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S/N: OWL-002
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EOPAYLOADS CATALOG



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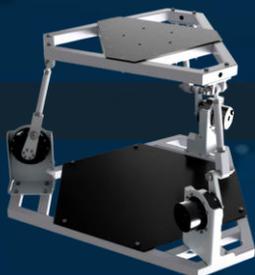
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SIGHTDESK

AUTOMATED TRACKING VIDEO SOFTWARE

- Multi Sensor Management
- Passive Electro Optic RADAR Client / Server
- Enhanced Digital Video Trackers / Classifiers
- Pan, Tilt, Zoom, Day, Night, LRF Control
- Geo-Positioning with pre-loaded route tracking
- INS Gyro Stabilization
- Electronic Stabilization
- Video Analysis, ATR, Detection, Tracking & Classification
- Integrated Tracker / Simulator / Trainer
- Mapping and FOV Zone view
- Recording & Logging
- Integration with external resources, Drones, Radars
- Open Source C# SDK, open source code available

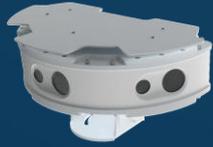


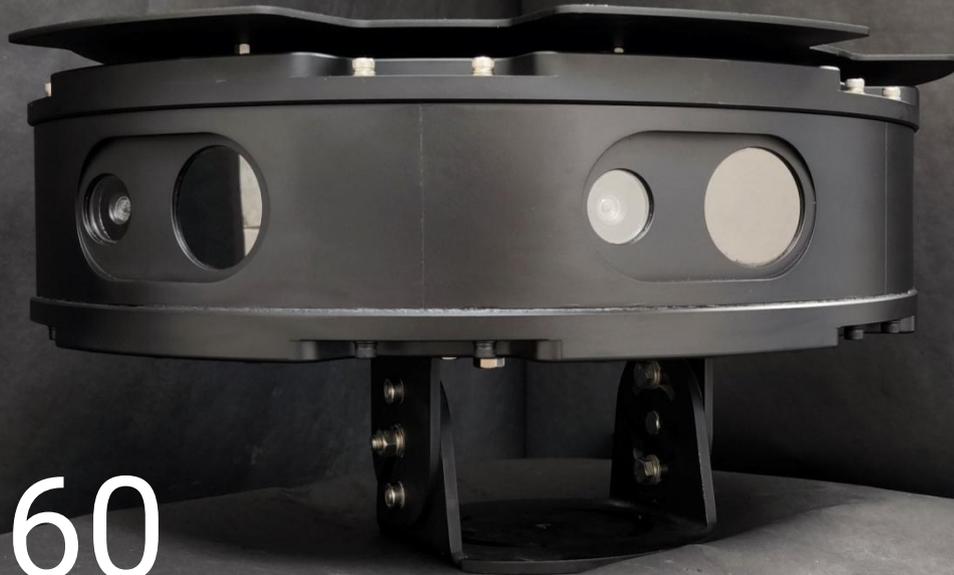
SASERIES

360 PANORAMIC 24/7 SITUATIONAL AWARENESS





	 SA360	 SA180
LOW LIGHT DAY	SIX (6) 1920x1080 Full HD 30 FPS SAPPHIRE Window	THREE (3) 1920x1080 Full HD 30 FPS SAPPHIRE Window
LWIR NIGHT	SIX (6) 1280x1024 or 640x512 12µm 30 FPS Germanium Window	THREE (3) 1280x1024 or 640x512 12µm 30 FPS Germanium Window
FOV	420° Deg. (H) 6 x 70° FOV (H) 420° (V) 46°	210° Deg. (H) 3 x 70° FOV (H) 210° (V) 46°
NATO/HUMAN DETECTION (640) DETECTION(1280)	370m / 167m 830m / 375m	370m / 167m 830m / 375m
STABILIZED POWER	2A@24VDC (9-40VDC)	1A@24VDC (9-40VDC)
DIMENSIONS (mm)	470x470x185	483x270x237
ETHERNET SWITCH	Gigabit Ethernet Switch 10/100/1000T	
CONNECTOR	Single Stainless Steel D38999/23YD35PN	
WEIGHT (Kg)	30 kg	16 kg
CHASSIS	CNC ALUMINUM, ANTI SALT BLACK POWDER PAINT	
IP RATE	IP67 Nitrogen Purged	



SA360

360° REAL-TIME SITUATIONAL AWARENESS SYSTEM

SA-360 is a constant naval guard, real-time object detection video analyzer that reads and understands risks, based on real-time video data from multiple sources and sensors.

SA-360 has been successfully deployed in USVs (Unmanned Surface Vessels) and UGVs (Unmanned Ground Vehicles). SA-360 provides real-time 12 Ethernet streaming sensors. Six LWIR 1280x1024 or 640x512 and six Low Light day 1920x1080 Full HD sensors. The sensors can be streamed directly or merged into single stream by Ex-Sight's AlxNPU rugged computer. The system can detect, track and classify threats on during day and night. It can also evaluate range and build a local NMEA passive Radar showing the different threats.



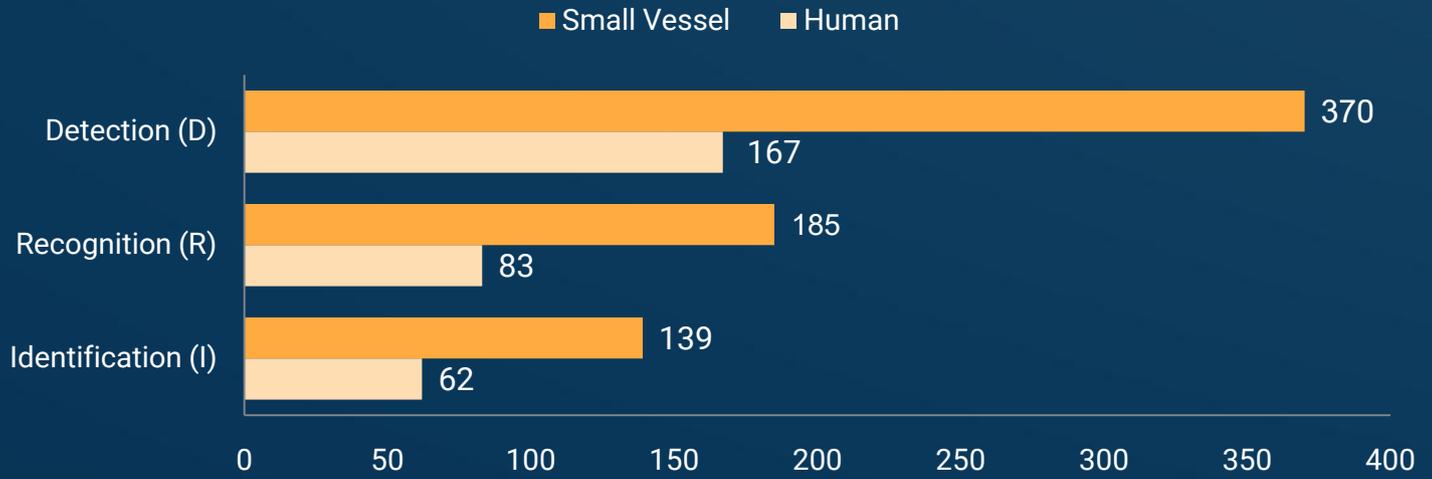
SA360

360° REAL-TIME 24/7 SITUATIONAL AWARENESS SYSTEM

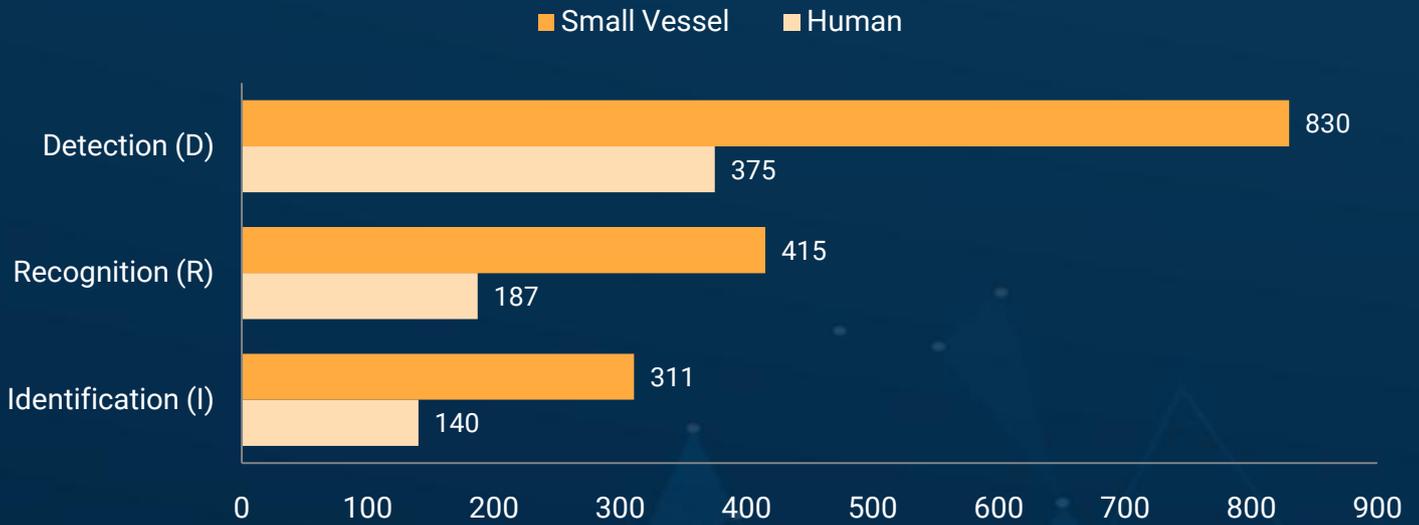
- Day & Night target recognition, detects static and dynamic targets*
- Ethernet connectivity, modular architecture, single cable connection
- Real-Time six 1920x1080 Full-HD Day low light sensors 70 Deg FOV, Sapphire window
- Real time six 1280x1024 or 640x512 LWIR (Thermal) sensors 70 Deg FOV with Germanium window
- Optional Distance estimation using EO and TI sensors*
- Visual RADAR view*
- True North INS GPS*
- IP-67 Hermetic sealed chassis, Nitrogen purged, MIL.STD Hermetic connectors
- Operating temp -40°C to +80°C
- **Dimensions (LxWxH,mm)** 470x470x185
- **WEIGHT** 30 kg

* Optional Configuration

SA360-640-5,8mm LWIR DRI (m)



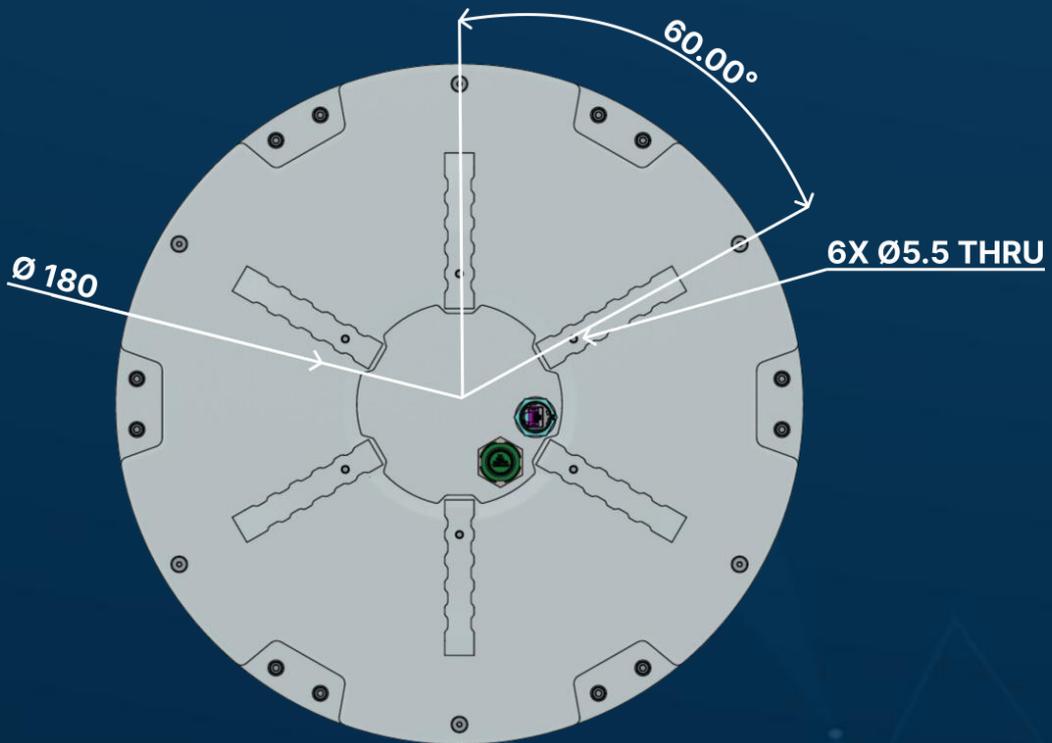
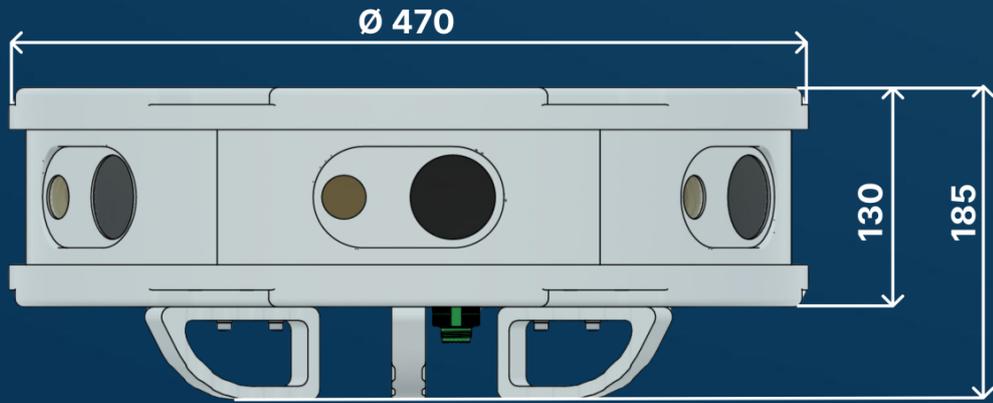
SA360-1280-13mm LWIR DRI (m)



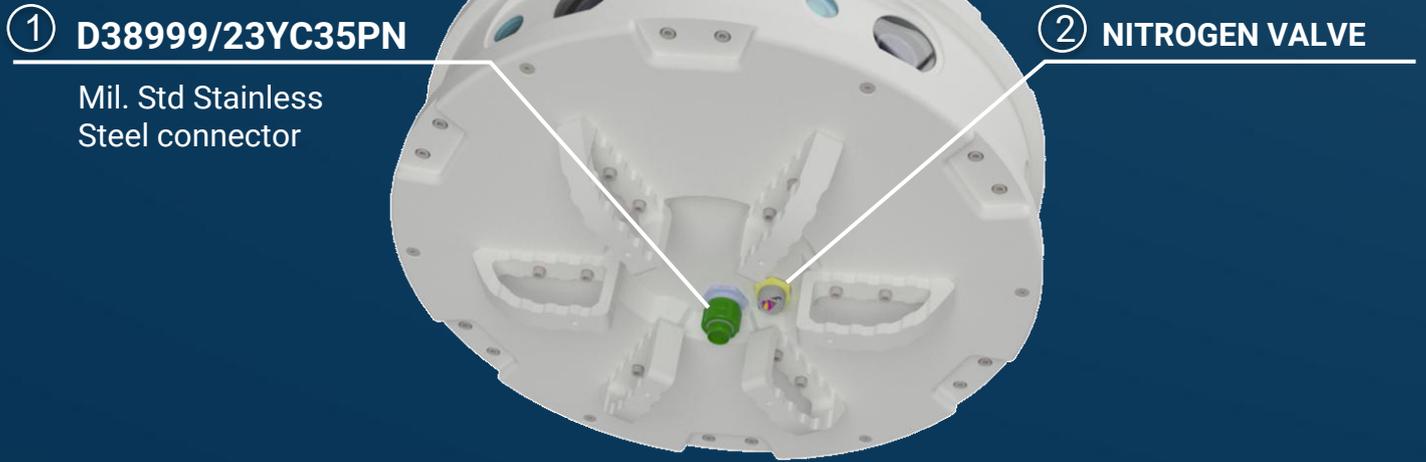
SA360

DIMENSIONS (LxWxH, mm) 470x470x185

WEIGHT 30 kg



CONNECTION INTERFACE



PANEL PIN LAYOUT

D38999/23YD35PN Stainless Steel Hermetic Connector

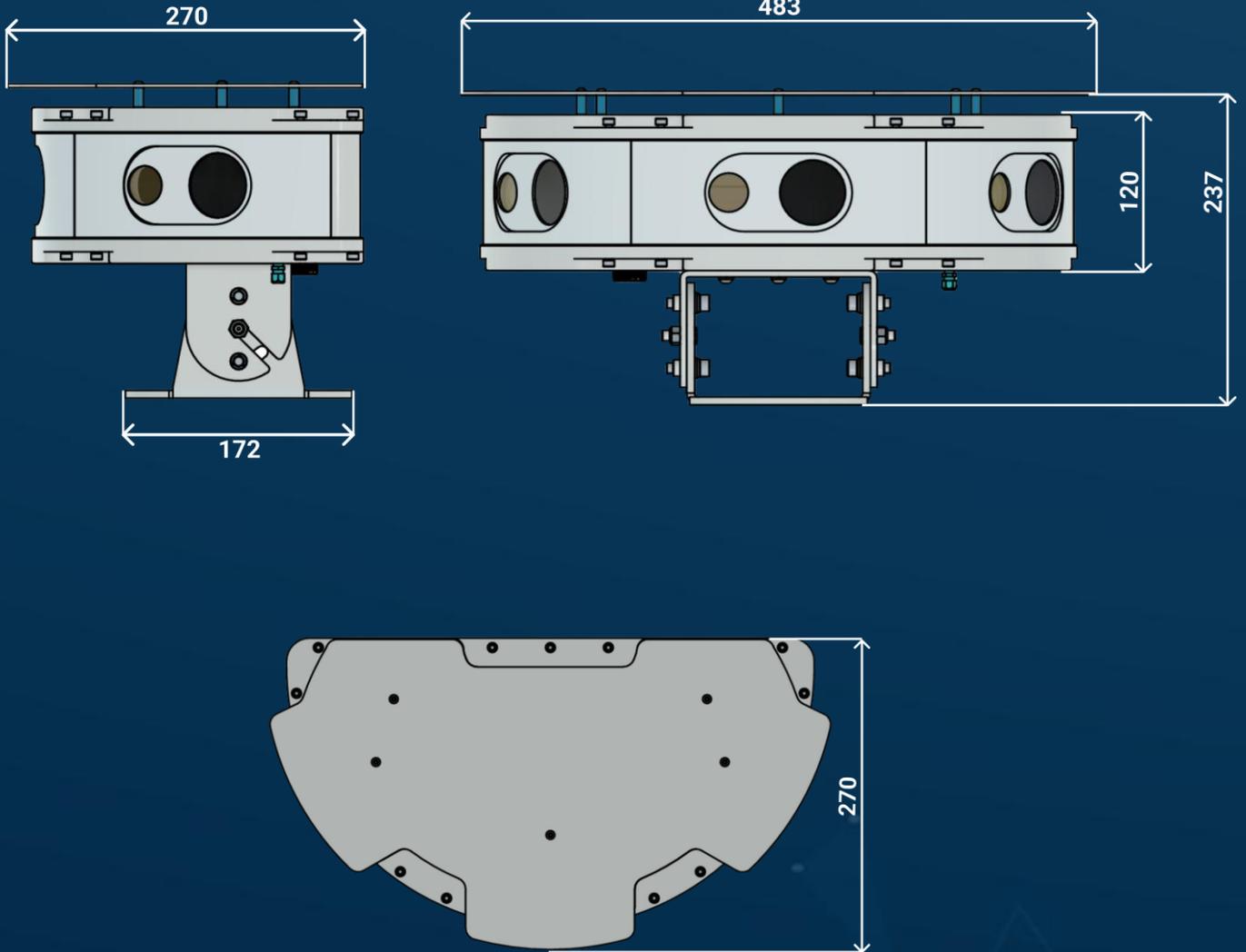
PIN	DESCRIPTION	
1	Main ETH 1 (White Orange)	Giga Ethernet Port to Switch
2	Main ETH 2 (Orange)	
3	Main ETH 3 (White Green)	
4	Main ETH 4 (Blue)	
5	Main ETH 5 (White Blue)	
6	Main ETH 6 (Green)	
7	Main ETH 7 (White Brown)	
8	Main ETH 8 (Brown)	
9	NC	Not Connected
10	NC	
11	+POWER INPUT VDC	

PIN	DESCRIPTION	
12	GND	
13	+POWER INPUT VDC Backup	
14	GND Backup	Giga Ethernet to Chained Sensor
15	CHAIN ETH 1 (White Orange)	
16	CHAIN ETH 2 (Orange)	
17	CHAIN ETH 3 (White Green)	
18	CHAIN ETH 4 (Blue)	
19	CHAIN ETH 5 (White Blue)	
20	CHAIN ETH 6 (Green)	
21	CHAIN ETH 7 (White Brown)	
22	CHAIN ETH 8 (Brown)	Not Connected
23-37	NC	

SA180

DIMENSIONS (LxWxH, mm) 483x270x237

WEIGHT 15 kg/640; 16kg/1280

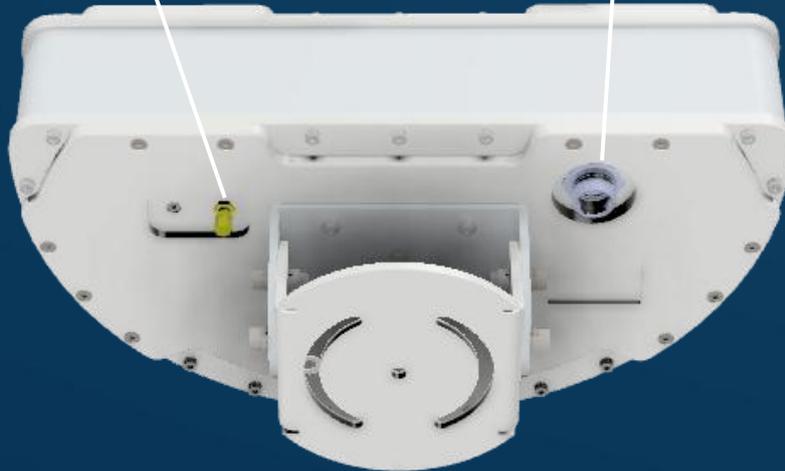


CONNECTION INTERFACE

② NITROGEN VALVE

① D38999/23YC35PN

Mil. Std Stainless Steel connector



PANEL PIN LAYOUT

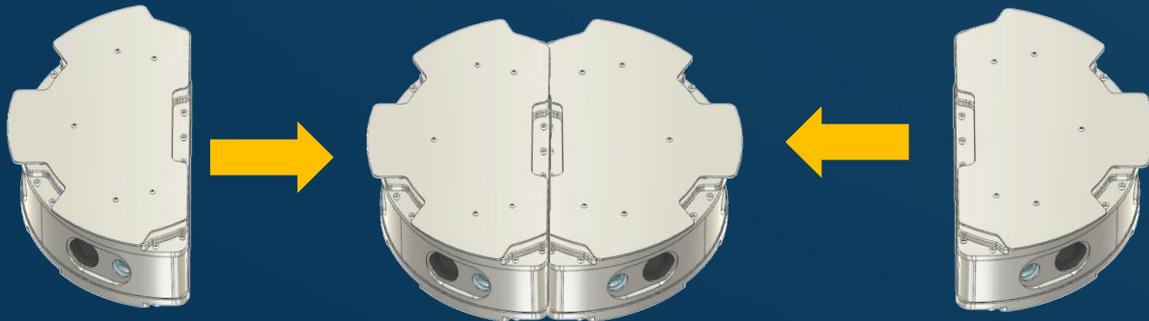
D38999/23YD35PN Stainless Steel Hermetic Connector

PIN	DESCRIPTION	
1	Main ETH 1 (White Orange)	Giga Ethernet Port to Switch
2	Main ETH 2 (Orange)	
3	Main ETH 3 (White Green)	
4	Main ETH 4 (Blue)	
5	Main ETH 5 (White Blue)	
6	Main ETH 6 (Green)	
7	Main ETH 7 (White Brown)	
8	Main ETH 8 (Brown)	
9	NC	Not Connected
10	NC	
11	+POWER INPUT VDC	

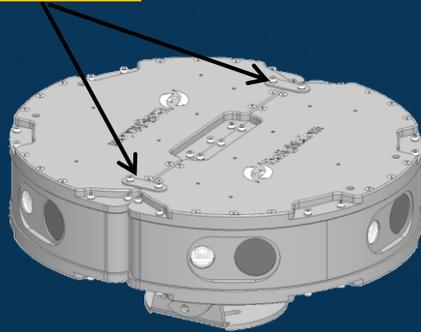
PIN	DESCRIPTION	
12	GND	
13	+POWER INPUT VDC Backup	
14	GND Backup	
15	CHAIN ETH 1 (White Orange)	Giga Ethernet to Chained Sensor
16	CHAIN ETH 2 (Orange)	
17	CHAIN ETH 3 (White Green)	
18	CHAIN ETH 4 (Blue)	
19	CHAIN ETH 5 (White Blue)	
20	CHAIN ETH 6 (Green)	
21	CHAIN ETH 7 (White Brown)	
22	CHAIN ETH 8 (Brown)	
23-37	NC	Not Connected

SA360 CONFIGURATION

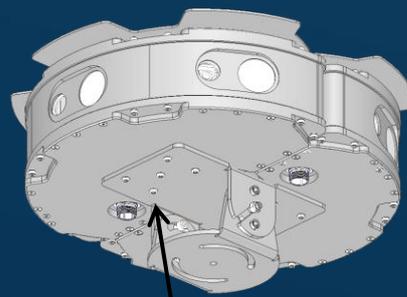
Two SA180 turn into single SA360 system.



