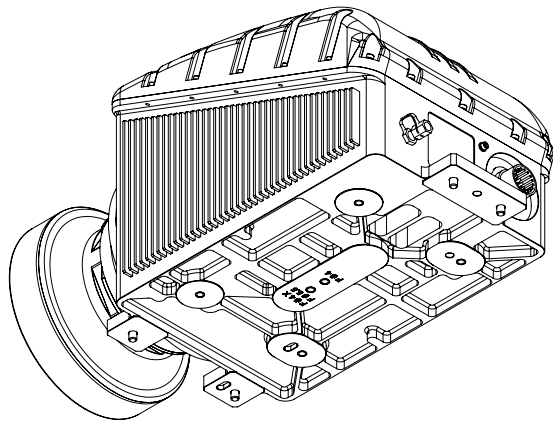
WEIGHT = 6700 gr (nom)



WEIGHT = 7200 gr (nom)



WEIGHT = 8000 gr (nom)



WEIGHT: 8.5 [kg]