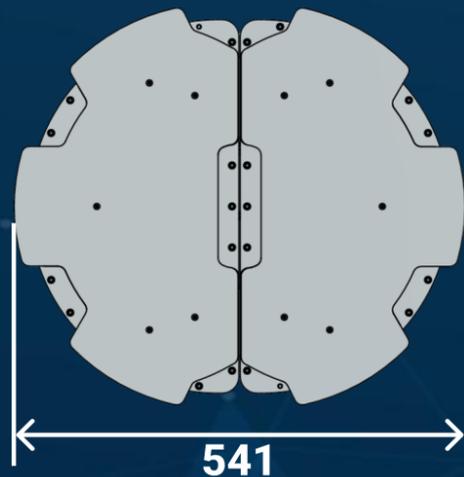
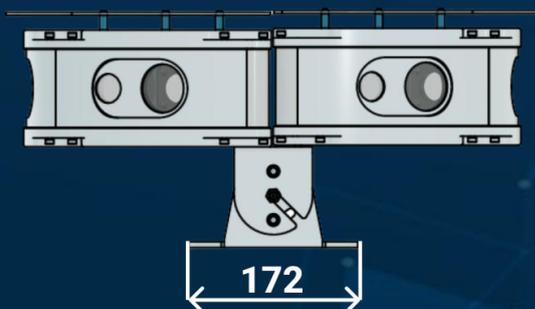
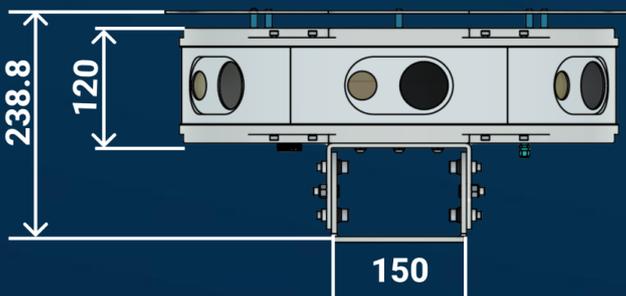
M5 support



M8

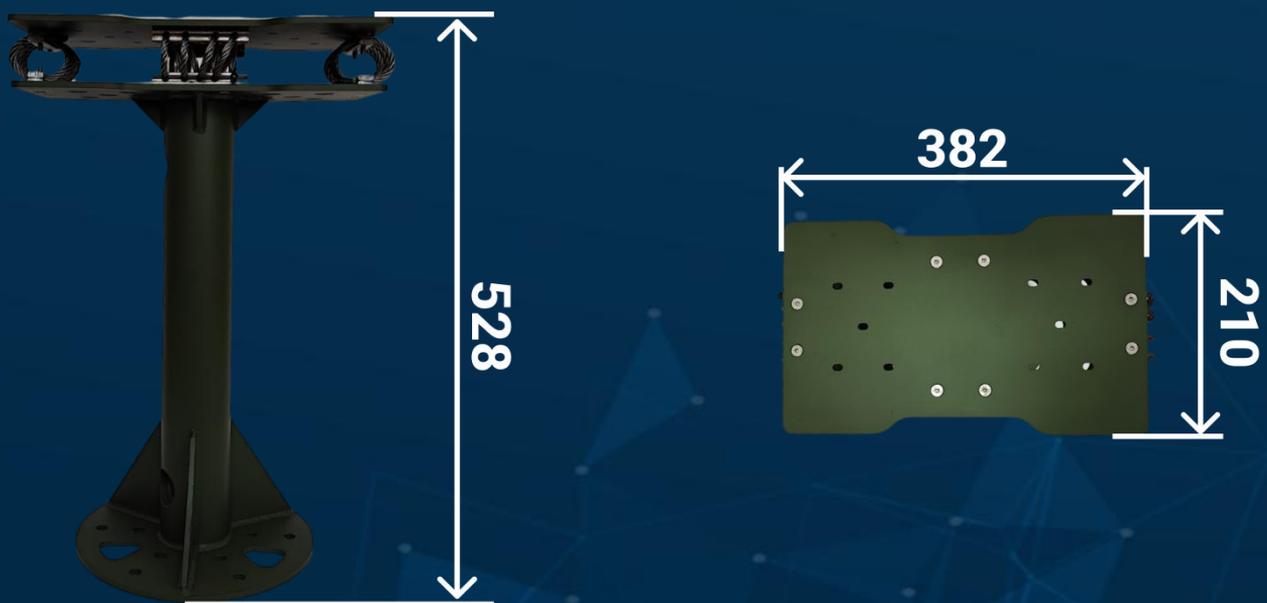
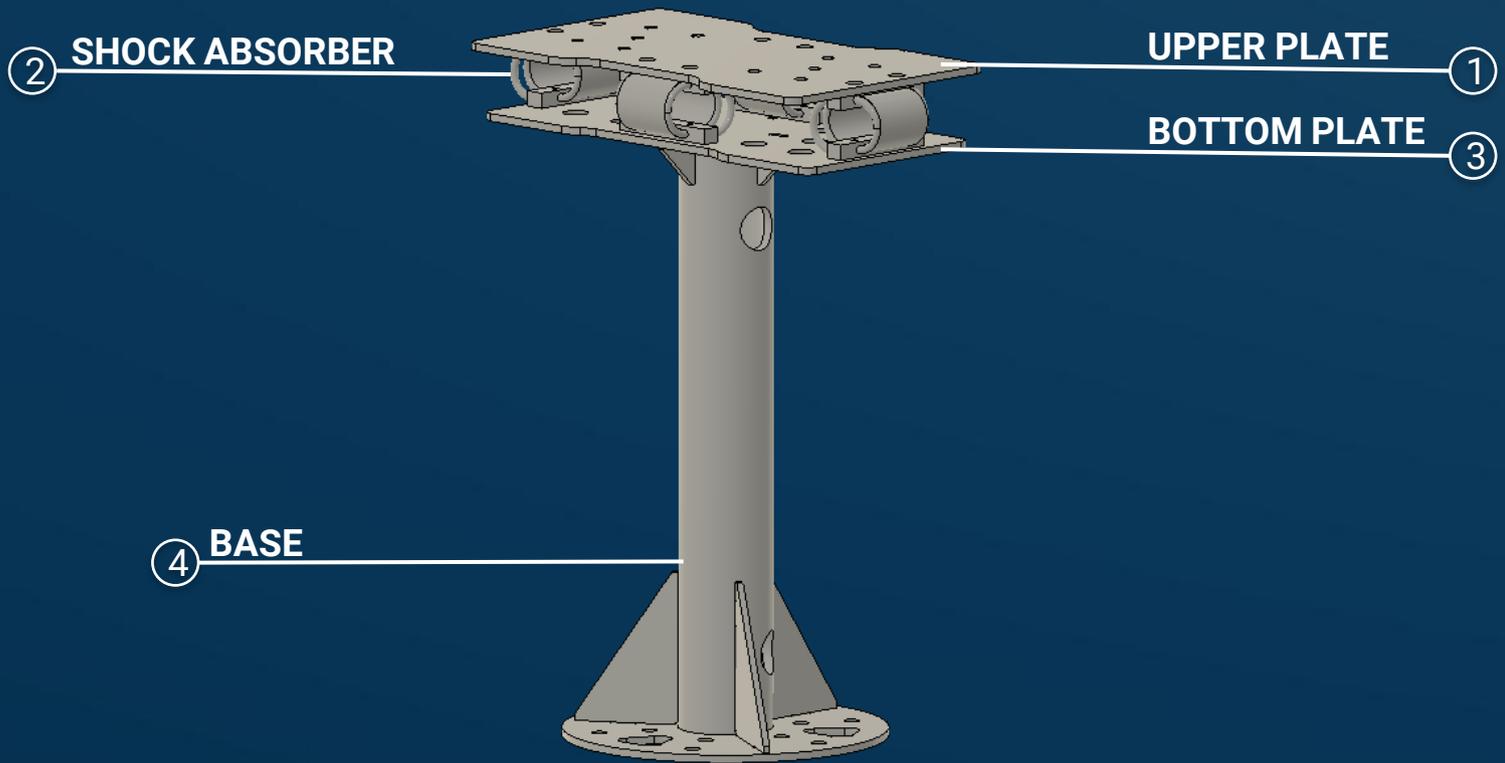


DIMENSIONS (LxWxH, mm) 541x172x238.8



SA180-POLE

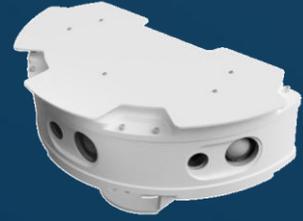
Pole support, providing height and stability. The pole has a wide base and shock absorbers to minimize shock and vibrations.



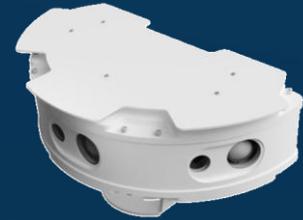
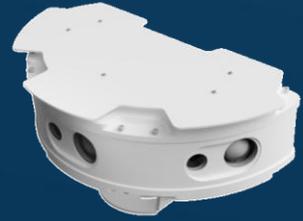
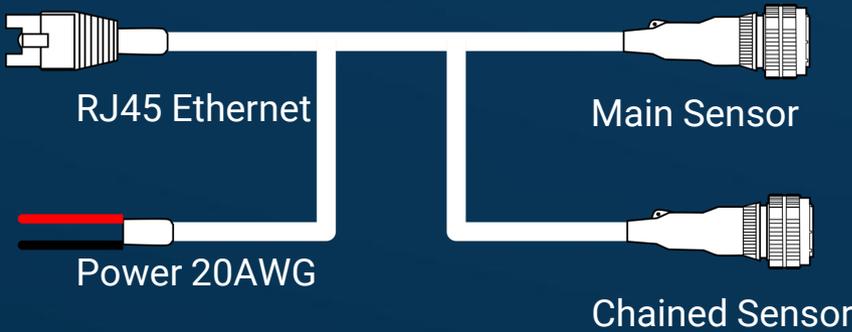
CABLE PART NUMBERING



SC Cable



CC Cable



SA180 PART NUMBERING

SA180-[RES]-[FOV]

[RES]	LWIR RESOLUTION	640 (LWIR 640x512) 5.8 mm	1280 (LWIR 1280x1024) 13 mm
[FOV]	FIELD OF VIEW	70 - 70° LWIR (69.4°x57.3°) 90° DAY (84.6°x45.9°)	S - 70° LWIR (69.4°x57.3°) 70° DAY (70.7°x43.5°) SYNC

CABLE PART NUMBERING

SA180-CABLE-[CT]-[LEN1]-[LEN2]

[CT]	CABLE TYPE	SC (SINGEL CABLE)	CC (CHAINED CABLE)
[LEN1]	CABLE LENGTH	In Meters	
[LEN2]	CHAINED CABLE LENGTH	In Meters (CC cable only)	

SA180-CABLE-SC

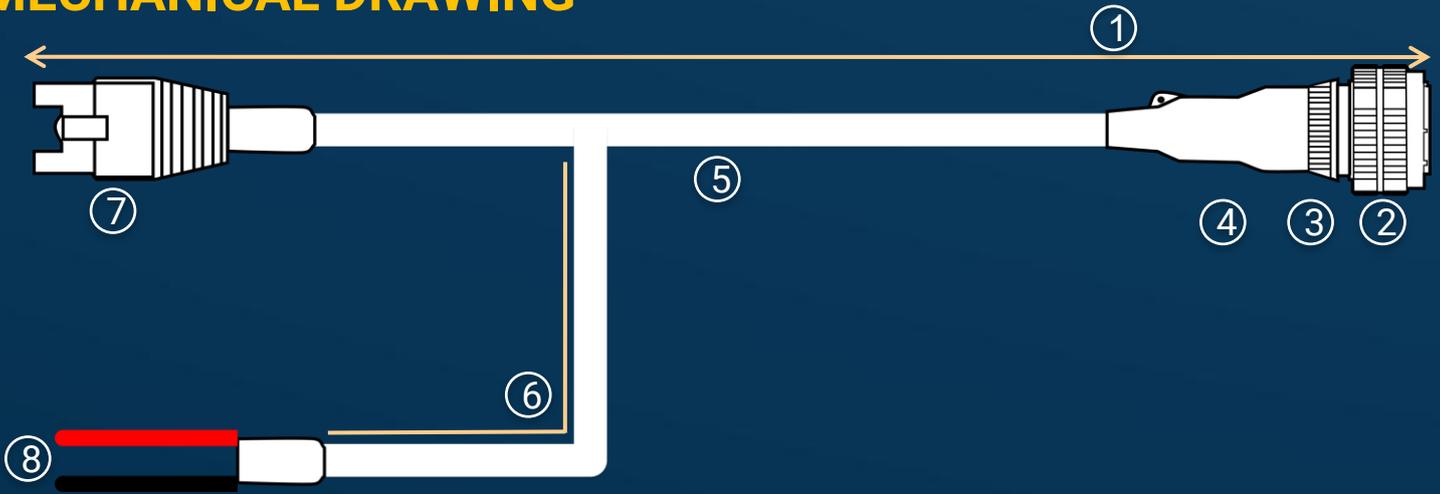
SA180-CABLE-SC-[LEN1]

SA180-CABLE is RQT1601875 Cable (6*20AWG + SPEC 55) with specified length.

The cable includes connector D38999/26KD35SN Mil. Std Stainless Steel that connects to the connector D38999/23YD35PN on the SA180 system.

On the other side of the cable there is a connection to Power 9-36V (open black wire + open red wire) and RJ45 Giga Ethernet connection.

MECHANICAL DRAWING



CABLE PART NUMBERING INDEX

#	P/N	DESCRIPTION
1	[LEN1]	Total Cable length (meters)
2	D38999/26KD35SN	Mil. Std Stainless Steel connector (200°C, firewall capability, 500 hour salt spray resistance)
3	27140S141010410	Stainless Steel Backshell
4	202K132-25-0/202K132-25-0	Boot
5	Cable RQT1601875	6*20AWG + SPEC55 (RAYCHEM DR-25)
6	Cable RQT1601875	6*20AWG + SPEC55 (1m) (RAYCHEM DR-25)
7	RJ45 Ethernet	Main Ethernet connector
8	Power Wires	20AWG For 9V-36V input

SA180-CABLE-CC

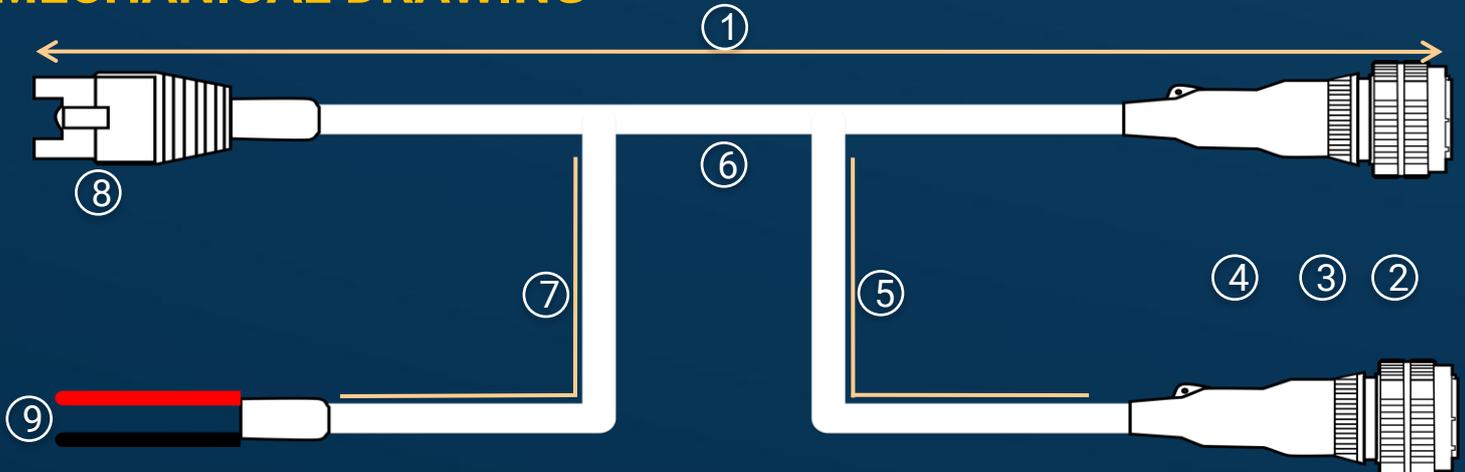
SA180-CABLE-CC-[LEN1]-[LEN2]

SA360-CABLE is RQT1601875 Cable (6*20AWG + SPEC 55) with specified length and Additional Chained sensor connector.

The cable includes two D38999/26KD35SN Mil. Std Stainless Steel connectors that connects to the D38999/23YD35PN on two SA180 systems.

On the other side of the cable there is a connection to Power 9-36V (open black wire + open red wire) and RJ45 Giga Ethernet connection.

MECHANICAL DRAWING



CABLE PART NUMBERING

#	P/N	DESCRIPTION
1	[LEN1]	Total Cable length (imeters)
2	D38999/26KD35SN	Mil. Std Stainless Steel connector (200°C, firewall capability, 500 hour salt spray resistance)
3	27140S141010410	Stainless Steel Backshell
4	202K132-25-0/202K132-25-0	Boot
5	[LEN2]	Chained Cable Length (in meter) from split
6	Cable RQT1601875	6*20AWG + SPEC55 (RAYCHEM DR-25)
7	Cable RQT1601875	6*20AWG + SPEC55 (1m) (RAYCHEM DR-25)
8	RJ45 Ethernet	Main Ethernet connector
9	Power Wires	20AWG For 9V-36V input



SIGHTSERIES

MULTI SENSOR VISION SYSTEM



**SIGHT IS QUALIFIED:
MIL-STD-810G FOR THE FOLLOWING PROCEDURES:**

High Temp. - Method 501.6, Procedure I Storage high temp 168H
Low Temp. - Method 502.6, Procedure I Storage low temp 24H
High Temp. - Method 501.6, Procedure II Operation high temp 24H
Low Temp. - Method 502.6, Procedure II Operation low temp
Temperature Shock -Method 503.6,63/-33, 1 cycle
Vibration - method 514.7, transportation highway,1h each axis total 3h
Vibration - method 528.1, operational 15 sec each frequency, endurance 2h
Shock - method 516.7, Procedure I,40g/11ms
Dust -method 510.6, procedure I
Salt Fog, total 96h
SAND -Method 510.6, procedure II
Humidity - Method 507.6, Procedure II, 240H
Sealing test towards IEC60529 IP67 code
Solar radiation - Method 505.4 procedure I – 72h
Rain - Method 506.4, Procedure II, 15minutes
Fluids contamination - Method 504.3

MIL STD 461F EMI RFI

CE101, CE102, CS101, CS114, CS116, RE101 RE102, RS101,
RS103 (2Mhz-18Ghz;50V/m).

Tested by:



ISRAEL TESTING LABORATORIES
Global Certifications You Can Trust

				
	MWIR15-250	LWIR 25-225	LWIR 25-150	LWIR 20-100
LOW LIGHT DAY SENSOR	Global Shutter 30 FPS 1600x1300 x36 Zoom 4,5mm-162mm H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°	Full HD 30 FPS 1920x1080 Up to x92 Zoom 6,1mm-561mm H-FOV 63,4° to 0,98° V-FOV 37,6° to 0,60°	Global Shutter 60FPS 1600x1300 x36 Zoom 4,5mm-162mm H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°	Global Shutter 60FPS 1600x1300 x36 Zoom 4,5mm-162mm H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°
NIGHT SENSOR	COOLED MWIR x16,6 Zoom 15-250 mm FOV 35,5° to 2,2°	LWIR 1280x1024 x9 Zoom 25-225mm FOV 34,2° to 3,9°	LWIR 640x512 x6 Zoom 25-150mm FOV 17,5° to 2,93°	LWIR 640x512 x5 Zoom 20-100mm FOV 22,5° to 4,4°
DRI				
DETECTION (m) Human/NATO target	8,660/14,500	6,495/14,375	4,300/9,583	2,886/6,388
RECOGNITION (m) Human/NATO target	4,330/9,583	3,247/7,187	2,165/4,791	1,443/3,194
IDENTIFICATION (m) Human/NATO target	3,247/7,187	2,435/5,390	1,623/3,593	1,082/2,395
LRF Laser Range Finder	up to 8KM NATO Target	up to 8KM NATO Target	up to 8KM NATO Target	up to 8KM NATO Target
POWER	12-40 VDC 120W Max. MIL.STD704, MIL.STD810G POWER STABILIZER			
DIMENSIONS (mm)	250x190x240	360x275x275	290x190x264	250x190x255
INTERFACE	ETHERNET INTERFACE			
CONNECTOR	Hermetic Stainless Steel D38999/23YC35PN			
WEIGHT (Kg)	9 kg	20 kg	9 kg	9 kg
IP RATE	IP67 Nitrogen Purged			

SIGHTMWIR PART NUMBERING

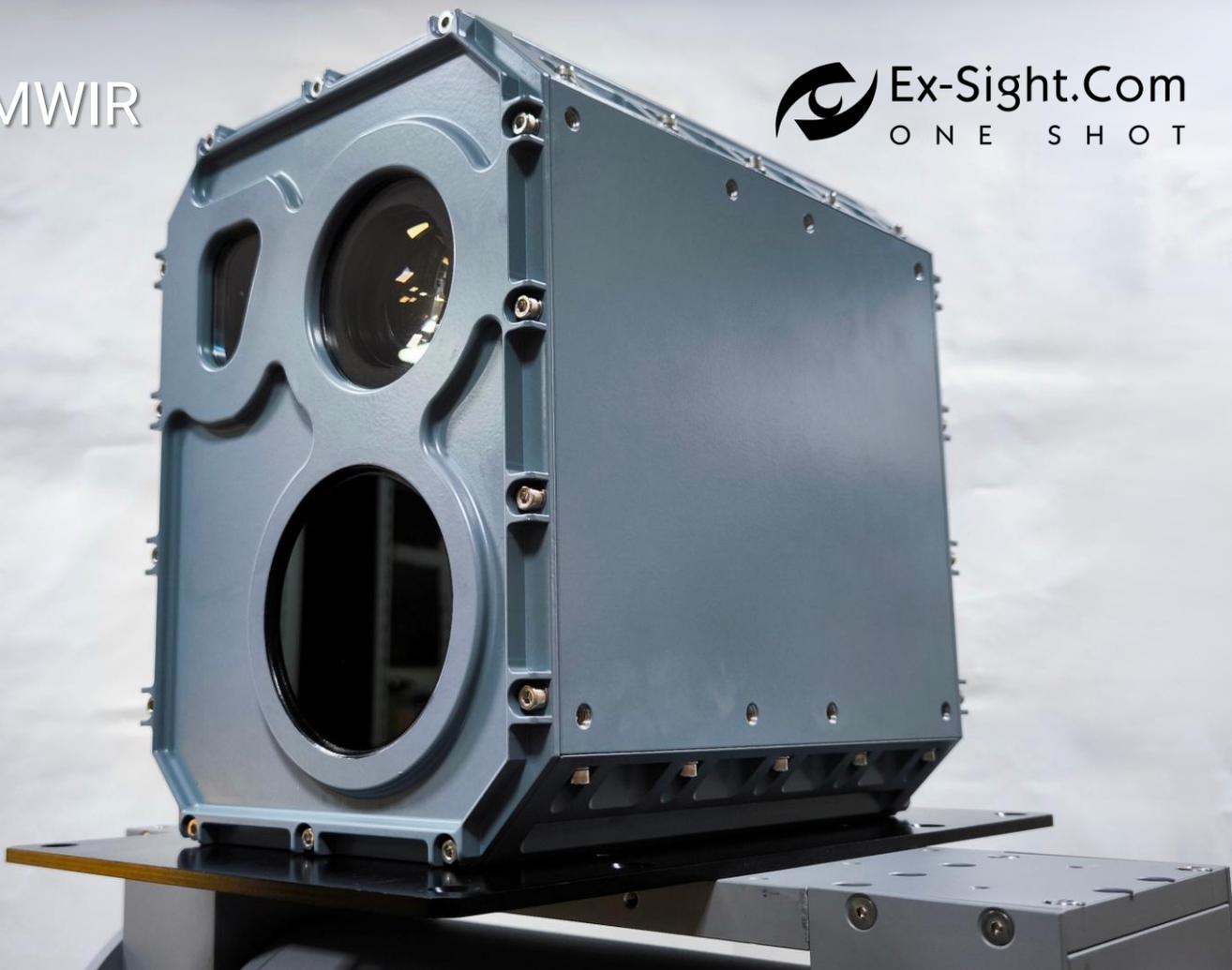
SIGHT MWIR		SM-640-250-36-N	
SM-[RES]-[LENS]-[ZOOM-DS]-[LRF]			
[RES]	LWIR RESOLUTION	640 (LWIR 640x512)	
[LENS]	LWIR LENS	250 Focal Length 15~250 mm	
[ZOOM-DS]	ZOOM DAY SENSOR	36 - x36 Optical Zoom, Global Shutter	
[LRF]	LRF	N - None	8 - 8Km NATO Target

SIGHTLWIR PART NUMBERING

SIGHTLWIR 25-225		SLB-1280-225-36-N	
SLB-[RES]-[LENS]-[ZOOM-DS]-[LRF]			
[RES]	LWIR RESOLUTION	640 (LWIR 640x512, 5.8mm)	1280 (LWIR 1280x1024, 13mm)
[LENS]	LWIR LENS	225 - Focal Length 25mm~225 mm	
[ZOOM-DS]	ZOOM DAY SENSOR	36 - x36 Optical Zoom, Global Shutter	92 - x92 Optical Zoom, 16x Digital Zoom
[LRF]	LRF	N - No LRF	8 - 8Km NATO Target

SIGHTLWIR 25-150		SLA-640-150-36	
SLA[POS]-[RES]-[LENS]-[ZOOM-DS]-[LRF]			
[POS]	CAMERA POSITION	BLANK - Vertical	H - Horizontal
[RES]	LWIR RESOLUTION	640 (LWIR 640x512, 5.8mm)	
[LENS]	LWIR LENS	150 Focal Length 25~150 mm	
[ZOOM-DS]	ZOOM DAY SENSOR	36 - x36 Optical Zoom	
[LRF]	LRF	BLANK - No LRF	8 - 8Km NATO Target

SIGHTLWIR 20-100		SLA-640-100-36	
SLA-[RES]-[LENS]-[ZOOM-DS]-[LRF]			
[RES]	LWIR RESOLUTION	640 (LWIR 640x512, 5.8mm)	
[LENS]	LWIR LENS	100 Focal Length 20~100 mm	
[ZOOM-DS]	ZOOM DAY SENSOR	36 - x36 Optical Zoom	
[LRF]	LRF	BLANK - No LRF	8 - 8Km NATO Target



SIGHTMWIR

COOLED MWIR 15-250mm SIGHT System

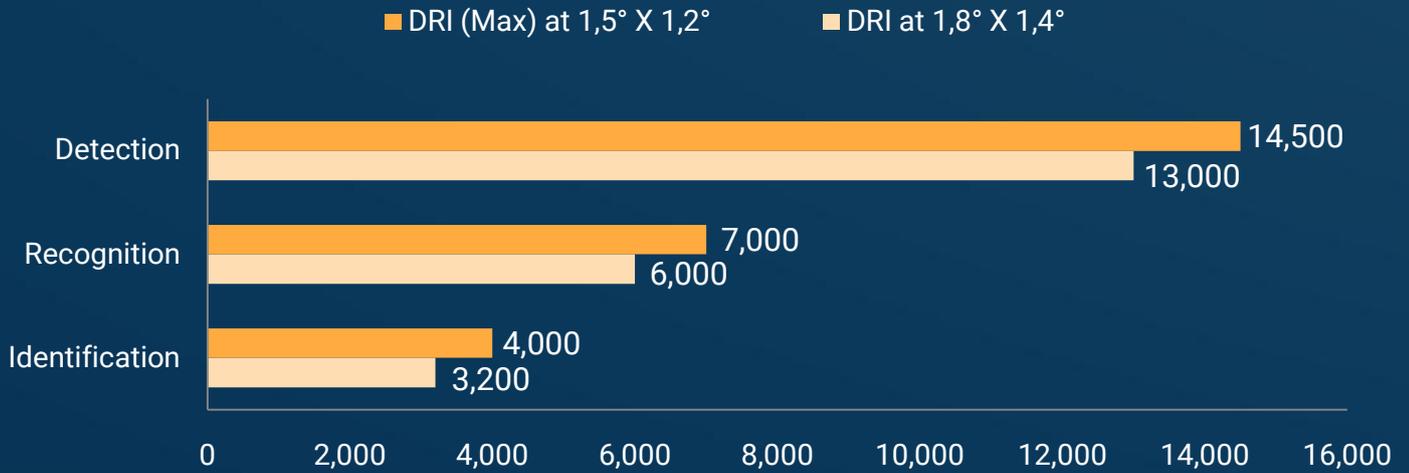
- Day x36 30 FPS 1600x1300 Global Shutter
- Night MWIR 15-250mm 640x512 pixels
- LRF up to 8Km NATO Target
- Ethernet & Analog Interfaces
- IP-67, Nitrogen Purged
- Marine Grade Chassis



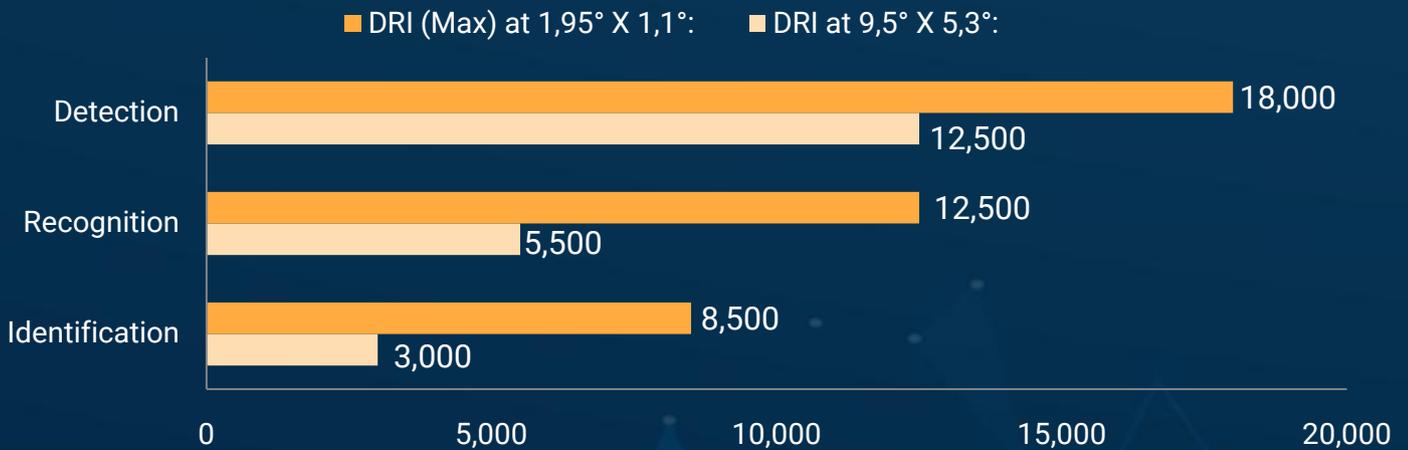
COOLED MWIR SIGHT SYSTEM

- Automatic target recognition, automatically track and detect static and dynamic targets
- Ethernet connectivity, modular architecture, single cable connection
- 30 FPS Global Shutter x36 Zoom 1600x1300 sensor H-FOV 59,0° to 2,4°; V-FOV 33,6 ° to 1,4° Sapphire window
- SPARROW MWIR COOLED x16.6 Zoom sensor, Lens 15-250 mm FOV 35.5° to 2.2°
- LRF 8km NATO target
- PSU 12-40 VDC 120W Max. MIL.STD1275, MIL.STD704, MIL.STD810G POWER STABILIZER
- IP-67 nitrogen purged, hermetic sealed, aluminum chassis , stainless steel screws , ground pin connector
- **Dimensions (LxWxH, mm)** 250x190x240
- **Weight** 9 Kg

SIGHTMWIR NIGHT DRI (m)



SIGHTMWIR DAY DRI (m)



SYSTEM OVERVIEW

DAY ZOOM SENSOR

GLOBAL SHUTTER 60FPS
1600x1300
x36 ZOOM
4,5mm -162mm
SAPPHIRE WINDOW

LRF

LASER RANGE FINDER
Up to 8KM
NATO Target
SAPPHIRE WINDOW



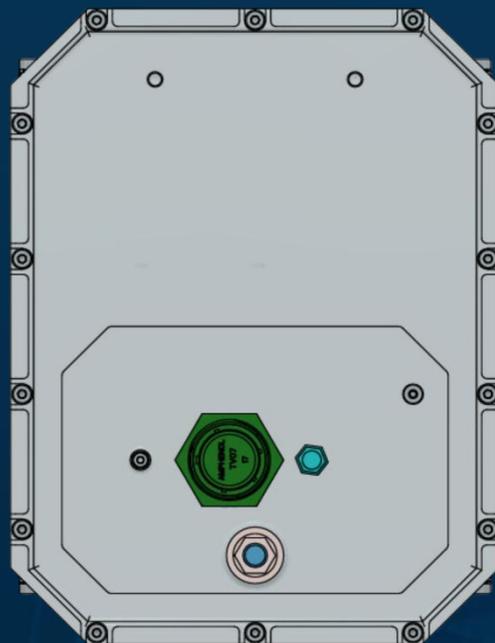
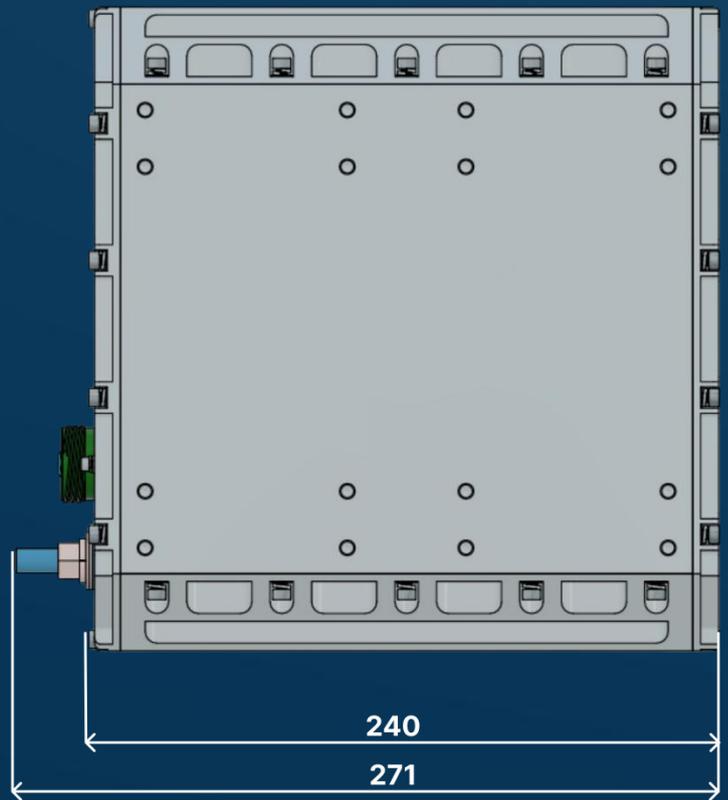
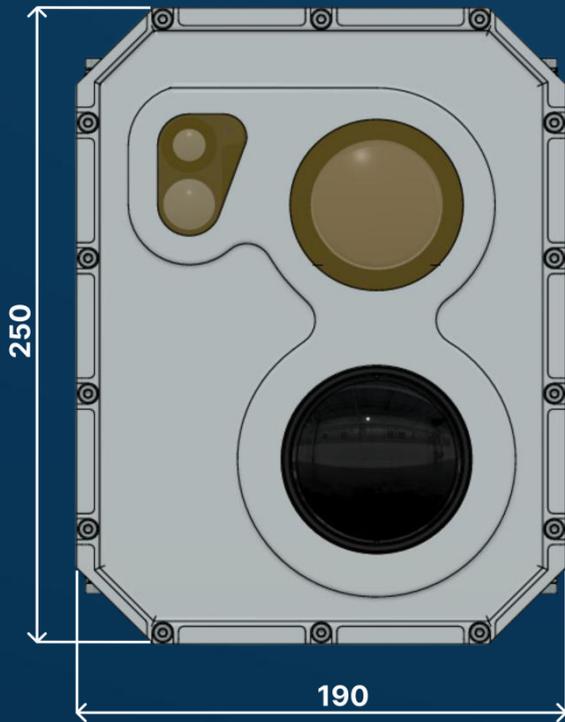
MWIR ZOOM SENSOR

COOLED MWIR
X16,6 ZOOM
SPARROW 15-250mm

- EX-SIGHT APPLICATION, SDK OPEN SOURCE C#
- LASER POINTER ON LRF CAMERA
- ETHERNET & ANALOG INTERFACE
- IP-67 NITROGEN PURGED

DIMENSIONS (LxWxH, mm) 250x190x240

WEIGHT 9 kg





SIGHTLWIR

MULTI SENSOR UNCOOLED VISION SYSTEMS / WEAPON SIGHTS

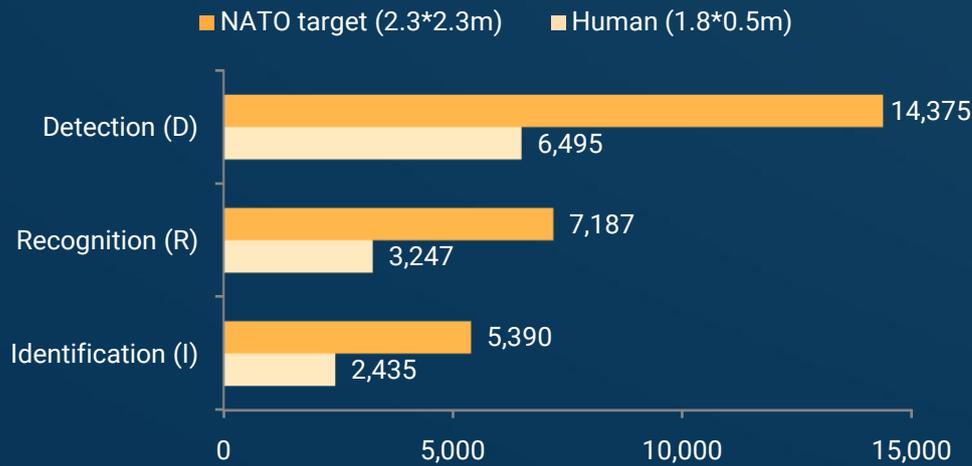


SIGHT25-225

MULTI SENSOR UNCOOLED LONG RANGE VISION SYSTEM

- LOW LIGHT DAY 1920x1080 x92 ZOOM
- 4K DAY SCENE CAMERA
- LWIR 1280x1024 x9 Zoom 25-225mm
- LRF UP TO 8KM NATO TARGET
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED MARINE GRADE CHASSIS

SIGHT25-225 DRI LWIR (m)



- Automatic target recognition, automatically track and detect static and dynamic targets*
- Ethernet connectivity, modular architecture, single cable connection
- Full HD global shutter 1920x1080 x92 Zoom sensor H-FOV 63.4° to 0.98° V-FOV 37,6 ° to 0,60 °; Sapphire window
- 4K overview module, 12mm Lens, Sapphire window
- LWIR 1280x1024 sensors Lens 25-225mm Cont. x10.2 Zoom FOV 3.9°x3.1° to 34.2°x27.6°, Germanium window
- 8km NATO target
- PSU 12-40 VDC MIL-STD-461; MIL-STD-1275; MIL-STD-704
- Ethernet, ONVIF, RTSP interface
- Ex-Sight Application, SDK Open Source C#
- IP-67 Hermetic sealed chassis, Nitrogen purged, MIL.STD, with hermetic D38999 Stainless Steel connector
- Operating temp -40°C to +60°C
- **Dimensions** (LxWxH, mm) 352x275x360
- **Weight** 20 kg

* Optional Configuration

SIGHT25-225

SYSTEM OVERVIEW

DAY SCENE SENSOR

CAMERA SCENE 90° 4K
SAPPHIRE WINDOW

LRF

LASER RANGE FINDER
Up to 8 KM NATO Target

DAY ZOOM SENSOR

FULL HD 30FPS
1920x1080
Up to x92 ZOOM
6,1mm-561mm

LWIR ZOOM SENSOR

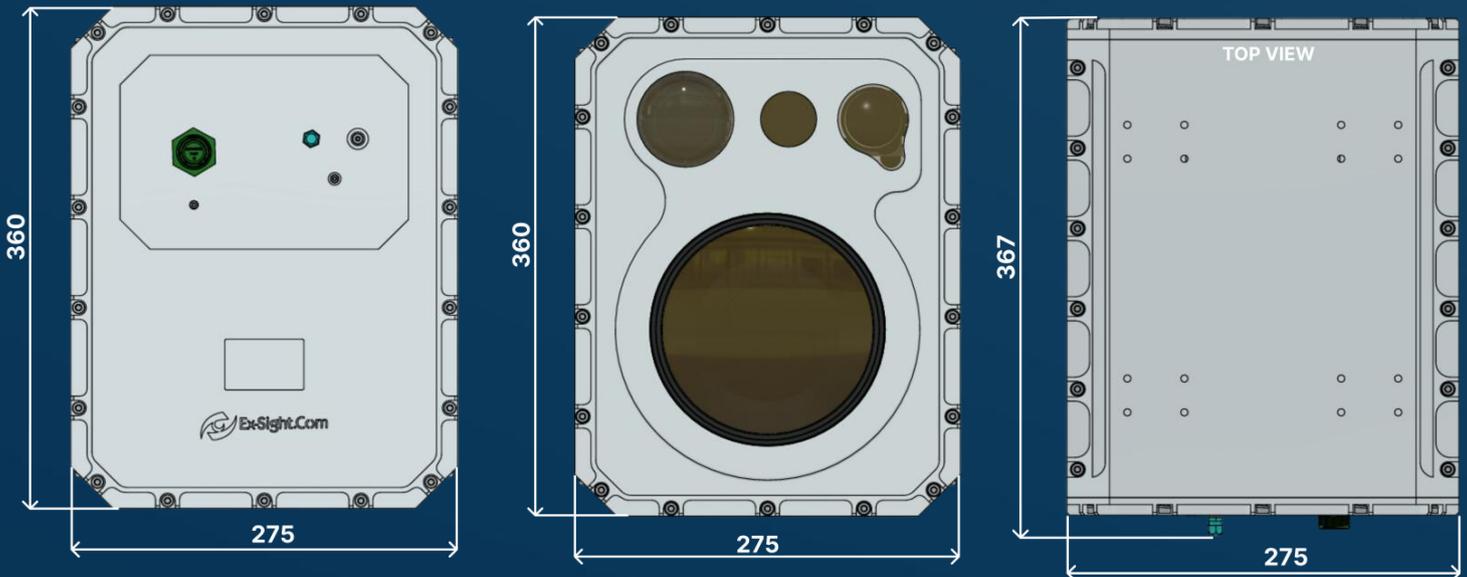
LWIR 1280x1024
x9 ZOOM
25-225mm

- EX-SIGHT APPLICATION, SDK OPEN SOURCE C#
- LASER POINTER ON LRF CAMERA
- ETHERNET & ANALOG INTERFACE
- IP-67 NITROGEN PURGED

SIGHT25-225

DIMENSIONS (LxWxH, mm) 360x275x275

WEIGHT 20 kg



PANEL PIN LAYOUT

D38999/23YC35PN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	NC
2	NC
3	(+9 TO +36VDC) INPUT POWER
4	GND INPUT POWER
5	(+9 TO +36VDC) INPUT POWER
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNET2 (1) TX+
10	ETHERNET2 (2) TX-
11	ETHERNET2 (3) RX+
12	ETHERNET2 (6) RX-
13	NC
14	NC
15	ETHERNET1 (1) TX+
16	ETHERNET1 (2) TX-
17	ETHERNET1 (3) RX+
18	ETHERNET1 (6) RX-
19	DAY VIDEO CVBS SIGNAL
20	DAY VIDEO CVBS GND
21	THERMAL VIDEO CVBS SIGNAL
22	THERMAL VIDEO CVBS GND



SIGHT25-150

 Ex-Sight.Com
ONE SHOT

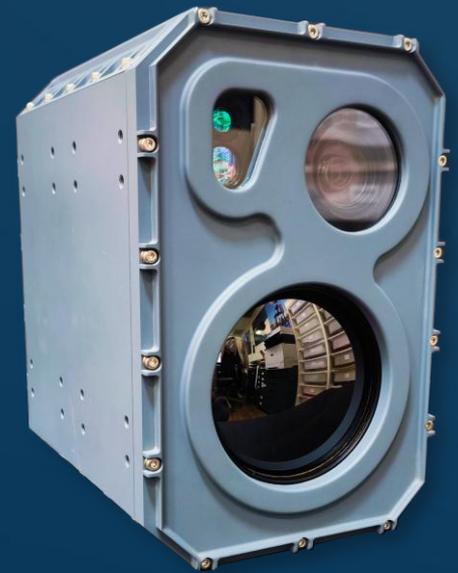
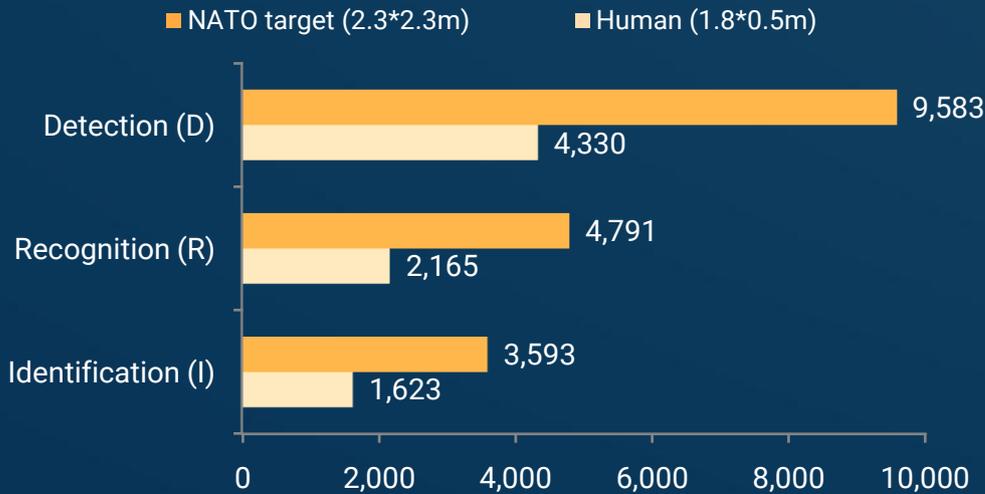


SIGHT25-150

LWIR UNCOOLED VISION SYSTEM

- GLOBAL SHUTTER DAY 1600x1300 x36 Zoom
- LWIR 640x512 x6 Zoom 25-150mm
- LRF up to 8KM NATO Target
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED MARINE GRADE CHASSIS

SIGHT25-150 DRI LWIR (m)



- Automatic target recognition, automatically track and detect static and dynamic targets*
- Ethernet connectivity, modular architecture, single cable connection
- Full HD global shutter 60FPS 1600x1300 x36 Zoom, 4,5mm-162mm, sensor H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4° , Sapphire window
- LWIR 640x512 sensor 12µm , Lens 25-150 mm Cont. x6 Zoom FOV 2.93°x2.34° to 17.5°x14° Germanium window
- LRF 8 km NATO target
- PSU 12-40 VDC MIL-STD-461; MIL-STD-1275; MIL-STD-704
- Ethernet, ONVIF, RTSP interface
- Ex-Sight Application, SDK Open Source C#
- IP-67 Hermetic sealed chassis, Nitrogen purged, MIL.STD, with hermetic D38999 Stainless Steel connector
- Operating temp -40°C to +80°C
- **Dimensions** (LxWxH, mm) 290x190x264
- **Weight** 9 kg

* Optional Configuration

SIGHT25-150

SYSTEM OVERVIEW

LRF

LASER RANGE FINDER
Up to 8KM
NATO Target
SAPPHIRE WINDOW

DAY ZOOM SENSOR

GLOBAL SHUTTER 60FPS
1600x1300
x36 ZOOM
4,5mm-162mm
SAPPHIRE WINDOW

LWIR ZOOM SENSOR

LWIR 640x512
x6 ZOOM
25-150mm

- EX-SIGHT APPLICATION, SDK OPEN SOURCE C#
- LASER POINTER ON LRF CAMERA
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED

SIGHT25-150H

SYSTEM OVERVIEW

LWIR ZOOM SENSOR

LWIR 640x512
x6 ZOOM
25-150mm

LRF

LASER RANGE FINDER
Up to 8KM
NATO Target
SAPPHIRE WINDOW

DAY ZOOM SENSOR

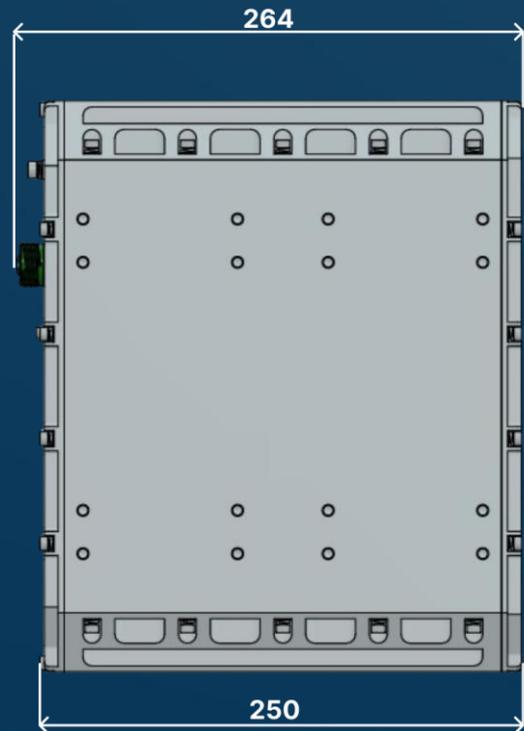
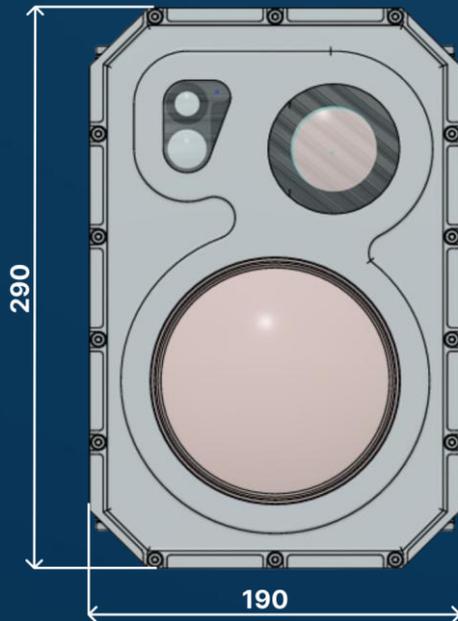
GLOBAL SHUTTER 60FPS
1600x1300
x36 ZOOM
4,5mm-162mm
SAPPHIRE WINDOW

- EX-SIGHT APPLICATION, SDK OPEN SOURCE C#
- LASER POINTER ON LRF CAMERA
- ETHERNET & ANALOG INTERFACE
- IP-67 NITROGEN PURGED

SIGHT25-150H

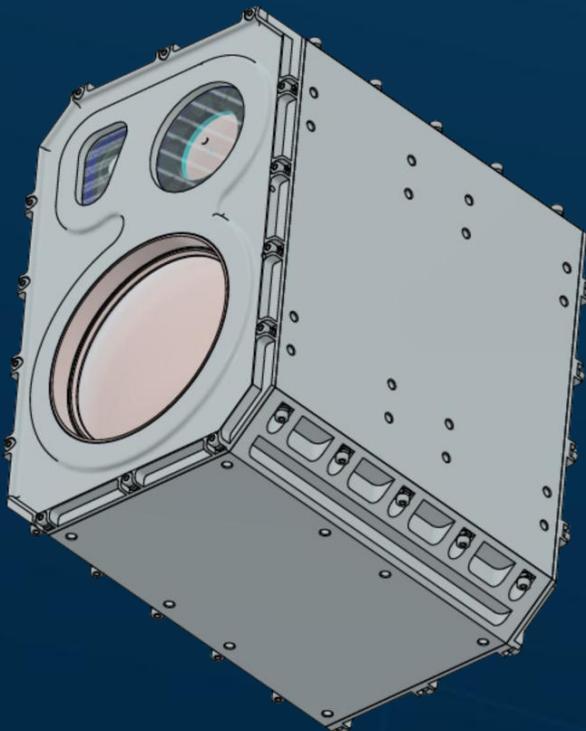
DIMENSIONS (LxWxH, mm) 290x190x264

WEIGHT 9 kg

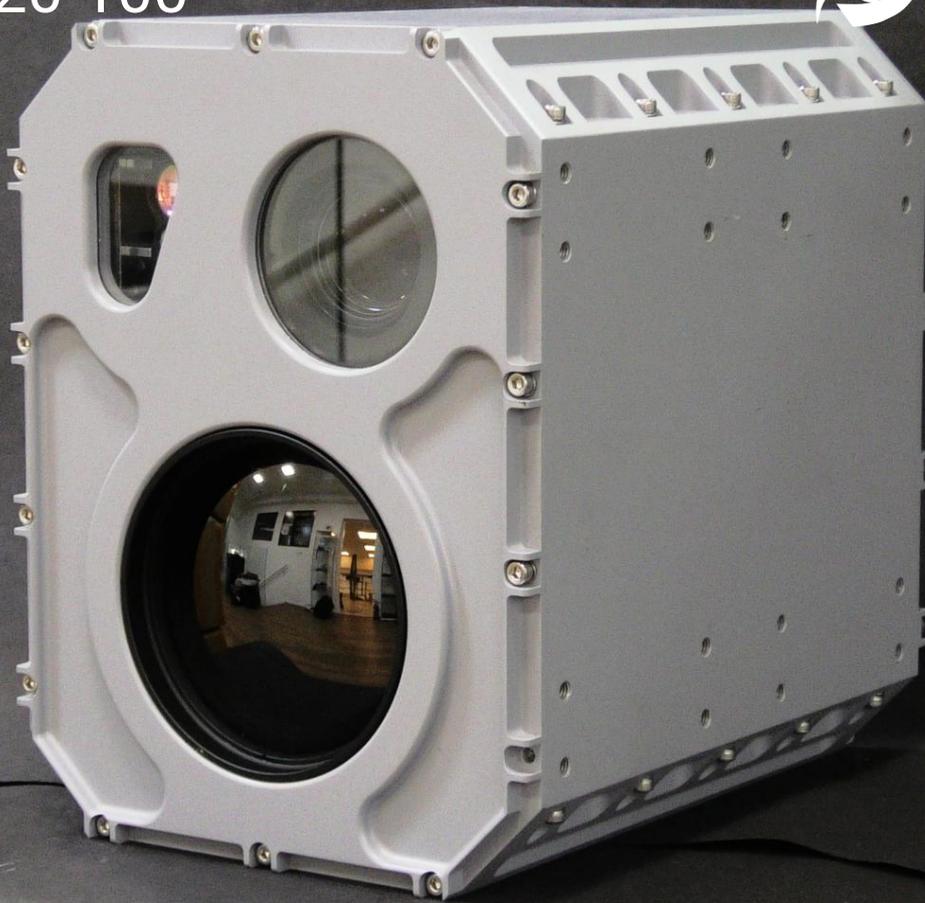


PANEL PIN LAYOUT

D38999/23YC35PN Stainless Steel Hermetic Connector



PIN	DESCRIPTION
1	NC
2	NC
3	(+9 TO +36VDC) INPUT POWER
4	GND INPUT POWER
5	(+9 TO +36VDC) INPUT POWER
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNET2 (1) TX+
10	ETHERNET2 (2) TX-
11	ETHERNET2 (3) RX+
12	ETHERNET2 (6) RX-
13	NC
14	NC
15	ETHERNET1 (1) TX+
16	ETHERNET1 (2) TX-
17	ETHERNET1 (3) RX+
18	ETHERNET1 (6) RX-
19	NC
20	NC
21	NC
22	NC



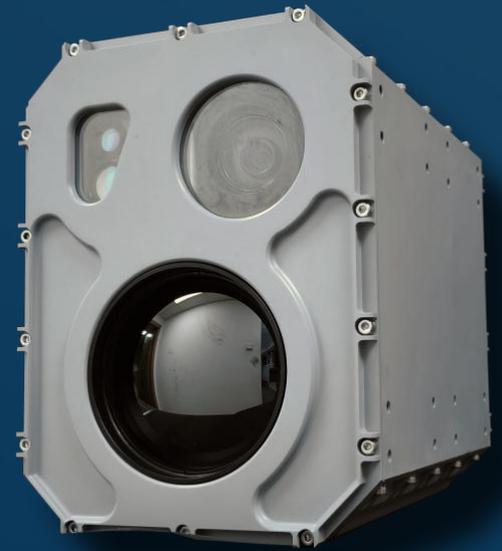
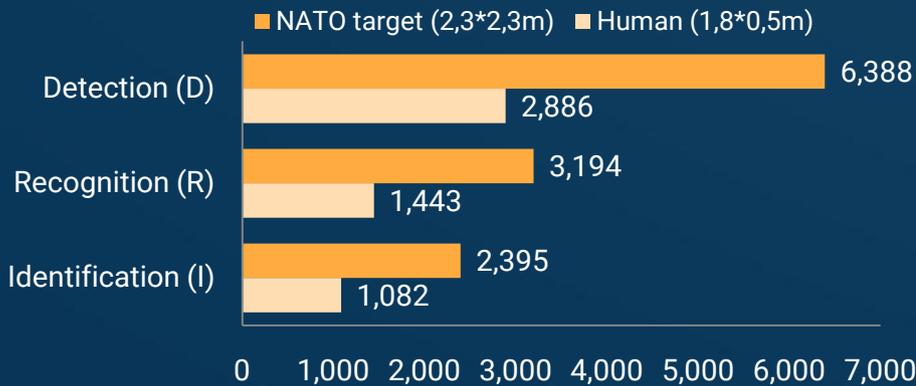
SIGHT20-100

LWIR UNCOOLED VISION SYSTEM

- GLOBAL SHUTTER DAY 1600x1300 x36 Zoom
- LWIR 640x512 x5 Zoom 20-100mm
- LRF up to 8KM NATO Target
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED MARINE GRADE

CHASSIS

SIGHT20-100 DRI LWIR (m)



- Automatic target recognition, automatically track and detect static and dynamic targets*
- Ethernet connectivity, modular architecture, single cable connection
- Full HD Global Shutter 1600x1300, 60FPS, x36 Zoom 4,5mm-162mm sensor H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4° Sapphire Window
- LWIR 640x512 sensor 12µm, Lens 20-100 mm Cont. x5 Zoom 22.5° to 4.4° FOV, Germanium window
- LRF 8 km NATO target
- PSU 12-40 VDC MIL-STD-461; MIL-STD-1275;
- MIL-STD-704
- Ethernet, ONVIF, RTSP interface
- Ex-Sight Application, SDK Open Source C#
- IP-67 Hermetic sealed chassis, Nitrogen purged, MIL.STD, with hermetic D38999 Stainless Steel connector
- Operating temp -40°C to +80°C
- **Dimensions (LxWxH, mm)** 250x190x255
- **Weight** 9 kg

* Optional Configuration

SIGHT20-100

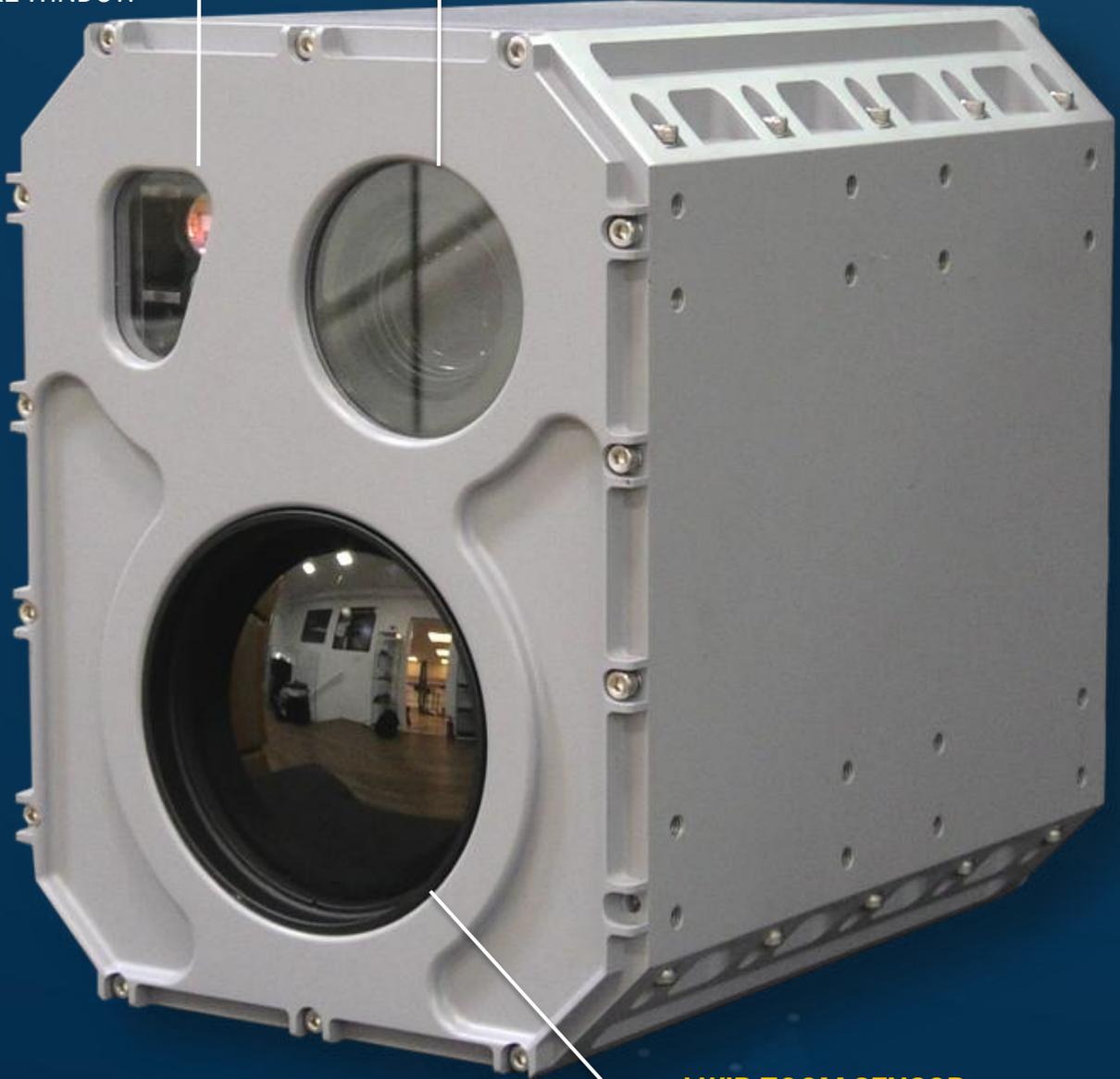
SYSTEM OVERVIEW

LRF

LASER RANGE FINDER
Up to 8KM
NATO Target
SAPPHIRE WINDOW

DAY ZOOM SENSOR

GLOBAL SHUTTER 60FPS
1600x1300
x36 ZOOM
4,5mm-162mm
SAPPHIRE WINDOW



LWIR ZOOM SENSOR

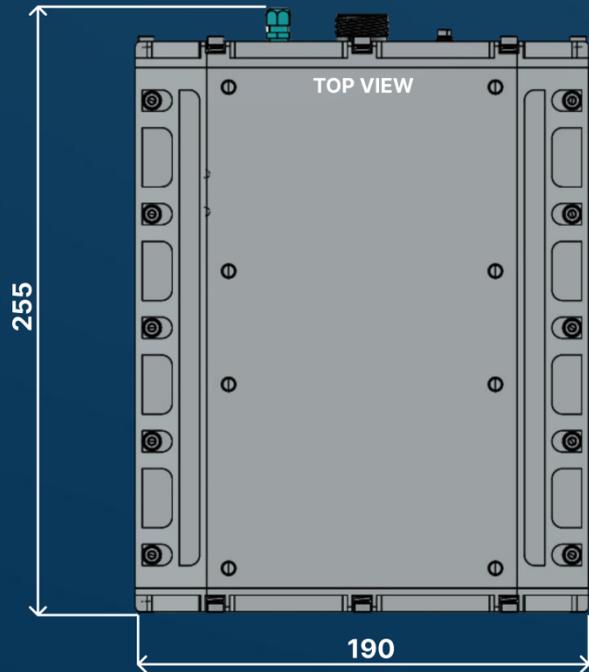
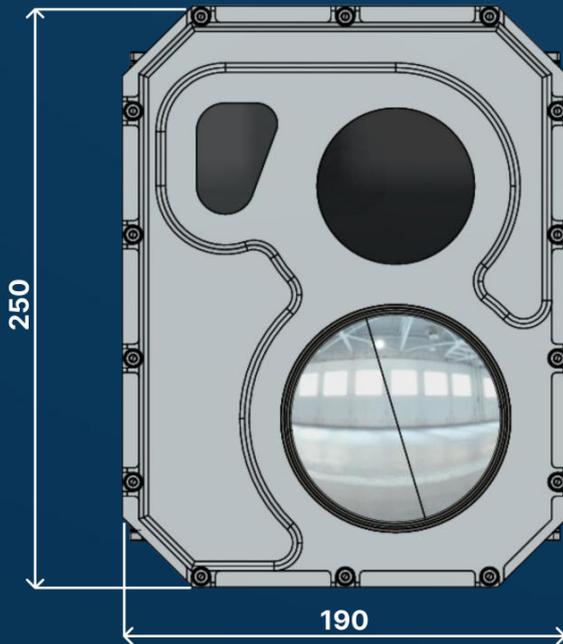
LWIR 640x512
x5 ZOOM
20-100mm

- EX-SIGHT APPLICATION, SDK OPEN SOURCE C#
- LASER POINTER ON LRF CAMERA
- ETHERNET & ANALOG INTERFACE
- IP-67 NITROGEN PURGED

SIGHT20-100

DIMENSIONS (LxWxH, mm) 250x190x255

WEIGHT 9 kg



PANEL PIN LAYOUT

D38999/23YC35PN Stainless Steel Hermetic Connector



PIN	DESCRIPTION
1	NC
2	NC
3	(+9 TO +36VDC) INPUT POWER
4	GND INPUT POWER
5	(+9 TO +36VDC) INPUT POWER
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNET2 (1) TX+
10	ETHERNET2 (2) TX-
11	ETHERNET2 (3) RX+
12	ETHERNET2 (6) RX-
13	NC
14	NC
15	ETHERNET1 (1) TX+
16	ETHERNET1 (2) TX-
17	ETHERNET1 (3) RX+
18	ETHERNET1 (6) RX-
19	NC
20	NC
21	NC
22	NC



Ex-Sight.Com

SPHERE SERIES

COMPACT MULTI SENSOR RUGGED GIMBALS

				
	SPHERE-M250	SPHERE-150	SPHERE-100	SPHERE-F
DAY SENSOR	Global Shutter 60FPS 1600x1300 X36 Zoom 4,5mm-162mm H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°	Global Shutter 60FPS 1600x1300 X36 Zoom 4,5mm-162mm H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°	Global Shutter 60FPS 1600x1300 X36 Zoom 4,5mm-162mm H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°	Global Shutter 60FPS 1600x1300 X36 Zoom 4,5mm-162mm H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°
THERMAL SENSOR	COOLED MWIR 10µm, XBn 640x512 x16,6 Zoom 15-250mm FOV 35,5° to 2,2°	UNCOOLED LWIR 12µm 640x512 x6 Zoom 25-150mm FOV 17,5° to 2,93°	UNCOOLED LWIR 12µm 640x512 x5 Zoom LENS 20-100mm FOV 22,5° to 4,4°	UNCOOLED LWIR 12 µm 640x512 FIXED LENS 5.8mm FOV 70° 25mm FOV 17.5° 35mm FOV 12.5°
LRF	Up to 8 KM NATO Target	Up to 8 KM NATO Target	Up to 8 KM NATO Target	Up to 2 KM NATO Target
D (m) Human/NATO	8,660/14,500	6,495/14,375	4,300/9,583	2,886/6,388
R (m) Human/NATO	4,330/9,583	3,247/7,187	2,165/4,791	1,443/3,194
I (m) Human/NATO	3,247/7,187	2,435/5,390	1,623/3,593	1,082/2,395
GNSS / INS	RUGGED INS GPS IMU *			
SPEED	Up to 150°/Sec			
POWER	24-48VDC			
DIMENSIONS (mm)	317x312x456 ø 280	317x312x456 ø 280	317x312x456 ø 280	245x216x347 ø 185
WEIGHT (Kg)	26 kg	26 kg	26 kg	13 kg
CONNECTOR	Hermetic Stainless Steel D38999/23YC35PN			
IP RATE	IP67			

SPHERESERIES PART NUMBERING

SPHERE-F		SPF-640-5.8-36-N- RAL9005		
SPF-[RES]-[LENS]-[ZOOM-DS]-[LRF] - [RAL]				
[RES]	LWIR RESOLUTION	640 (LWIR 640x512)		
[LENS]	LWIR LENS	5.8mm FOV 70°	25mm FOV 17.5°	35mm FOV 12.5°
[ZOOM-DS]	ZOOM DAY SENSOR	36 - x36 Optical Zoom, Global Shutter		
[LRF]	LRF	N - None	8 - 8Km NATO Target	
[RAL]	COLOR	RAL 9005 JET BLACK	RAL 6014 YELLOW OLIVE	

SPHERE-100/150		SPL-640-25-150-36-8-RAL6014		
SPL-[RES]-[LENS]-[ZOOM-DS]-[LRF] - [RAL]				
[RES]	LWIR RESOLUTION	640 (LWIR 640x512)		
[LENS]	LWIR LENS	25-150 mm FOV 17,5° to 2,93°	20-100 mm FOV 22,5° to 4,4°	
[ZOOM-DS]	ZOOM DAY SENSOR	36 - x36 Optical Zoom, Global Shutter		
[LRF]	LRF	N - None	8 - 8Km NATO Target	
[RAL]	COLOR	RAL 9005 JET BLACK	RAL 6014 YELLOW OLIVE	

SPHERE-M250		SPM-640-15-250-36-N-RAL6014		
SPM-[RES]-[LENS]-[ZOOM-DS]-[LRF] - [RAL]				
[RES]	LWIR RESOLUTION	640 (LWIR 640x512)		
[LENS]	LWIR LENS	15-250 mm FOV 35,5° to 2,2°		
[ZOOM-DS]	ZOOM DAY SENSOR	36 - x36 Optical Zoom, Global Shutter		
[LRF]	LRF	N - None	8 - 8Km NATO Target	
[RAL]	COLOR	RAL 9005 JET BLACK	RAL 6014 YELLOW OLIVE	

SPHEREM250

 **Ex-Sight.Com**
ONE SHOT



SPHEREM250

COMPACT COOLED MWIR GYRO STABILIZED SYSTEM

- GLOBAL SHUTTER DAY 1600x1300 x36 Zoom
- COOLED MWIR 10 μ m, 640x512, LENS 15-250 mm
- LRF up to 8KM NATO Target
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED MARINE GRADE CHASSIS

DRI (m)



COMPACT COOLED MWIR GYRO STABILIZED SYSTEM

- Compact Cooled MWIR GIMBAL
- True North Dual GPS INS*
- Ethernet interface
- DAY: Full HD Low Light Global Shutter 1600x1300, 60FPS, x36 Zoom 4,5mm-162mm sensor H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°; Sapphire Window
- NIGHT: MWIR 640x512 Cont. Zoom 15-250mm
- LRF up to 8KM NATO Target
- 4K Day Scene module, Sapphire window
- Rugged Aluminum structure
- Ex-Sight DESK Application, SDK Open Source C#
- IP-67, MIL.STD, with hermetic D38999 Stainless Steel connector
- Operating temp -20°C to +80°C
- **Dimensions (LxWxH, mm)**
317x312x456 ø 280
- **Weight 26 Kg**

* Optional Configuration

SPHEREM250

SYSTEM OVERVIEW

MWIR ZOOM SENSOR

COOLED MWIR
X16,6 ZOOM
SPARROW 15-300mm

DAY ZOOM SENSOR

GLOBAL SHUTTER 60FPS
1600x1300
x36 ZOOM
4,5mm-162mm
SAPPHIRE WINDOW

DAY SCENE SENSOR

CAMERA SCENE 90° 4K
SAPPHIRE WINDOW

LRF

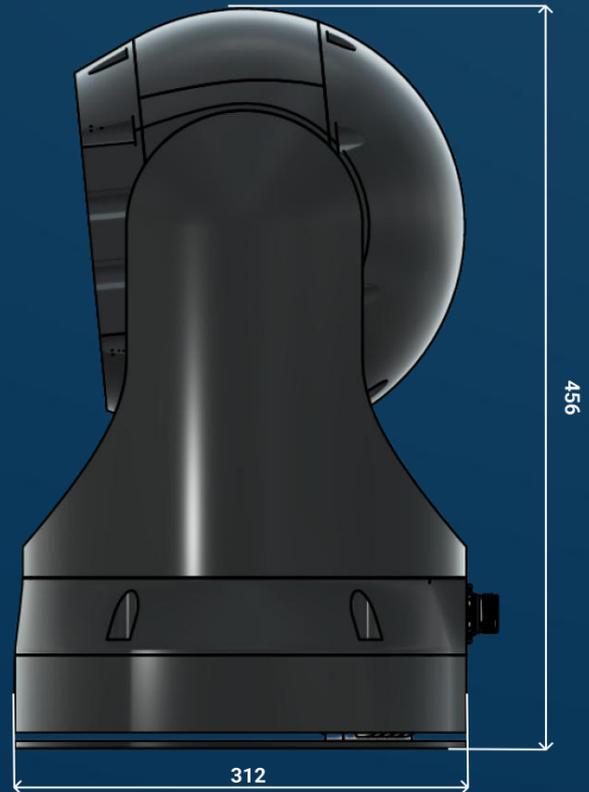
LASER RANGE FINDER
Up to 8KM
NATO Target
SAPPHIRE WINDOW

SHOCK ABSORBERS

- EX-SIGHT DESK APPLICATION, SDK OPEN SOURCE C#
- ETHERNET INTERFACE
- IP-67

SPHEREM250

DIMENSIONS (LxWxH, mm) 317x312x456 \varnothing 280





SPHERE150

LWIR UNCOOLED GYRO STABILIZED SYSTEM

- GLOBAL SHUTTER DAY 1600x1300 x36 Zoom
- UNCOOLED LWIR 12 μ m, 640x512, LENS 25-150 mm
- LRF up to 8KM NATO Target
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED MARINE GRADE CHASSIS

SPHERE150

DRI LWIR (m)



LWIR UNCOOLED GYRO STABILIZED SYSTEM

- True North Dual GPS INS*
- Ethernet interface
- Full HD Global Shutter
1600x1300, 60FPS, x36 Zoom 4,5mm-162mm sensor H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°; Sapphire Window
- LWIR 640x512 x6 Cont. Zoom 25-150mm
- 4K Scene module, 4mm Lens, Sapphire window
- LRF up to 8KM NATO Target
- Light Weight Rugged Aluminum structure
- Ex-Sight DESK Application, SDK Open Source C#
- IP-67, MIL.STD, with hermetic D38999 Stainless Steel connector
- Operating temp -20°C to +80°C
- **Dimensions (LxWxH, mm)** 317x312x456
Ø 280
- **Weight** 26 Kg

* Optional Configuration

SPHERE150

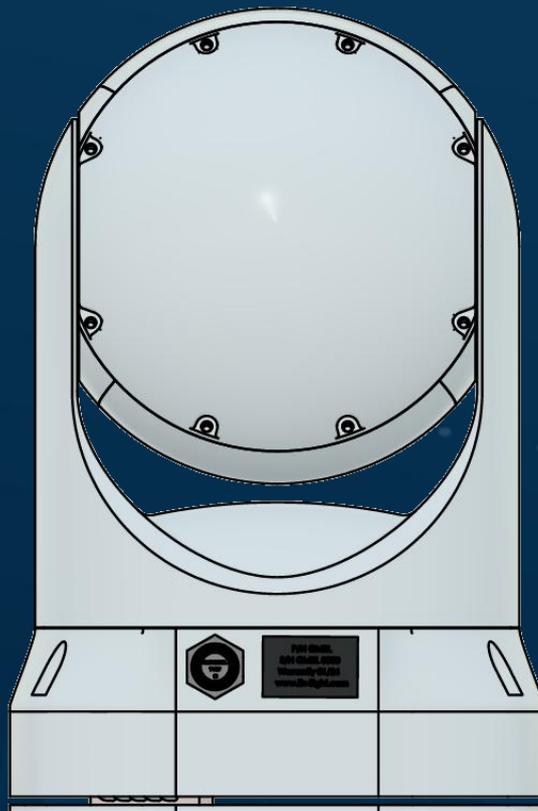
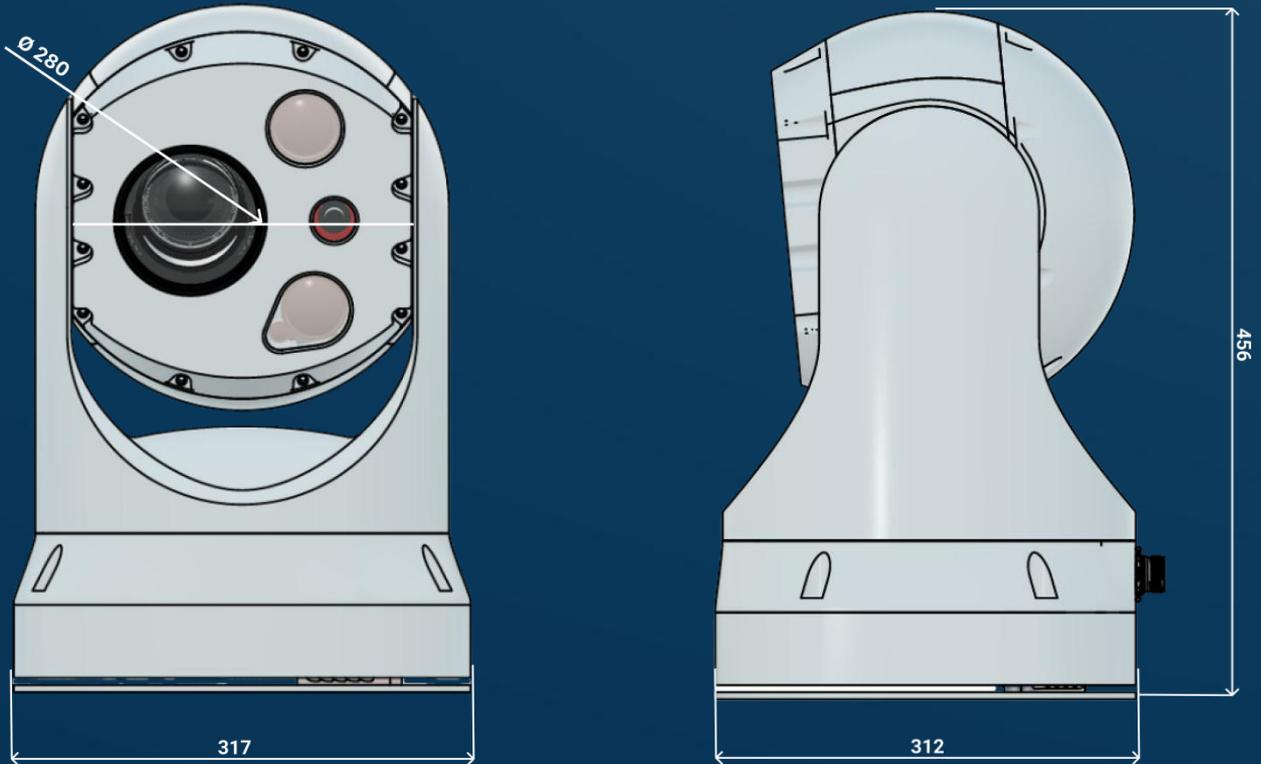
SYSTEM OVERVIEW



- EX-SIGHT DESK APPLICATION, SDK OPEN SOURCE C#
- LASER POINTER ON LRF CAMERA
- ETHERNET & ANALOG INTERFACE
- IP-67

SPHERE100

DIMENSIONS (LxWxH, mm) 317x312x456 \varnothing 280



SPHERE100

Ex-Sight.Com
ONE SHOT



SPHERE100

LWIR UNCOOLED GYRO STABILIZED SYSTEM

- GLOBAL SHUTTER DAY 1600x1300 x36 Zoom
- UNCOOLED LWIR 12 μ m, 640x512, LENS 20-100 mm
- LRF up to 8KM NATO Target
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED MARINE GRADE CHASSIS

SPHERE100

DRI LWIR (m)



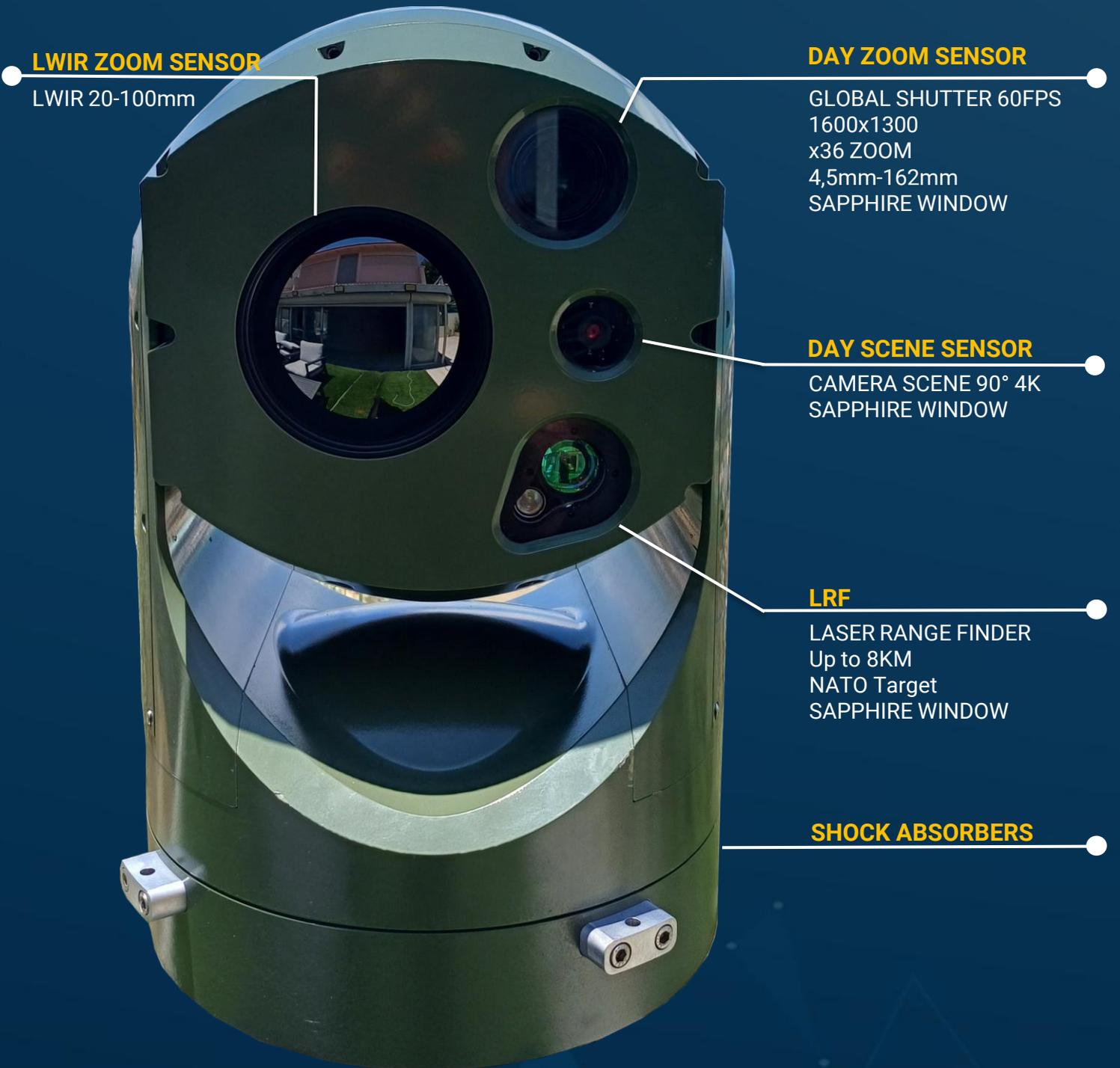
LWIR UNCOOLED GYRO STABILIZED SYSTEM

- True North Dual GPS INS*
- Ethernet interface
- Full HD Global Shutter
1600x1300, 60FPS, x36 Zoom 4,5mm-162mm sensor H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°; Sapphire Window
- LWIR 640x512 x5 Cont. Zoom 20-100mm
- 4K Scene module, 4mm Lens, Sapphire window
- LRF up to 8KM NATO Target
- Light Weight Rugged Aluminum structure
- Ex-Sight DESK Application, SDK Open Source C#
- IP-67, MIL.STD, with hermetic D38999 Stainless Steel connector
- Operating temp -20°C to +80°C
- **Dimensions (LxWxH, mm)** 317x312x456
Ø 280
- **Weight** 26 Kg

* Optional Configuration

SPHERE100

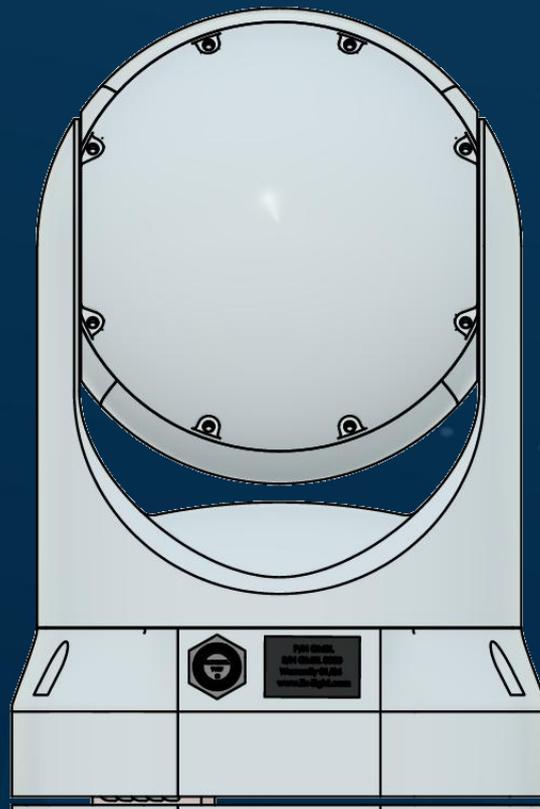
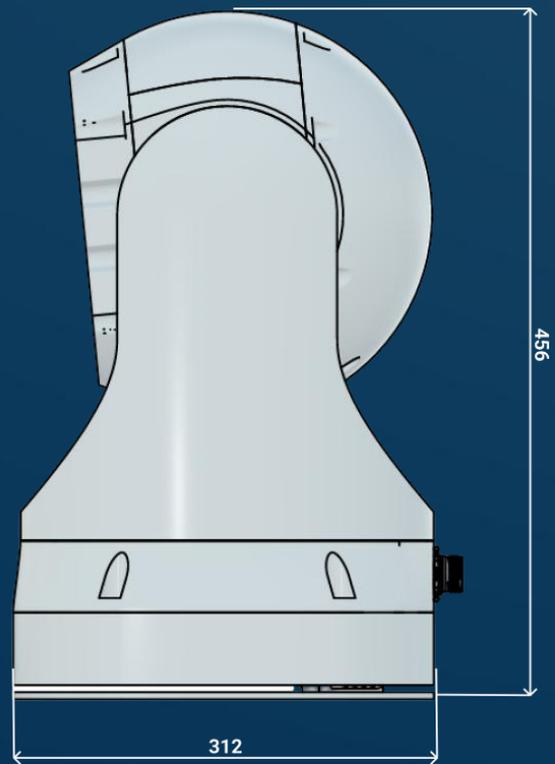
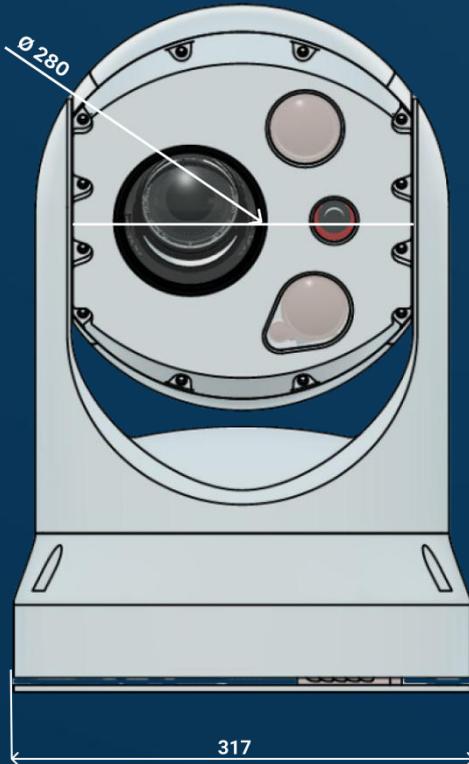
SYSTEM OVERVIEW



- EX-SIGHT DESK APPLICATION, SDK OPEN SOURCE C#
- LASER POINTER ON LRF CAMERA
- ETHERNET & ANALOG INTERFACE
- IP-67

SPHERE100

DIMENSIONS (LxWxH, mm) 317x312x456 \varnothing 280





SPHERE-F

LWIR UNCOOLED GIMBAL

- GLOBAL SHUTTER DAY 1600x1300 x36 Zoom
- UNCOOLED LWIR 12 μ m, 640x512, FIXED LENS
- LENS OPTION: 5.8 mm/25mm/35mm
- LRF up to 8KM NATO Target
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED MARINE GRADE CHASSIS



LWIR UNCOOLED GIMBAL

- Full HD Global Shutter
1600x1300, 60FPS, x36 Zoom 4,5mm-162mm sensor H-FOV 59,0° to 2,4° V-FOV 33,6° to 1,4°; Sapphire Window
- LWIR 640x512 Fixed Lens: 5.8 | 25 | 35mm
- LRF up to 2KM NATO Target
- Light Weight Rugged Aluminum structure
- Ex-Sight DESK Application, SDK Open Source C#
- IP-67, MIL.STD, with hermetic D38999 Stainless Steel connector
- Ethernet interface
- Operating temp -20°C to +80°C
- **Dimensions (LxWxH, mm)** 245x216x347
ø 185
- **Weight** 13 Kg

* Optional Configuration

SYSTEM OVERVIEW



LRF

LASER RANGE FINDER
Up to 2KM
NATO Target
SAPPHIRE WINDOW

LWIR SENSOR

UNCOOLED LWIR 12 μ m
640x512

LENS OPTION:

5.8 | 25 | 35mm

DAY ZOOM SENSOR

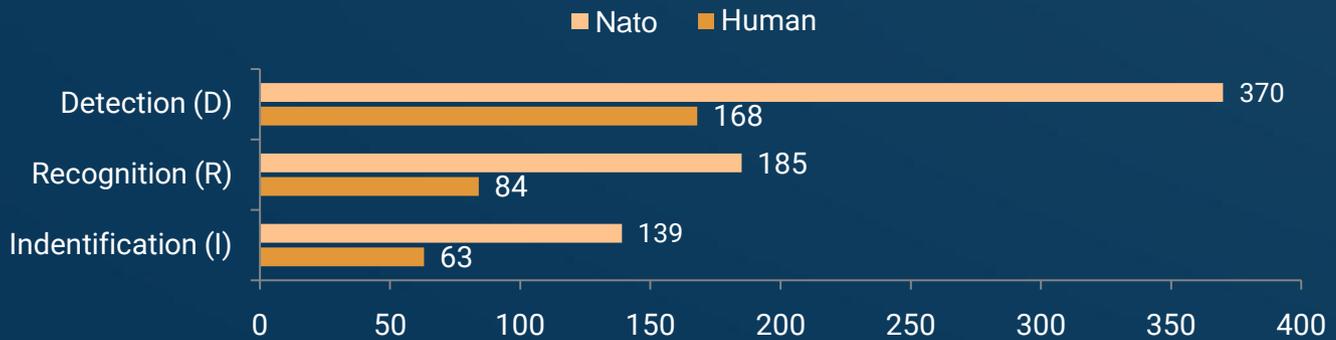
GLOBAL SHUTTER 60FPS
1600x1300
x36 ZOOM
4,5mm-162mm
SAPPHIRE WINDOW

SHOCK ABSORBERS

- EX-SIGHT DESK APPLICATION, SDK OPEN SOURCE C#
- LASER POINTER ON LRF CAMERA
- ETHERNET & ANALOG INTERFACE
- IP-67

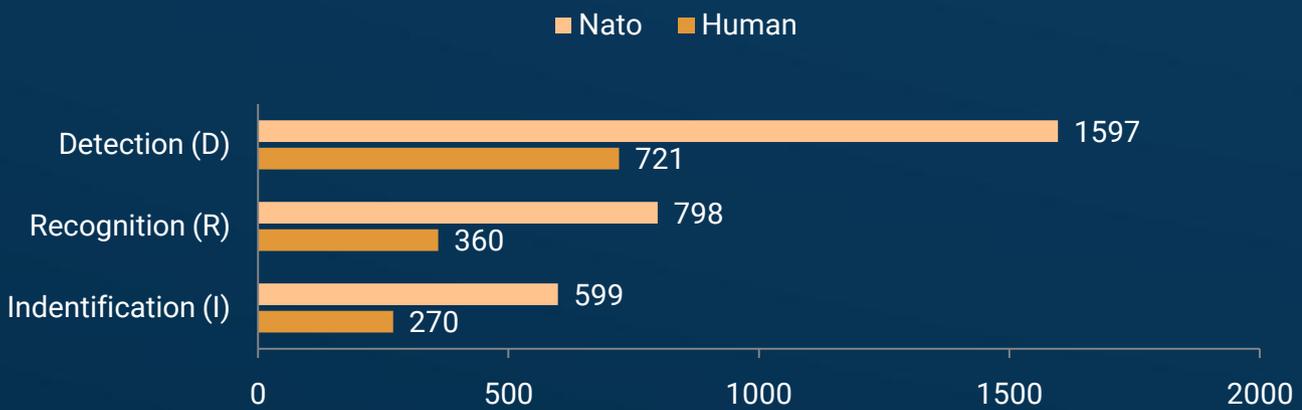
DRI LWIR (m)
640x512 LENS 5,8 mm

FOV 65,24° x 54,22°



DRI LWIR (m)
640x512 LENS 25 mm

FOV 17,46° x 14,01°

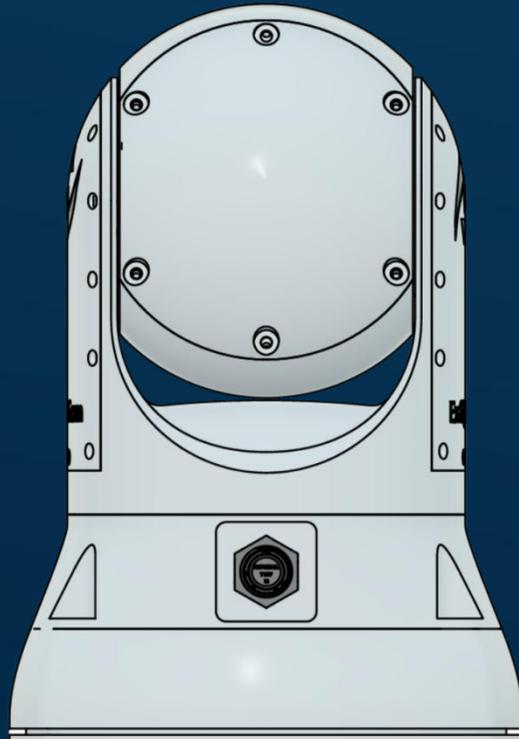
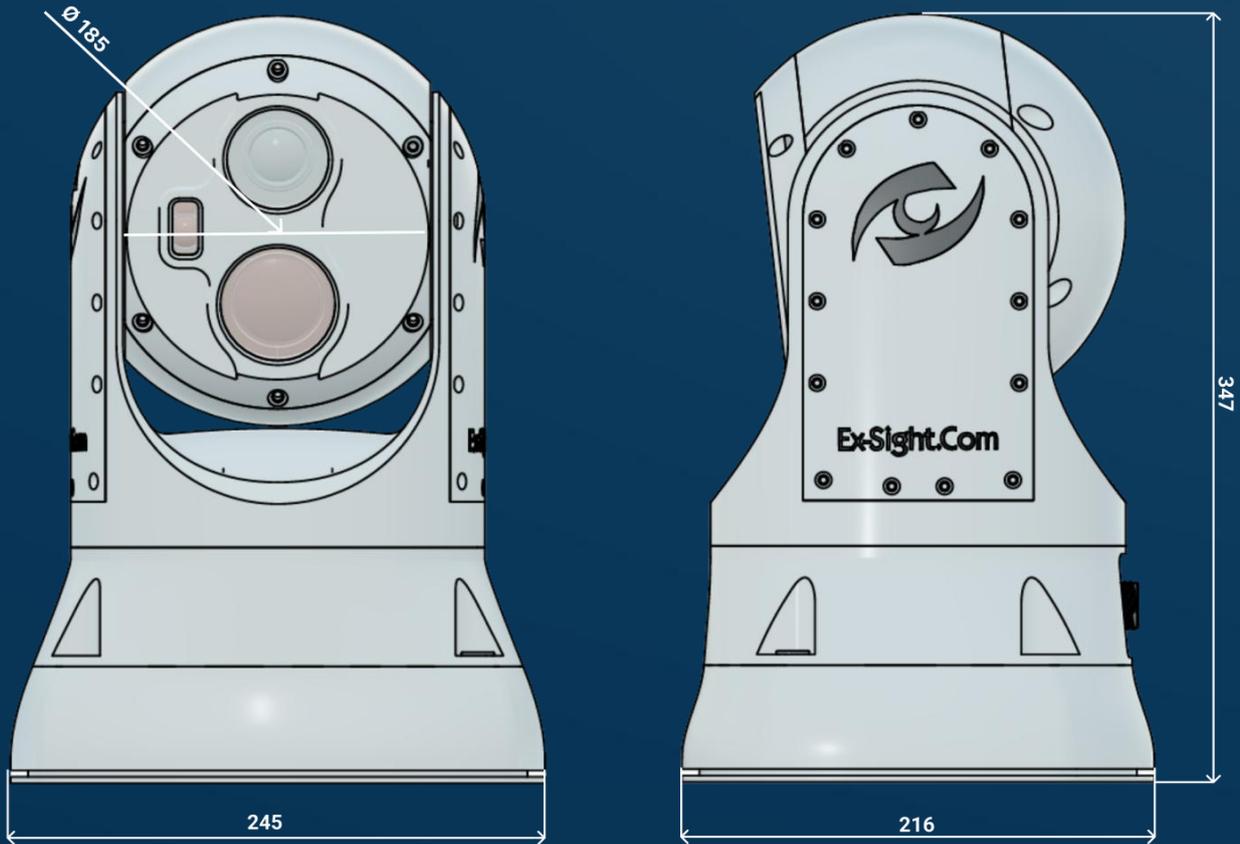


DRI LWIR (m)
640x512 LENS 35 mm

FOV 12,52° x 10,03°



DIMENSIONS (LxWxH, mm) 245x216x347 \varnothing 185





PT SERIES

HEAVY DUTY STABILIZED PAN TILT SYSTEMS

				
	OWL	OWL225	OMEGAΩ	ALMA
MOUNTING TYPE	U Mount	U Mount	Ω (OMEGA) TOP + Sides	T Top Mount
TILT	Max ±90° Deg Max. Motor Torque (NM) 35/ 50/ 150			35 NM
PAN	Cont. 360° Deg Motor Torque (NM) 35/ 50/ 150			35 NM
TRUE NORTH INS GPS	DUAL ANTENNA GNSS-AIDED INERTIAL NAVIGATION*			
MAX.SPEED	20 RPM, up to 120°/sec			30 RPM, up to 180°/sec
MAX. PAYLOAD	50 kg	50 kg	70 kg	15 Kg
DIMENSIONS LxWxH (mm)	416x210x442	505x255x624	794x210x419	218x163x296
WEIGHT(Kg)	22 kg	25 kg	32 kg	8,5 kg
IP RATE	IP66			
POWER	24-48VDC			



			
	ALMA	ADVA	COMPASS
MOUNTING TYPE	T Top Mount	T Top Mount	T Top Mount
TILT	35 NM	35 NM	-
PAN	35 NM	-	35 NM
TRUE NORTH INS GPS	DUAL ANTENNA GNSS-AIDED INERTIAL NAVIGATION*	Optional VN100 INS/ VN200 INS	-
MAX.SPEED	30 RPM, up to 180°/sec	30 RPM, up to 180°/sec	
MAX. PAYLOAD	15 Kg	9 Kg	9 Kg
DIMENSIONS LxWxH (mm)	218x163x296	232x210x158	
WEIGHT(Kg)	8,5 kg	3,5 Kg	4,5 Kg
IP RATE	IP66		
POWER	24-48VDC		



PART NUMBERING

OWL		OWL-U-50-150-100			
OWL-[TYPE]-[TILT]-[PAN]-[INS]					
[TUPE]	U model	Top Mount			
[TILT]	Motor Torque (NM)	35	50	150	
[PAN]	Motor Torque (NM)	35	50	150	
[INS]	BLANK - No INS, No Gyro stabilization	100 - VN100 INS	200 - VN200 INS	300 - VN300 INS Dual GPS true north	

OWL225		OWL225-U-50-150-100			
OWL225-[TYPE]-[TILT]-[PAN]-[INS]					
[TUPE]	U model	Top Mount			
[TILT]	Motor Torque (NM)	35	50	150	
[PAN]	Motor Torque (NM)	35	50	150	
[INS]	BLANK - No INS, No Gyro stabilization	100 - VN100 INS	200 - VN200 INS	300 - VN300 INS Dual GPS true north	

OMEGA		OMEGA-300			
OMEGA-[INS]					
	Ω (omega) model	TOP + Sides			
[INS]	BLANK - No INS, No Gyro stabilization	100 - VN100 INS	200 - VN200 INS	300 - VN300 INS Dual GPS true north	

ALMA		ALMA-T-35-35-200			
ALMA-[TYPE]-[TILT]-[PAN]-[INS]					
[TYPE]	T-model	Top Mount			
[TILT]	Motor Torque (NM)	35	50	150	
[PAN]	Motor Torque (NM)	35	50	150	
[INS]	BLANK - No INS, No Gyro stabilization	100 - VN100 INS	200 - VN200 INS	300 - VN300 INS Dual GPS true north	

PART NUMBERING

ALMA	ALMA-T-35-35-200			
ALMA-[TYPE]-[TILT]-[PAN]-[INS]				
[TYPE]	T-model	Top Mount		
[TILT]	Motor Torque (NM)	35	50	150
[PAN]	Motor Torque (NM)	35	50	150
[INS]	BLANK - No INS, No Gyro stabilization	100 - VN100 INS	200 - VN200 INS	300 - VN300 INS Dual GPS true north

ADVA	ADVA-T-17-100		
ALMA-[TYPE]-[TILT]-[INS]			
[TYPE]	T-model	Top Mount	
[TILT]	Motor Torque (NM)	35	
[INS]	BLANK - No INS, No Gyro stabilization	100 - VN100 INS	200 - VN200 INS

COMPASS	COMPASS-T-17	
COMPASS-[TYPE]-[PAN]-[INS]		
[TYPE]	T-model	Top Mount
[PAN]	Motor Torque (NM)	35
[INS]	BLANK - No INS, No Gyro stabilization	



OWL

GYRO STABILIZED HEAVY DUTY PAN TILT

Specially designed to allow high precision continuous 360 deg stabilized platform for heavy EO payloads. Includes embedded braking system, True north dual GPS INS and Ethernet Interface.

The OWL can support up to 70 Kg payloads.

SIGHTMWIR



SIGHT25-150



SIGHT20-100



GYRO STABILIZED PAN TILT

- High power precision motors
- True North Dual GPS INS*
- Ethernet interface
- Embedded braking system
- Low power consumption on idle
- Light Weight Rugged Aluminum structure

SPECIFICATION

MAX SPEED	Up to 120°/sec
MAX PAYLOAD	70 kg
ACCURACY	0.01° Deg
MOTION RANGE AZIMUTH	Cont. 360° Deg
MOTION RANGE ELEVATION	Max. ±90° Deg
CONTROL INTERFACE	ETHERNET
POWER SUPPLY	48VDC
MAX CURRENT (LOADED)	16A@48VDC
ENVIRONMENTAL PROTECTION	IP66
OPTIONAL TRUE NORTH INS GPS	DUAL ANTENNA GNSS-AIDED INERTIAL NAVIGATION
DIMENSIONS LxWxH (mm) OWL	442X412X210 mm
WEIGHT	Up to 22 Kg

* Optional Configuration

OWL PAN TILT



② **D38999/23YC35SN**

Mil. Std Stainless Steel connector

① **D38999/23YC35PN**

Mil. Std Stainless Steel connector

PANEL PIN LAYOUT (1)

D38999/23YC35PN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	+48VDC POWER IN
2	+48VDC POWER IN
3	+48VDC POWER IN
4	+48VDC POWER IN
5	+48VDC POWER IN
6	+48VDC POWER IN
7	+48VDC POWER IN
8	GND POWER IN
9	GND POWER IN
10	GND POWER IN
11	GND POWER IN

PIN	DESCRIPTION
12	GND POWER IN
13	GND POWER IN
14	GND POWER IN
15	ETHERNET (1) TX+
16	ETHERNET (2) TX-
17	ETHERNET (3) RX+
18	NC
19	NC
20	ETHERNET2 (6) RX-
21	NC
22	NC

PANEL PIN LAYOUT (2)

D38999/23YC35SN Stainless Steel Hermetic Connector

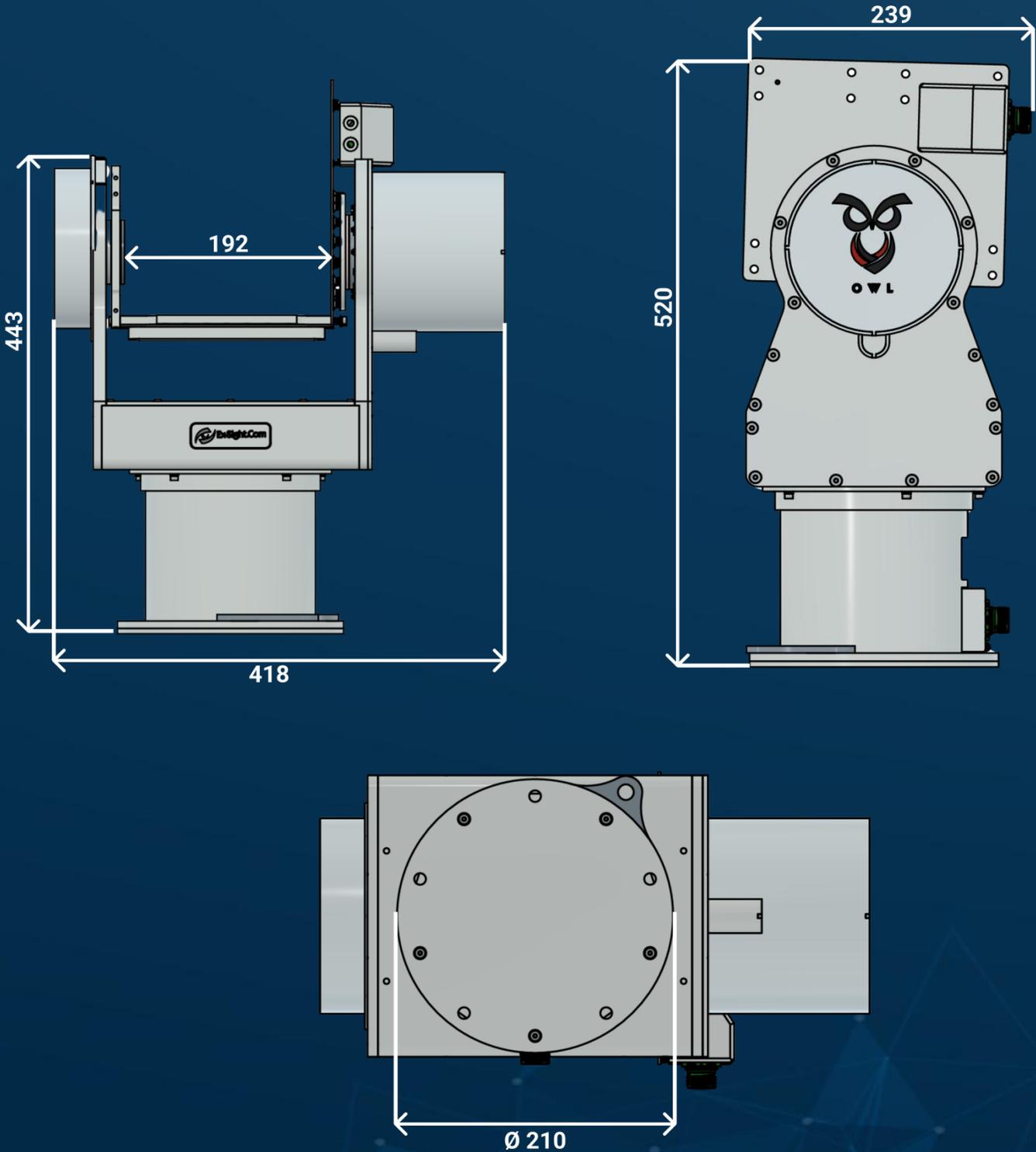
PIN	DESCRIPTION
1	NC
2	NC
3	(+9 TO +36VDC) INPUT POWER
4	GND INPUT POWER
5	(+9 TO +36VDC) INPUT POWER
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNET (1) TX+
10	ETHERNET (2) TX-
11	ETHERNET (3) RX+

PIN	DESCRIPTION
12	ETHERNET (6) RX-
13	NC
14	NC
15	NC
16	NC
17	NC
18	NC
19	NC
20	NC
21	NC
22	NC

OWL

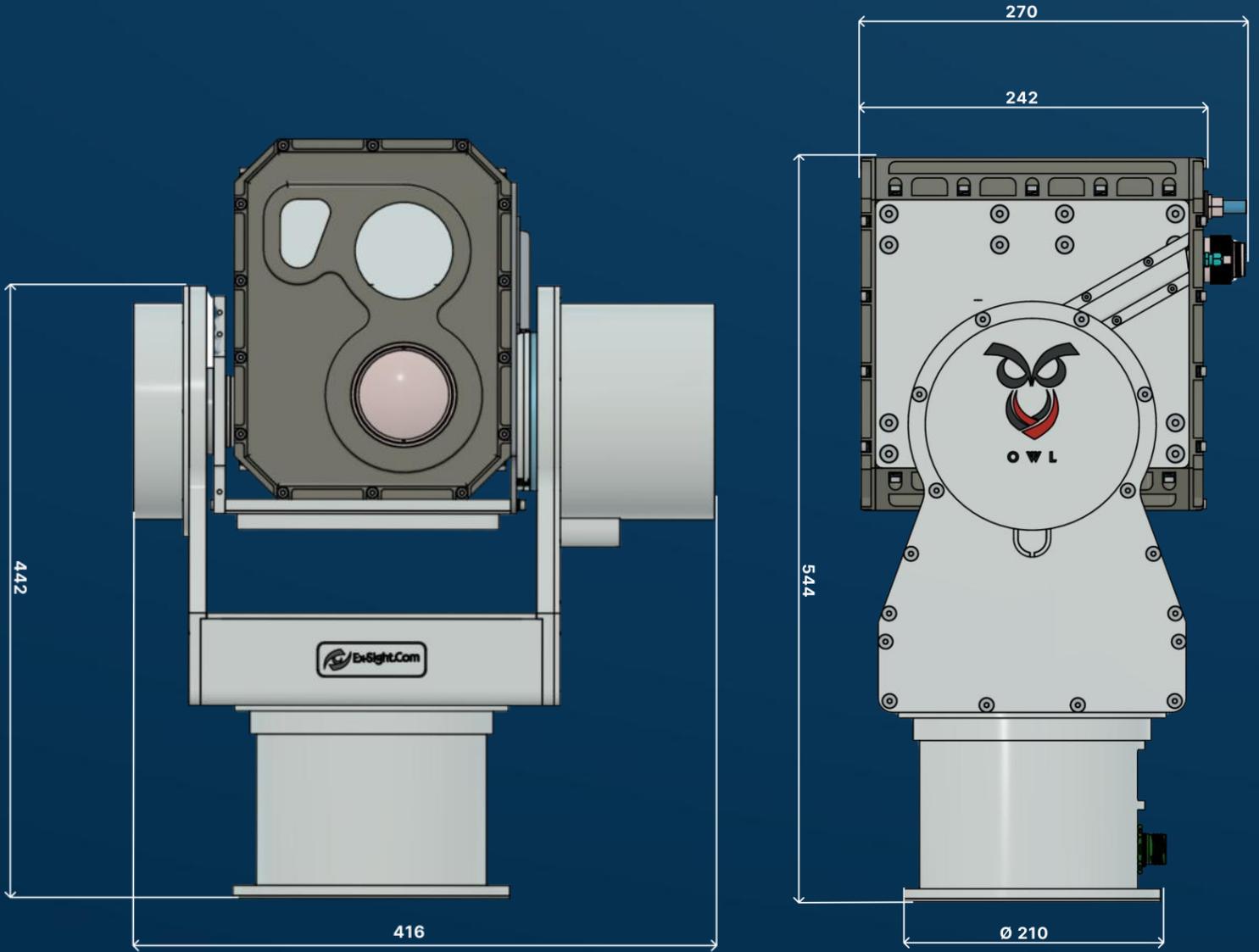
DIMENSIONS without EO (LxWxH, mm) 442x416x210

WEIGHT 16 kg



OWL

DIMENSIONS with camera (LxWxH, mm) 544x416x210





OWL225

HEAVY DUTY WIDE GYRO STABILIZED PAN TILT

Specially designed to allow high precision continuous 360 deg stabilized platform for wide and heavy EO payloads. Includes embedded braking system, True north dual GPS INS and Ethernet Interface.

The OWL can support up to 70 Kg payloads.

OWL225



STABILIZED HEAVY DUTY PAN TILT

- High power precision motors
- True North Dual GPS INS*
- Ethernet interface
- Embedded braking system
- Low power consumption on idle
- Light Weight Rugged Aluminum structure

SPECIFICATION	
MAX SPEED	Up to 120°/sec
MAX PAYLOAD	70 kg
ACCURACY	0.01° Deg
MOTION RANGE AZIMUTH	Cont. 360° Deg
MOTION RANGE ELEVATION	MAX ±90° Deg
CONTROL INTERFACE	ETHERNET (UDP)
POWER SUPPLY	48VDC
MAX CURRENT (LOADED)	16A@48VDC
ENVIRONMENTAL PROTECTION	IP66
OPTIONAL TRUE NORTH INS GPS	DUAL ANTENNA GNSS-AIDED INERTIAL NAVIGATION
DIMENSIONS LxWxH (mm) OWL	505x210x624 mm
WEIGHT	Up to 25 kg

* Optional Configuration

GYRO STABILIZED PAN TILT



② **D38999/24WC35SN**

Mil. Std Stainless Steel connector

① **D38999/24WC35PN**

Mil. Std Stainless Steel connector

PANEL PIN LAYOUT (1)

D38999/23YC35PN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	+48VDC POWER IN
2	+48VDC POWER IN
3	+48VDC POWER IN
4	+48VDC POWER IN
5	+48VDC POWER IN
6	+48VDC POWER IN
7	+48VDC POWER IN
8	GND POWER IN
9	GND POWER IN
10	GND POWER IN
11	GND POWER IN

PIN	DESCRIPTION
12	GND POWER IN
13	GND POWER IN
14	GND POWER IN
15	ETHERNET (1) TX+
16	ETHERNET (2) TX-
17	ETHERNET (3) RX+
18	NC
19	NC
20	ETHERNET2 (6) RX-
21	NC
22	NC

PANEL PIN LAYOUT (2)

D38999/23YC35SN Stainless Steel Hermetic Connector

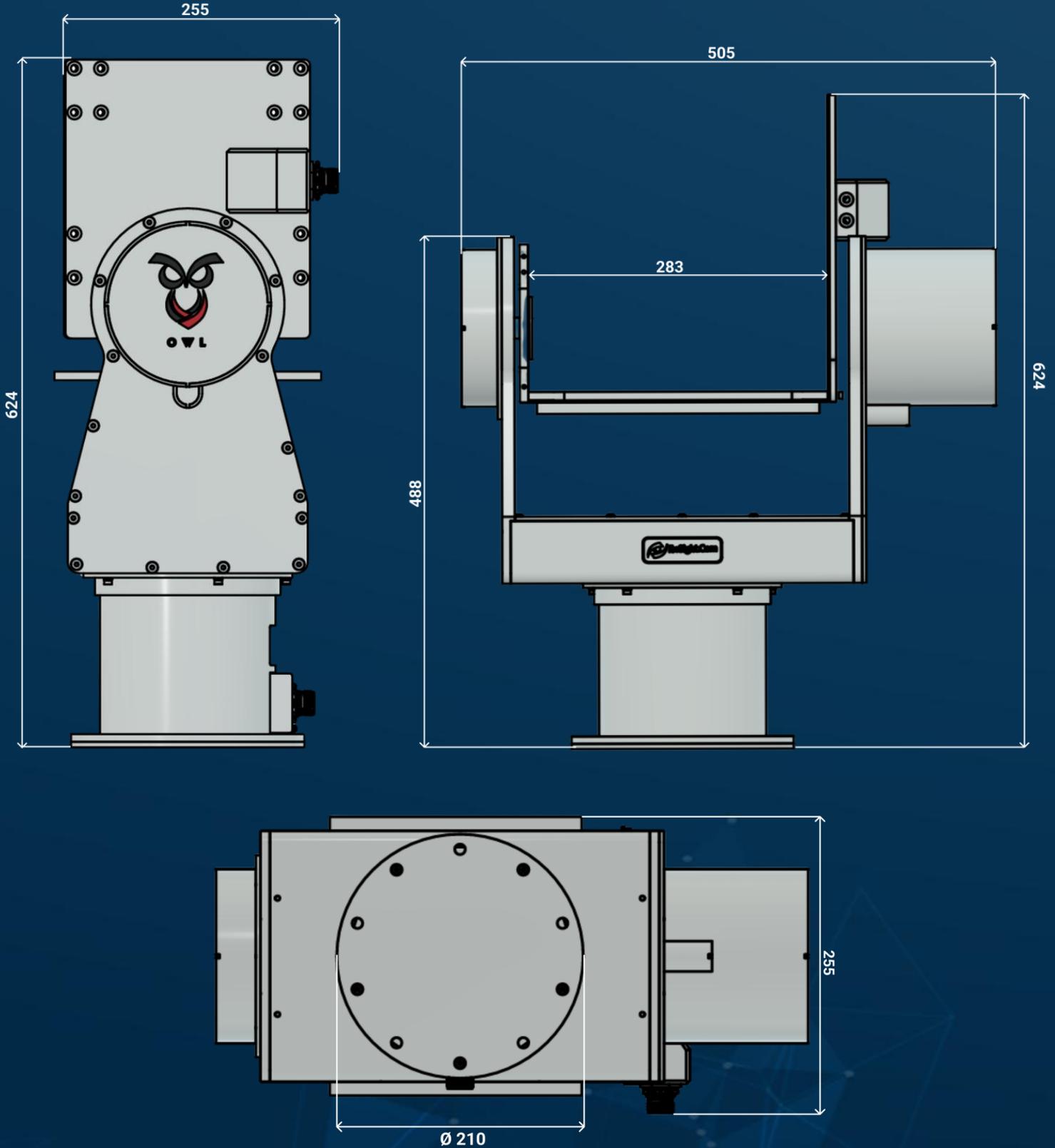
PIN	DESCRIPTION
1	NC
2	NC
3	(+9 TO +36VDC) INPUT POWER
4	GND INPUT POWER
5	(+9 TO +36VDC) INPUT POWER
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNET (1) TX+
10	ETHERNET (2) TX-
11	ETHERNET (3) RX+

PIN	DESCRIPTION
12	ETHERNET (6) RX-
13	NC
14	NC
15	NC
16	NC
17	NC
18	NC
19	NC
20	NC
21	NC
22	NC

OWL225

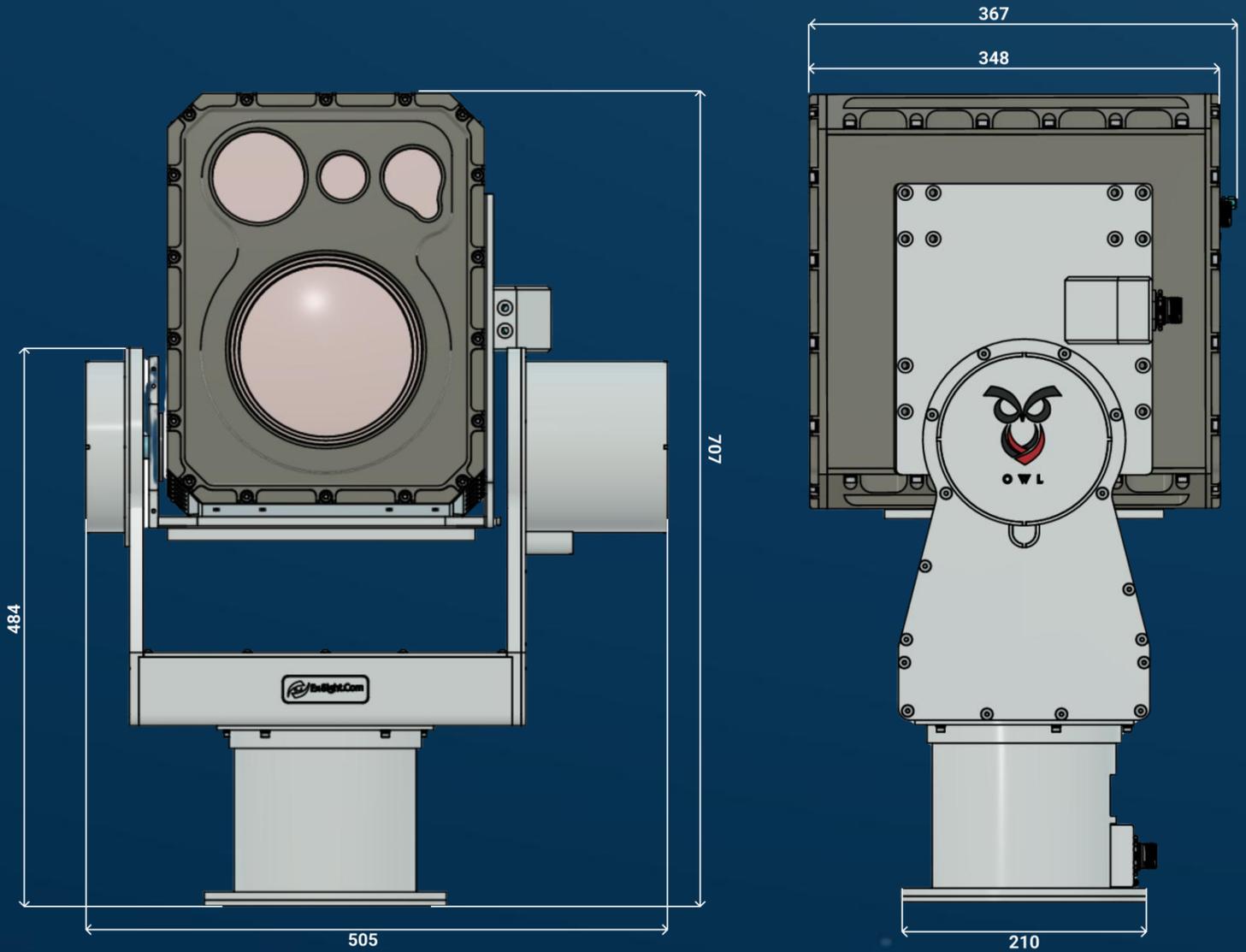
DIMENSIONS without camera (LxWxH, mm) 505x255x624

WEIGHT 18 kg



OWL225

DIMENSIONS with camera (LxWxH, mm) 484x505x210





OMEGA Ω

HEAVY DUTY GYRO STABILIZED PAN TILT

OMEGA was designed to allow high precision continuous 360 stabilized platform for heavy EO payloads due to his high power precision motors, embedded braking system and true north dual GPS INS.

The OMEGA supports up to 70 Kg payloads.



OMEGA Ω

HEAVY DUTY GYRO STABILIZED PAN TILT

OMEGA was designed to allow high precision continuous 360 stabilized platform for heavy EO payloads due to his high power precision motors, embedded braking system and true north dual GPS INS.

The OMEGA supports up to 70 Kg payloads.



OMEGA STABILIZED HEAVY DUTY PAN TILT

- High power precision motors
- True North Dual GPS INS*
- Ethernet interface
- Embedded braking system
- Low power consumption on idle
- Light Weight Rugged Aluminum structure

SPECIFICATION	
MAX SPEED	Up to 120°/sec
MAX PAYLOAD	70 kg
ACCURACY	0.01° Deg
MOTION RANGE AZIMUTH	Cont. 360° Deg
MOTION RANGE ELEVATION	±90° Deg
CONTROL INTERFACE	ETHERNET (UDP)
POWER SUPPLY	48VDC
MAW CURRENT (LOADED)	16A@48VDC
ENVIRONMENTAL PROTECTION	IP66
OPTIONAL TRUE NORTH INS GPS	DUAL ANTENNA GNSS-AIDED INERTIAL NAVIGATION
DIMENSIONS LxWxH (mm)	794x210x419 mm
WEIGHT	32 kg

* Optional Configuration

GYRO STABILIZED PAN TILT

② D38999/23YC35SN

Mil. Std Stainless Steel connector

P1-P2-P3 (Payload)



① D38999/23YC35PN

Mil. Std Stainless Steel connector

B1 (Base)

PANEL PIN LAYOUT (B1)

D38999/23YC35PN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	+48VDC POWER IN
2	+48VDC POWER IN
3	+48VDC POWER IN
4	+48VDC POWER IN
5	+48VDC POWER IN
6	+48VDC POWER IN
7	+48VDC POWER IN
8	GND POWER IN
9	GND POWER IN
10	GND POWER IN
11	GND POWER IN

PIN	DESCRIPTION
12	GND POWER IN
13	GND POWER IN
14	GND POWER IN
15	ETH1-10G-1
16	ETH1-10G-2
17	ETH1-10G-3
18	ETH1-10G-4
19	ETH1-10G-5
20	ETH1-10G-6
21	ETH1-10G-7
22	ETH1-10G-8

GYRO STABILIZED PAN TILT

PANEL PIN LAYOUT (P1)

D38999/23YC35SN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	48vdc
2	48vdc
3	48vdc
4	GND
5	GND
6	GND
7	ETH1-2.5G-1
8	ETH1-2.5G-2
9	ETH1-2.5G-3
10	ETH1-2.5G-4
11	ETH1-2.5G-5
12	ETH1-2.5G-6
13	ETH1-2.5G-7
14	ETH1-2.5G-8
15	ETH2-2.5G-1
16	ETH2-2.5G-2
17	ETH2-2.5G-3
18	ETH2-2.5G-4
19	ETH2-2.5G-5
20	ETH2-2.5G-6
21	ETH2-2.5G-7
22	ETH2-2.5G-8

D38999/23YC35SN

Mil. Std Stainless
Steel connector

P1-P2-P3 (Payload)



GYRO STABILIZED PAN TILT

PANEL PIN LAYOUT (P2)

D38999/23YC35SN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	48vdc
2	48vdc
3	48vdc
4	GND
5	GND
6	GND
7	ETH1-2.5G-1
8	ETH1-2.5G-2
9	ETH1-2.5G-3
10	ETH1-2.5G-4
11	ETH1-2.5G-5
12	ETH1-2.5G-6
13	ETH1-2.5G-7
14	ETH1-2.5G-8
15	
16	
17	
18	
19	
20	
21	
22	

D38999/23YC35SN

Mil. Std Stainless
Steel connector

P1-P2-P3 (Payload)



GYRO STABILIZED PAN TILT

PANEL PIN LAYOUT (P3)

D38999/23YC35SN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	48vdc
2	48vdc
3	48vdc
4	GND
5	GND
6	GND
7	ETH1-10G-1
8	ETH1-10G-2
9	ETH1-10G-3
10	ETH1-10G-4
11	ETH1-10G-5
12	ETH1-10G-6
13	ETH1-10G-7
14	ETH1-10G-8
15	ETH2-100M-1
16	ETH2-100M-2
17	ETH2-100M-3
18	ETH2-100M-4
19	
20	
21	
22	

D38999/23YC35SN

Mil. Std Stainless
Steel connector

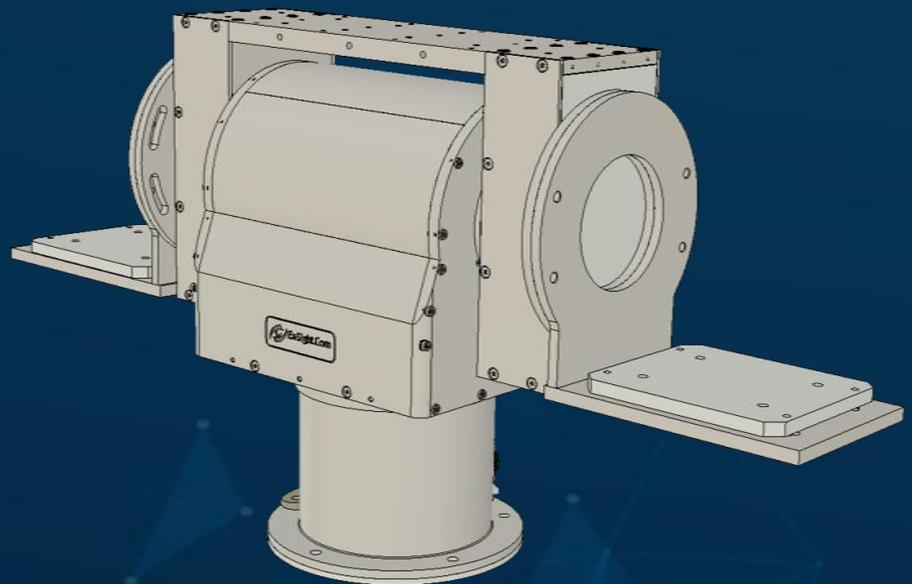
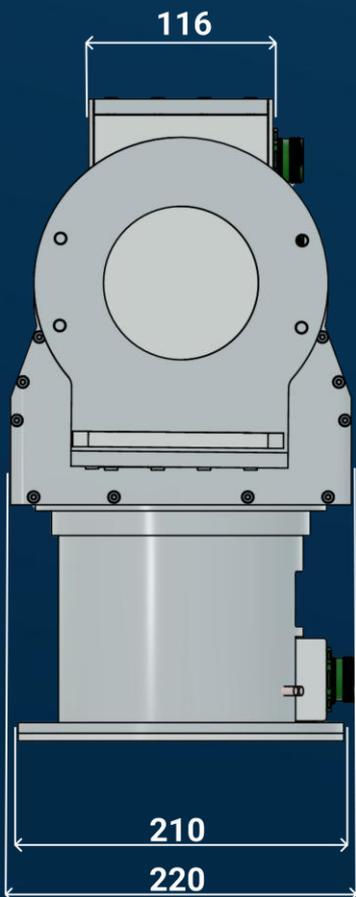
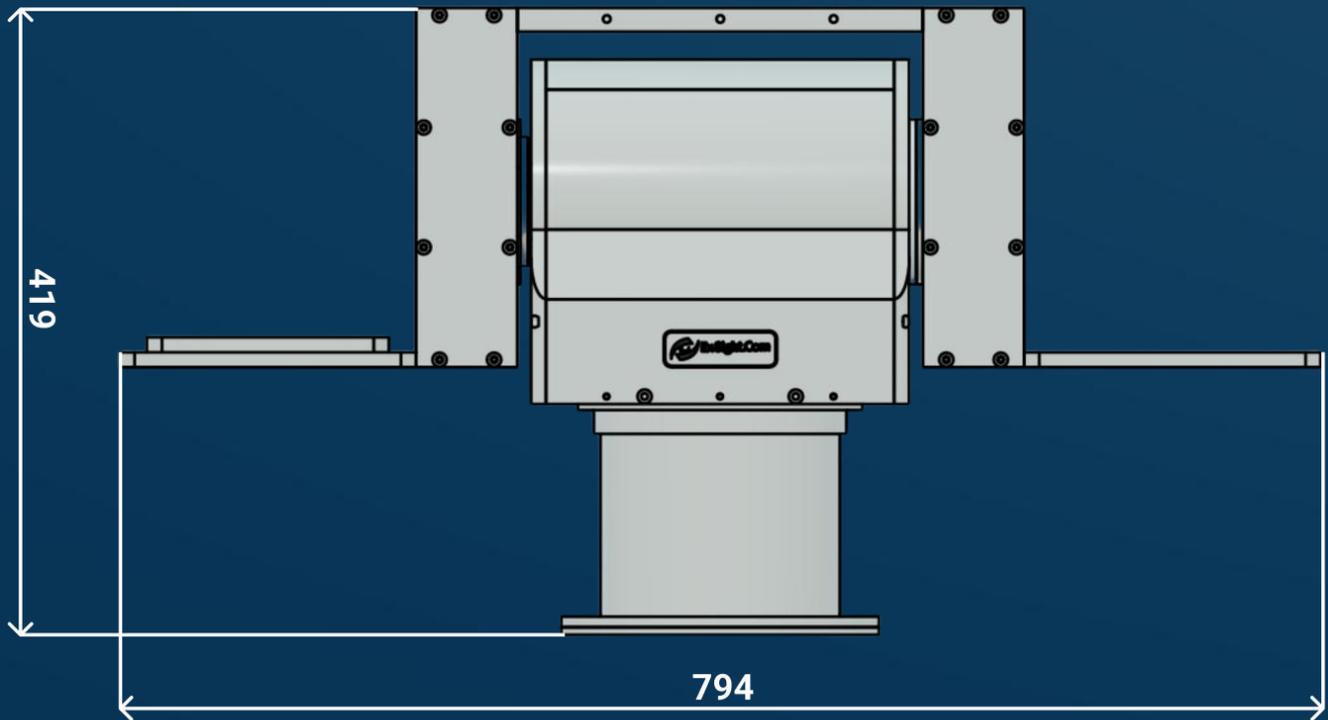
P1-P2-P3 (Payload)



OMEGA Ω

Ex-Sight.Com
ONE SHOT

DIMENSIONS without camera (LxWxH, mm) 794x210x419
WEIGHT 16 kg





ALMA

LIGHT RUGGED STABILIZED PAN TILT

ALMA was designed to allow high precision continuous 360 stabilized platform for Ex-Sight's FUSION, OZ and Sight's EO PODS due to high power precision motors, embedded braking system and optional INS system.

ALMA has light weight rugged aluminum structure that was specially selected for easy integration and support for mid size payloads.

SIGHT25-150H



OZ1280



LIGHT RUGGED STABILIZED PAN TILT

- High power precision motors
- Embedded braking system
- Optional True North Dual GPS INS*
- Low power consumption on idle
- Ethernet interface
- Light Weight Rugged Aluminum structure
- Internal Slip Rings

SPECIFICATION	
MAX SPEED	Up to 180°/sec
MAX PAYLOAD	15 kg
ACCURACY	0.01° Deg
MOTION RANGE AZIMUTH	Cont. 360° Deg
MOTION RANGE ELEVATION	±70 Deg
CONTROL INTERFACE	ETHERNET
POWER SUPPLY	24-48VDC
MAX CURRENT (LOADED)	10A@48VDC
ENVIRONMENTAL PROTECTION	IP66
TRUE NORTH INS GPS*	DUAL ANTENNA GNSS-AIDED INERTIAL NAVIGATION
DIMENSIONS LxWxH (mm)	218x163x296 mm (pan tilt only)
WEIGHT	8, 6 kg

* Optional Configuration

OWL PAN TILT

SMA INS GPS Connector

② D38999/23YC35SN

Mil. Std Stainless Steel connector



① D38999/23YC35PN

Mil. Std Stainless Steel connector

PANEL PIN LAYOUT (1)

D38999/23YC35PN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	+48VDC POWER IN
2	+48VDC POWER IN
3	+48VDC POWER IN
4	+48VDC POWER IN
5	+48VDC POWER IN
6	+48VDC POWER IN
7	+48VDC POWER IN
8	GND POWER IN
9	GND POWER IN
10	GND POWER IN
11	GND POWER IN

PIN	DESCRIPTION
12	GND POWER IN
13	GND POWER IN
14	GND POWER IN
15	ETHERNET (1) TX+
16	ETHERNET (2) TX-
17	ETHERNET (3) RX+
18	NC
19	NC
20	ETHERNET2 (6) RX-
21	NC
22	NC

PANEL PIN LAYOUT (2)

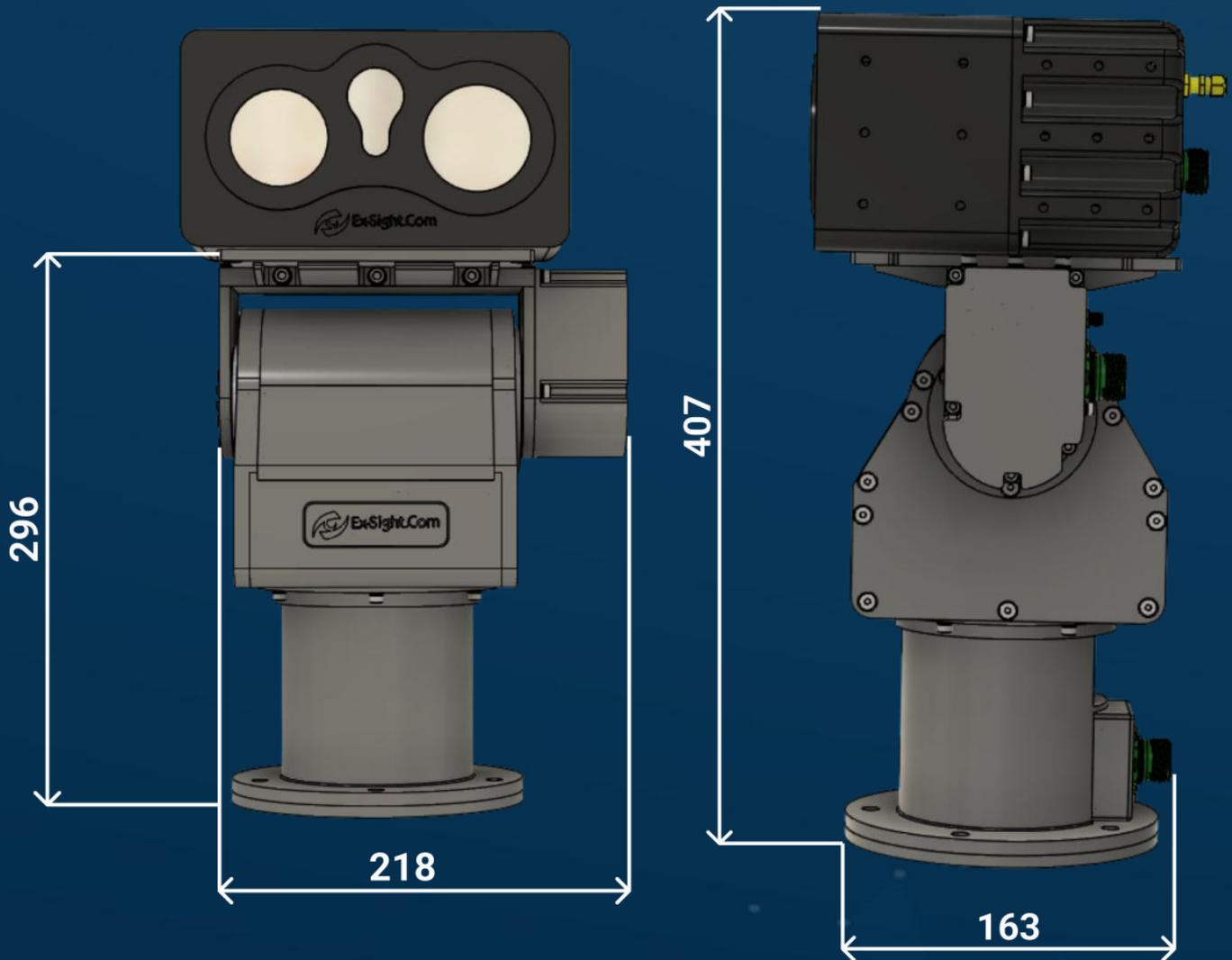
D38999/23YC35SN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	NC
2	NC
3	INPUT POWER12 VDC
4	GND INPUT POWER
5	INPUT POWER12 VDC
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNETE2 (1) TX+
10	ETHERNETE2 (2) TX-
11	ETHERNETE2 (3) RX+

PIN	DESCRIPTION
12	ETHERNETE2 (6) RX-
13	NC
14	NC
15	NC
16	NC
17	NC
18	NC
19	NC
20	NC
21	NC
22	NC

ALMA With OZ

DIMENSIONS without camera (LxWxH, mm) 218x163x296
WEIGHT 8,6 kg





FUSION SERIES

RUGGED DUAL DIGITAL VISION SYSTEM

			
	OZ1280	FUSION1280	FUSION640
DAY SENSOR	GLOBAL SHUTTER X36 1600x1300 60 FPS H.265/H264 COMPRESSION	FULL HD IMX327 1920x1080/2MP 30 FPS H.265/H.264/MJPEG	FULL HD IMX327 1920x1080/2MP 30FPS H.265/H.264/MJPEG
FOV DAY SENSOR	Global Shutter 60FPS 1600x1300 X36 Zoom 4.5mm-162mm FOV (H) 59.0° to 2.4°	LENS 4mm DC DRIVE M12 (fixed zoom) FOV (H) 69.4°	LENS 4mm DC DRIVE M12 FOV (H) 69.4°
THERMAL SENSOR	UNCOOLED LWIR 12 μm 1280x1024 LENS 13mm 50 FPS FOV 62°	UNCOOLED LWIR 12 μm 1280x1024 LENS 13mm 50 FPS FOV 62°	UNCOOLED LWIR 12 μm 640x512 LENS 5.8mm 50 FPS FOV 67°
LRF	3.5 KM NATO Target	-	-
LWIR DRI			
DETECTION (m) NATO/HUMAN target	830/375	830/375	370/167
RECOGNITION (m) NATO/HUMAN target	415/187	415/187	185/83
IDENTIFICATION (m) NATO/HUMAN target	311/140	311/140	139/62
POWER	9-36VDC, NOMINAL 5.6W (MAX on LOAD 12W)		
DIMENSIONS (mm)	198x170x111	149x147x96	147x118x96
CONNECTOR	Stainless Steel Hermetic Connector D38999/23YC35PN		
WEIGHT (Kg)	4.7 kg	3 kg	2.3 kg
IP RATE	IP67 Nitrogen Purged		

PART NUMBERING

OZ		OZ-1280-36GS-LRF	
OZ [RES]-[ZOOM-DS]-[LRF]			
[RES]	LWIR RESOLUTION	640 (LWIR 640x480, 5.8mm)	1280 (LWIR 1280x1024, 13mm)
[ZOOM-DS]	ZOOM DAY SENSOR	36GS - x36 Optical Zoom, Global Shutter	
[LRF]	LRF	BLANK - No LRF	LRF1 - 3,5 Km NATO target LRF

FUSION-F		FUSION-F-640-70-H	
FUSION-F [RES]-[FOV]-[POS]			
[RES]	LWIR RESOLUTION	640 (LWIR 640x512, 5,8mm)	1280 (LWIR 1280x1024, 13mm)
[FOV]	FIELD OF VIEW	70 - 70° LWIR (69.4° x 57.3°) 90° DAY (84.6°x45.9°)	S - 70° LWIR (69.4° x 57.3°), 70° DAY (70.7°x43.5°) SYNC
[POS]	CAMERA POSITION	H - HORIZONTAL	V - VERTICAL

OZ1280

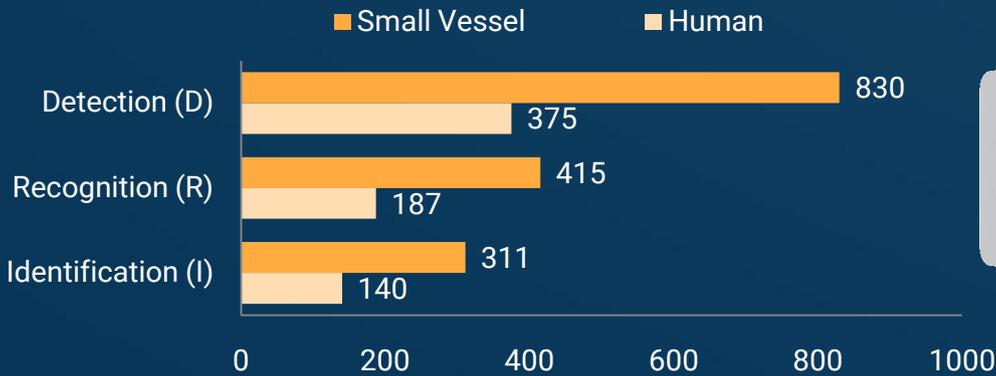


OZ1280

DUAL HD VISION SYSTEM WITH LRF

- GLOBAL SHUTTER DAY 1600x1300 x36 Zoom
- LWIR 1280x1024 70° FOV (13mm)
- LRF up to 3.5KM NATO Target
- ETHERNET INTERFACE

OZ DRI LWIR (m)

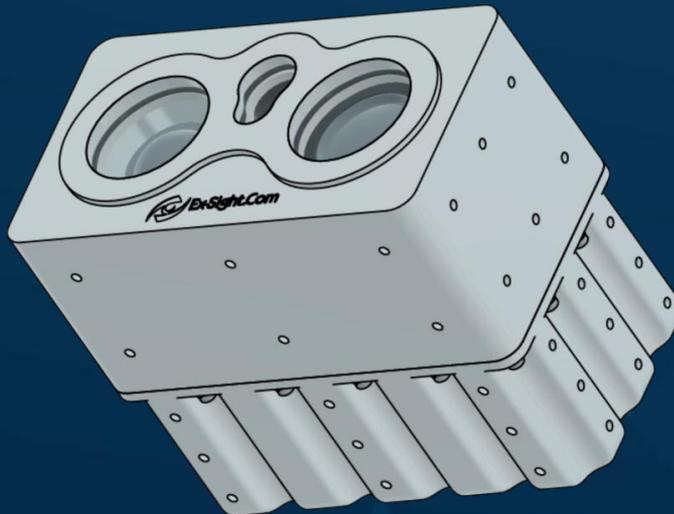
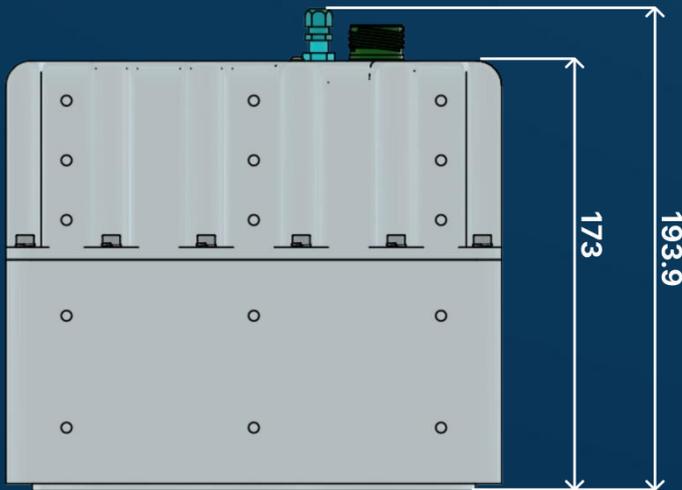


- Optional Automatic target recognition, automatically track and detect static and dynamic targets
- Ethernet connectivity, modular architecture, single cable connection
- 1600x1300@60fps Global Shutter x36 zoom Day Sensor , 59.0° ~ 2.4° FOV, Lens f=4.5mm~162mm , Sapphire window
- Uncooled LWIR 1280x1024 sensor, 67° (69.4° x57.3°) FOV, Lens 13mm, Germanium window
- 3,500m NATO target Laser Range Finder
- Sensor daisy chain via Ethernet to save cabling
- Ethernet Interface, ONVIF support, embedded switch
- 12-40 VDC Power Stabilizer
- IP-67 Hermetic sealed chassis, Nitrogen purged, MIL.STD Hermetic connectors
- Operating temp -40°C to +80°C
- **Dimensions** (LxWxH, mm) 198x194x111
- **Weight** 4.5 kg

OZ1280

DIMENSIONS (LxWxH, mm) 198x194x111

WEIGHT 4.5 kg



OZ1280

CONNECTION INTERFACE

②

Nitrogen Valve

①

D38999/23YC35PN

Mil. Std Stainless Steel connector



PANEL PIN LAYOUT

D38999/23YC35PN Stainless Steel Hermetic Connector

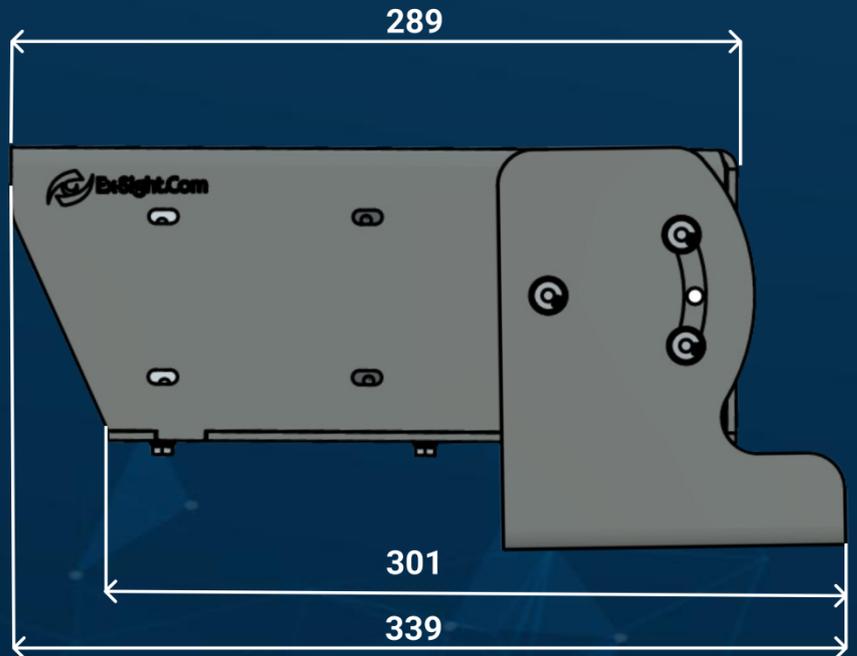
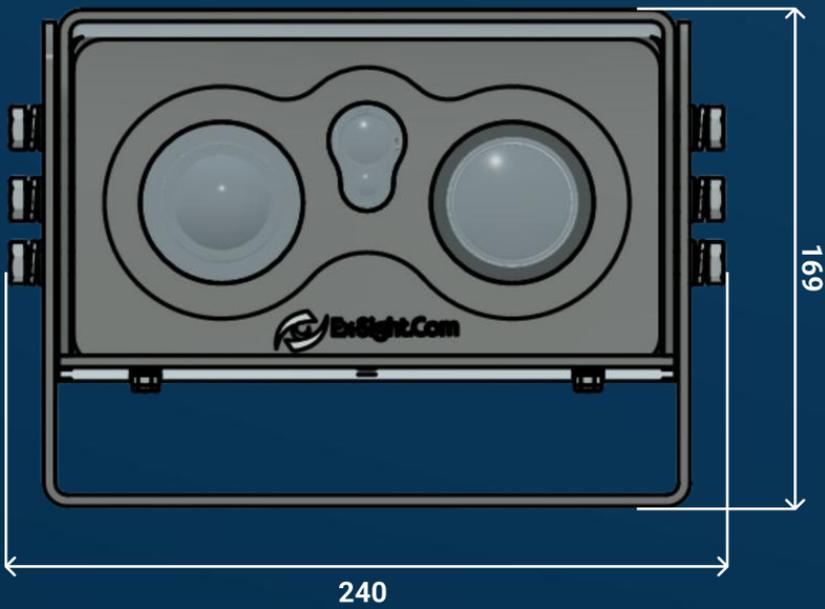
PIN	DESCRIPTION
1	NC
2	NC
3	(+9 TO +36VDC) INPUT POWER
4	GND INPUT POWER
5	(+9 TO +36VDC) INPUT POWER
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNET2 (1) TX+
10	ETHERNET2 (2) TX-
11	ETHERNET2 (3) RX+

PIN	DESCRIPTION
12	ETHERNET2 (6) RX-
13	NC
14	NC
15	ETHERNET1 (1) TX+
16	ETHERNET1 (2) TX-
17	ETHERNET1 (3) RX+
18	ETHERNET1 (6) RX-
19	DAY VIDEO CVBS SIGNAL
20	DAY VIDEO CVBS GND
21	THERMAL VIDEO CVBS SIGNAL
22	THERMAL VIDEO CVBS GND

OZ1280

BRACKET DIMENSIONS

BLACK STEEL BRACKET



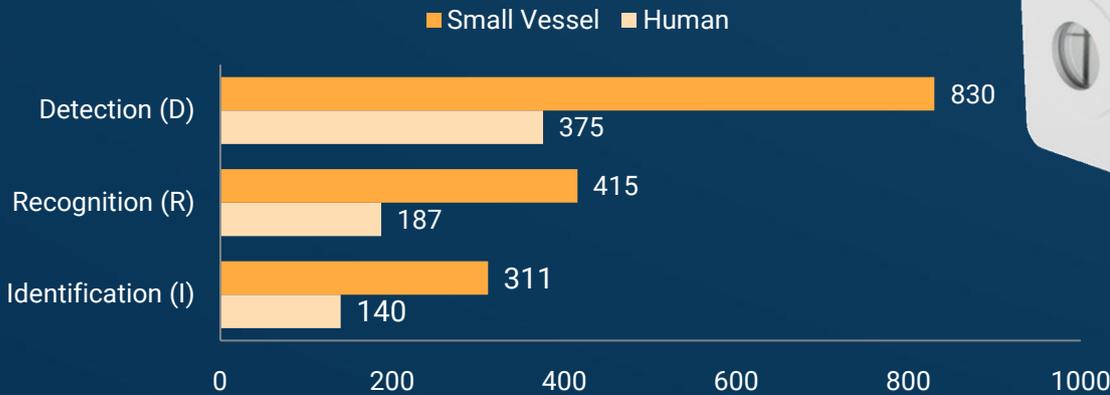


FUSIONF1280

RUGGED HD VISION SYSTEM

- FULL-HD LOW LIGHT DAY 1920x1080 4MM
- LWIR 1280x1024 UNCOOLED SENSORS LENS 13MM
- ETHERNET INTERFACE
- IP-67 NITROGEN PURGED CHASSIS

FUSIONF-1280 LWIR DRI (m)

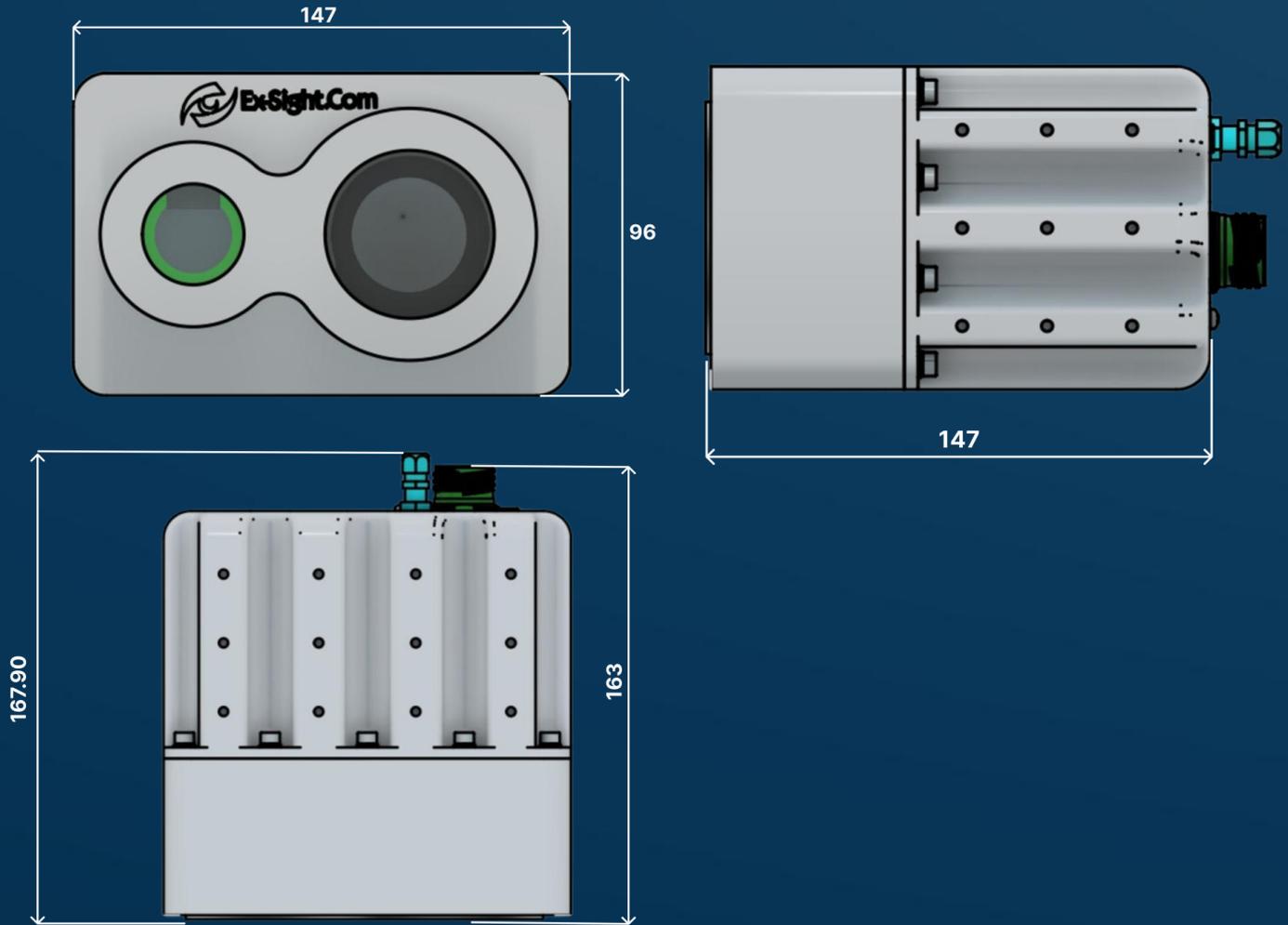


- Day & Night target recognition, detect static and dynamic targets
- LWIR 1280x1024, 12 μm uncooled sensor, LENS 13mm, FOV 61° x50° Germanium window
- Full-HD low light 1920x1080 4mm FOV (H) 84.6° (V) 45.9° (D) 100.0° Sapphire window
- Sensor daisy chain via Ethernet to save cabling
- 9-36VDC Power supply unit
- Easy Sensor-To-Screen, Sensor-To-PC Installation
- Optional SD card recording
- IP-67 Hermetic sealed chassis, Nitrogen purged, MIL.STD Hermetic connectors
- Power consumption (@24V):140mA (2300mA MAX)
- Operating temp -40°C to +80°C
- **Dimensions (LxWxH,mm)**
147x149x96mm
- **Weight** 3 kg

FUSIONF1280

DIMENSIONS (LxWxH, mm) 147x149x96

WEIGHT 3 kg



SENSOR POSITIONING



HORIZONTAL



VERTICAL

FUSIONF1280

CONNECTION INTERFACE

① D38999/23YC35PN

Mil. Std Stainless Steel connector

② Nitrogen Valve



PANEL PIN LAYOUT

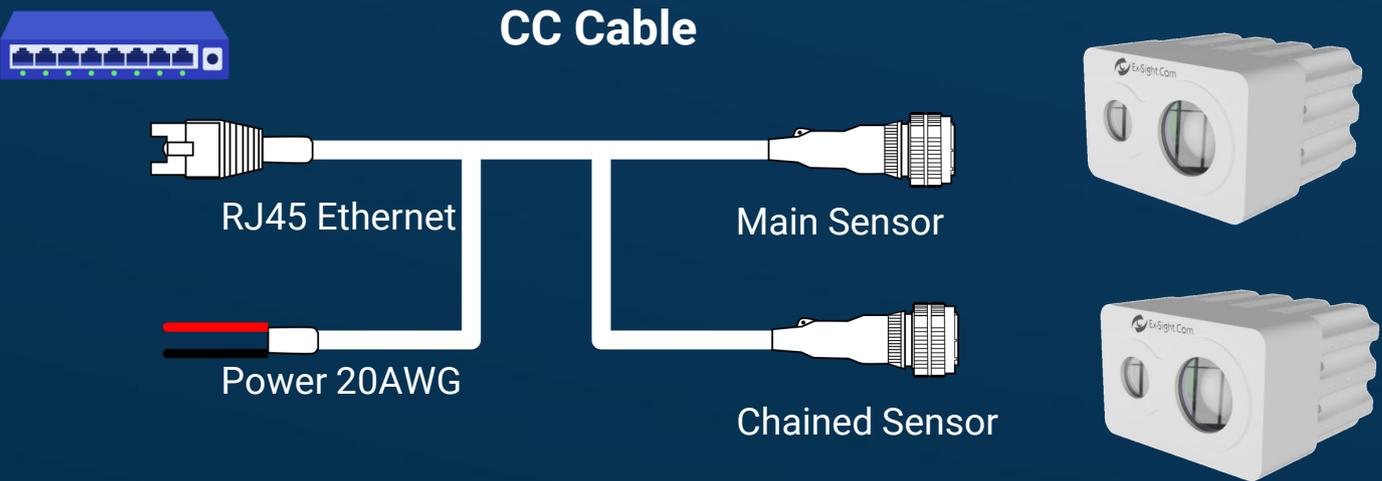
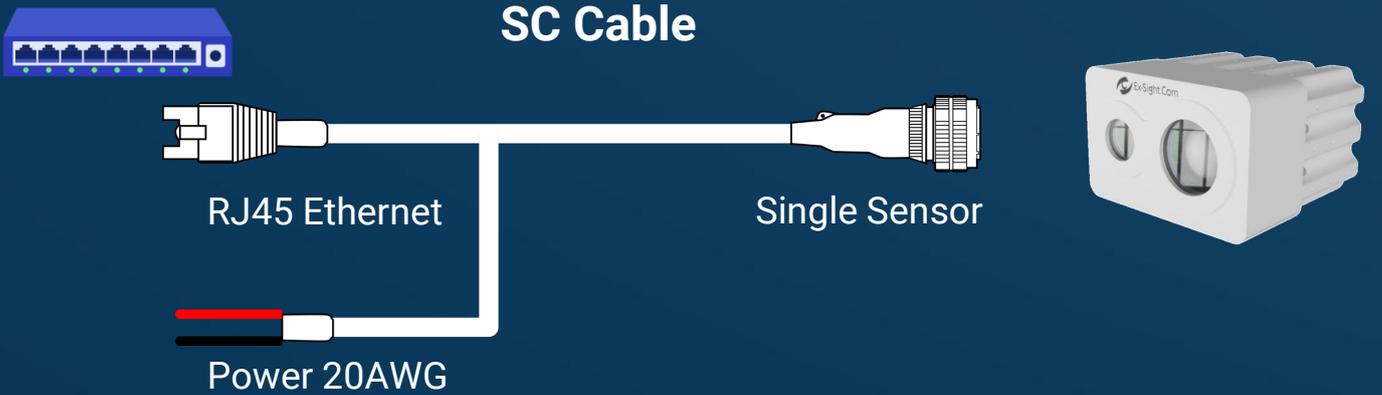
D38999/23YC35PN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	NC
2	NC
3	(+9 TO +36VDC) INPUT POWER
4	GND INPUT POWER
5	(+9 TO +36VDC) INPUT POWER
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNET2 (1) TX+
10	ETHERNET2 (2) TX-
11	ETHERNET2 (3) RX+

PIN	DESCRIPTION
12	ETHERNET2 (6) RX-
13	NC
14	NC
15	ETHERNET1 (1) TX+
16	ETHERNET1 (2) TX-
17	ETHERNET1 (3) RX+
18	ETHERNET1 (6) RX-
19	DAY VIDEO CVBS SIGNAL
20	DAY VIDEO CVBS GND
21	THERMAL VIDEO CVBS SIGNAL
22	THERMAL VIDEO CVBS GND

FUSIONF1280

CABLE PART NUMBERING



FUSION F CABEL PART NUMBERING

FUSION-F-CABLE [CT]-[LEN1]-[LEN2]

[CT]	CABLE TYPE	SC - SINGLE CABLE0	CC - CHAINED CABLE
[LEN1]	CABLE LENGTH	In Meters	
[LEN2]	CHAINED CABLE LENGTH	In Meters (CC cable only)	

FUSIONF1280

CABLE PIN LAYOUT D38999/26KC35SN

Stainless Steel Hermetic Connector

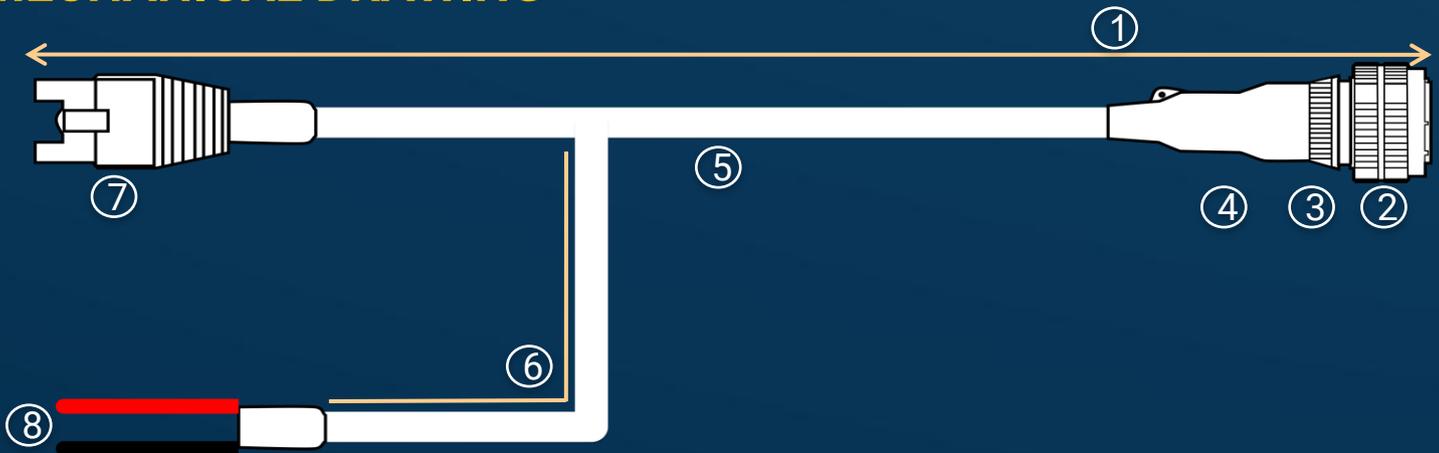
FUSION-F-CABLE-SC-[LEN1]

FUSION-F-CABLE is RQT1601875 Cable (6*20AWG + SPEC 55) with specified length.

The cable includes connector D38999/26KC35SN Mil. Std Stainless Steel that connects to the connector D38999/23YC35PN on the FUSION-F.

On the other side of the cable there is a connection to Power 9-36V (open black wire + open red wire) and RJ45 Giga Ethernet connection.

MECHANICAL DRAWING



CABLE PART NUMBERING INDEX

#	P/N	DESCRIPTION
1	[LEN1]	Total Cable length (meters)
2	D38999/26KD35SN	Mil. Std Stainless Steel connector (200°C, firewall capability, 500 hour salt spray resistance)
3	RQND-40S2-S-1307	Stainless Steel Backshell
4	202K132-25-0/202K132-25-0	Boot
5	Cable RQT1601875	6*20AWG + SPEC55 (RAYCHEM DR-25)
6	Cable RQT1601875	6*20AWG + SPEC55 (1m) (RAYCHEM DR-25)
7	RJ45 Ethernet	Main Ethernet connector
8	Power Wires	20AWG For 9V-36V input

FUSIONF1280

CABLE PIN LAYOUT D38999/26KC35SN

Stainless Steel Hermetic Connector

FUSION-F-CABLE-CC-[LEN1]-[LEN2]

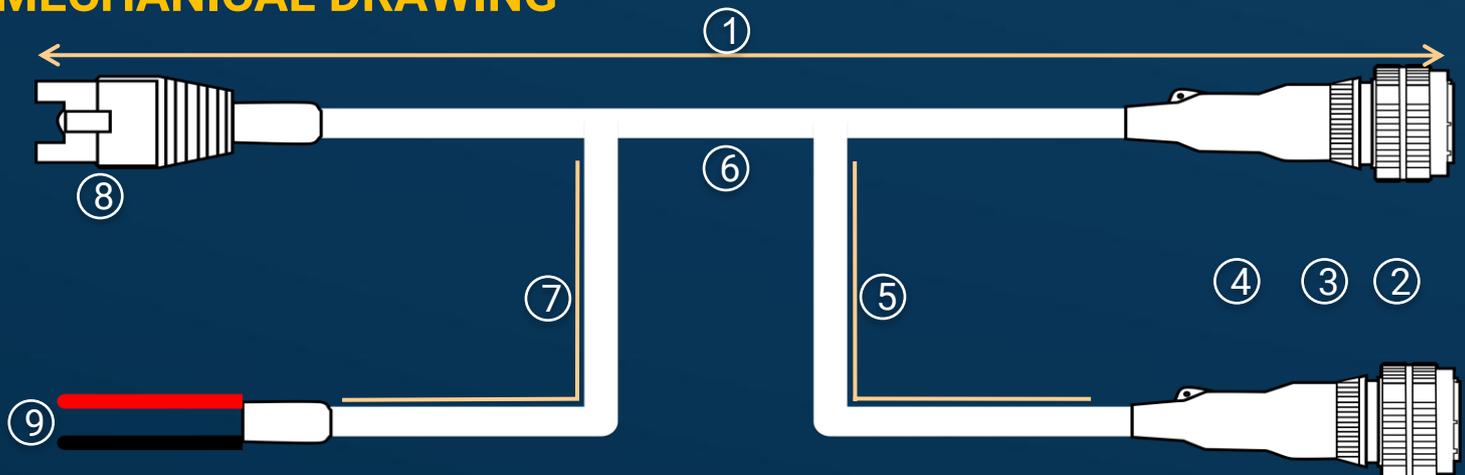
FUSION-F-CABLE is RQT1601875 Cable (6*20AWG + SPEC 55) with specified length and Additional Chained sensor connector.

The cable includes two connectors D38999/26KC35SN Mil. Std Stainless Steel that connects to the connectors

D38999/23YC35PN on the two FUSION-F.

On the other side of the cable there is a connection to Power 9-36V (open black wire + open red wire) and RJ45 Giga Ethernet connection.

MECHANICAL DRAWING



CABLE PART NUMBERING INDEX

#	P/N	DESCRIPTION
1	[LEN1]	Total Cable length (meters)
2	D38999/26KD35SN	Mil. Std Stainless Steel connector (200°C, firewall capability, 500 hour salt spray resistance)
3	RQND-40S2-S-1307	Stainless Steel Backshell
4	202K132-25-0/202K132-25-0	Boot
5	[LEN2]	Chained Cable Length (meter) from split
6	Cable RQT1601875	6*20AWG + SPEC55 (RAYCHEM DR-25)
7	Cable RQT1601875	6*20AWG + SPEC55 (1m) (RAYCHEM DR-25)
8	RJ45 Ethernet	Main Ethernet connector
9	Power Wires	20AWG For 9V-36V input

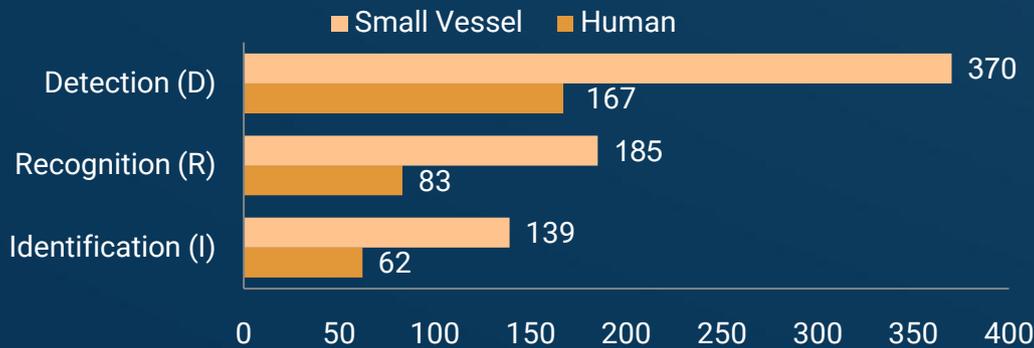


FUSIONF640

UNCOOLED LWIR Vision System

- FULL-HD LOW LIGHT DAY 1920x1080 4MM
- LWIR 640x512 5,8MM
- ETHERNET & ANALOG INTERFACE
- IP-67 NITROGEN PURGED CHASSIS

FUSIONF-640 LWIR DRI (m)

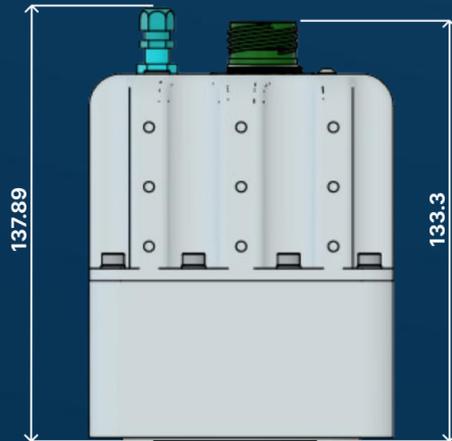


- Day & Night target recognition, detect static and dynamic targets
- LWIR 640x512 uncooled sensors LENS (640) 5.8mm, FOV 67° (69.4°x57.3°), with Germanium window
- Full-HD low light 1920x1080 sensors Lens 4mm , FOV(H) 84.6°(V)45.9°(D) 100.0°, Sapphire window
- Sensor daisy chain via Ethernet to save cabling
- 9-36VDC Power supply unit
- Easy Sensor-To-Screen, Sensor-To-PC Installation
- Optional SD card recording
- IP-67 Hermetic sealed chassis, Nitrogen purged, MIL.STD Hermetic connectors
- Power consumption (24V) : 140mA (2300mA MAX Constant)
- Operating temp -40°C to +80°C
- **Dimensions (LxWxH,mm)**
147x119x96mm
- **Weight** 2,3 kg

FUSIONF640

DIMENSIONS (LxWxH, mm) 147x119x96

WEIGHT 2,3 kg



SENSOR POSITIONING



HORIZONTAL



VERTICAL

FUSIONF640

CONNECTION INTERFACE

① D38999/23YC35PN

Mil. Std Stainless Steel connector

② MS51377-2 MS51607-1 MS20813-1

Nitrogen Valve Core
Nitrogen MS Valves
Nitrogen Fitting



PANEL PIN LAYOUT

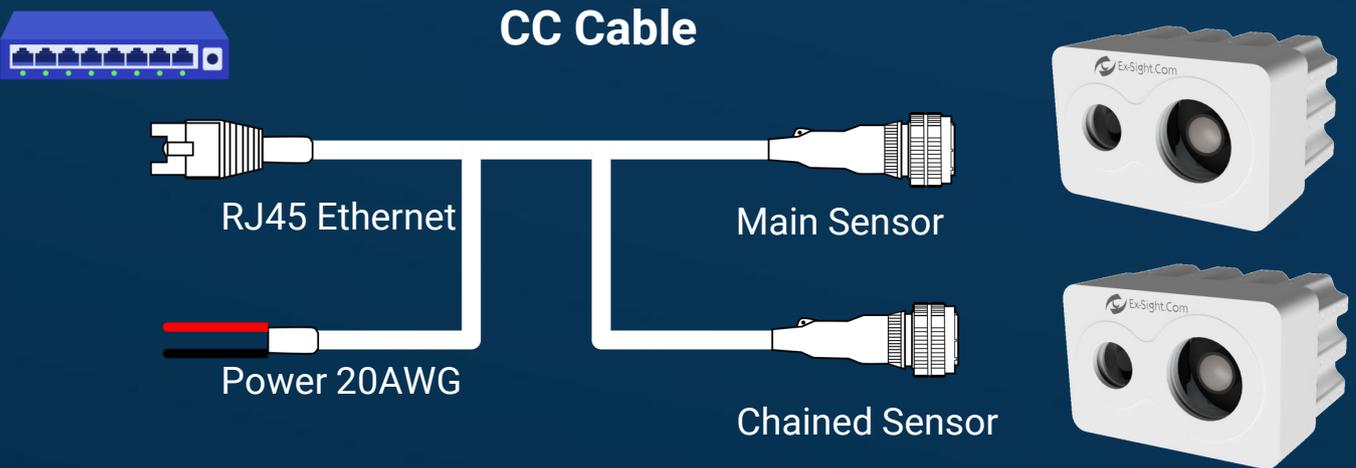
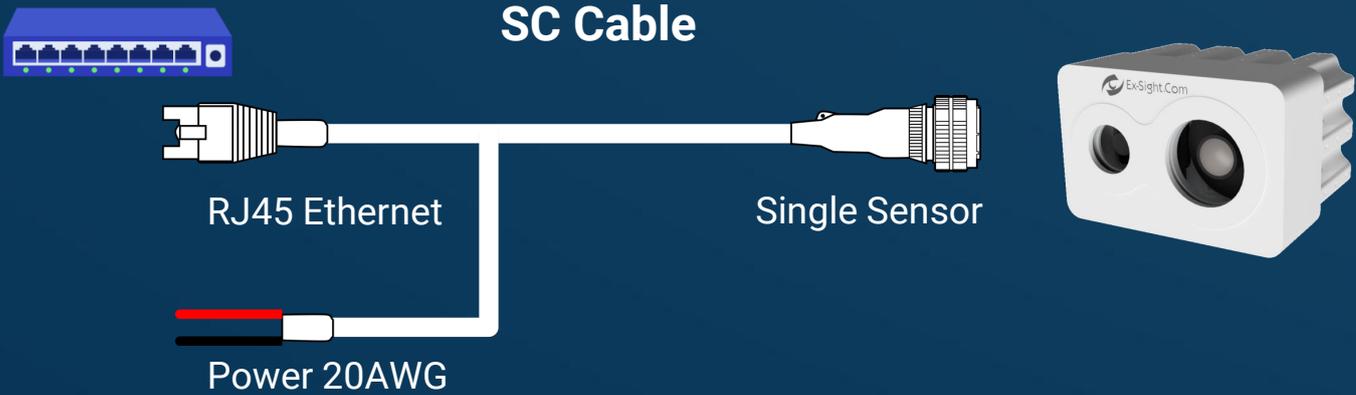
D38999/23YC35PN Stainless Steel Hermetic Connector

PIN	DESCRIPTION
1	NC
2	NC
3	(+9 TO +36VDC) INPUT POWER
4	GND INPUT POWER
5	(+9 TO +36VDC) INPUT POWER
6	GND INPUT POWER
7	NC
8	NC
9	ETHERNET2 (1) TX+
10	ETHERNET2 (2) TX-
11	ETHERNET2 (3) RX+

PIN	DESCRIPTION
12	ETHERNET2 (6) RX-
13	NC
14	NC
15	ETHERNET1 (1) TX+
16	ETHERNET1 (2) TX-
17	ETHERNET1 (3) RX+
18	ETHERNET1 (6) RX-
19	DAY VIDEO CVBS SIGNAL
20	DAY VIDEO CVBS GND
21	THERMAL VIDEO CVBS SIGNAL
22	THERMAL VIDEO CVBS GND

FUSIONF640

CABLE PART NUMBERING



FUSION F CABEL PART NUMBERING

FUSION-F-CABLE [CT]-[LEN1]-[LEN2]

[CT]	CABLE TYPE	SC - SINGLE CABLE0	CC - CHAINED CABLE
[LEN1]	CABLE LENGTH	In Meters	
[LEN2]	CHAINED CABLE LENGTH	In Meters (CC cable only)	

FUSIONF640

CABLE PIN LAYOUT D38999/26KC35SN

Stainless Steel Hermetic Connector

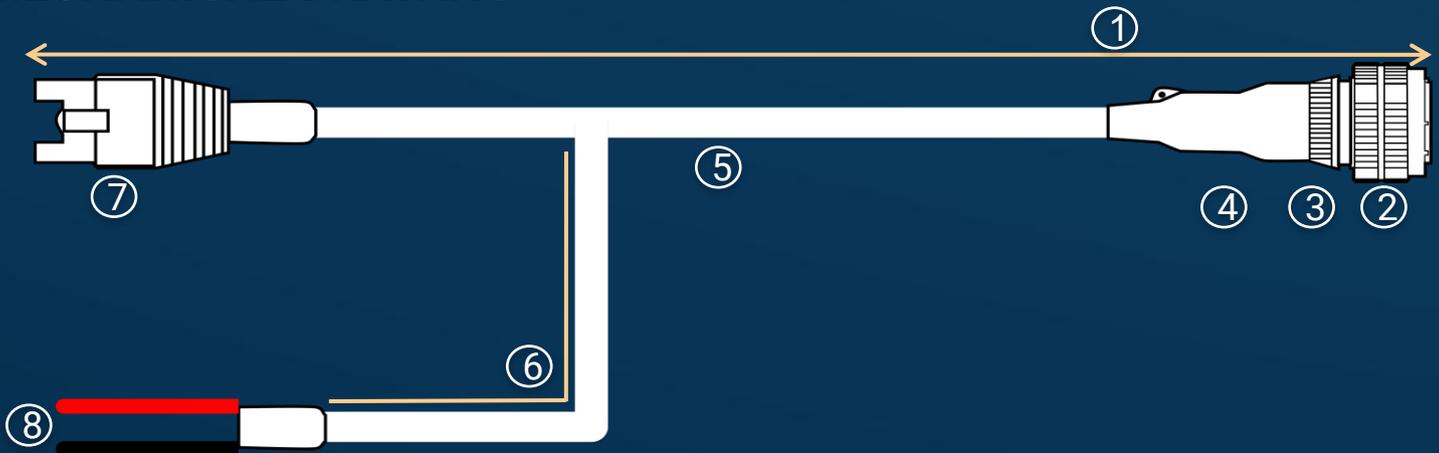
FUSION-F-CABLE-SC-[LEN1]

FUSION-F-CABLE is RQT1601875 Cable (6*20AWG + SPEC 55) with specified length.

The cable includes connector D38999/26KC35SN Mil. Std Stainless Steel that connects to the connector D38999/23YC35PN on the FUSION-F.

On the other side of the cable there is a connection to Power 9-36V (open black wire + open red wire) and RJ45 Giga Ethernet connection

MECHANICAL DRAWING



CABLE PART NUMBERING INDEX

#	P/N	DESCRIPTION
1	[LEN1]	Total Cable length (meters)
2	D38999/26KD35SN	Mil. Std Stainless Steel connector (200°C, firewall capability, 500 hour salt spray resistance)
3	RQND-40S2-S-1307	Stainless Steel Backshell
4	202K132-25-0/202K132-25-0	Boot
5	Cable RQT1601875	6*20AWG + SPEC55 (RAYCHEM DR-25)
6	Cable RQT1601875	6*20AWG + SPEC55 (1m) (RAYCHEM DR-25)
7	RJ45 Ethernet	Main Ethernet connector
8	Power Wires	20AWG For 9V-36V input

FUSIONF640

CABLE PIN LAYOUT D38999/26KC35SN

Stainless Steel Hermetic Connector

FUSION-F-CABLE-SC-[LEN1]-[LEN2]

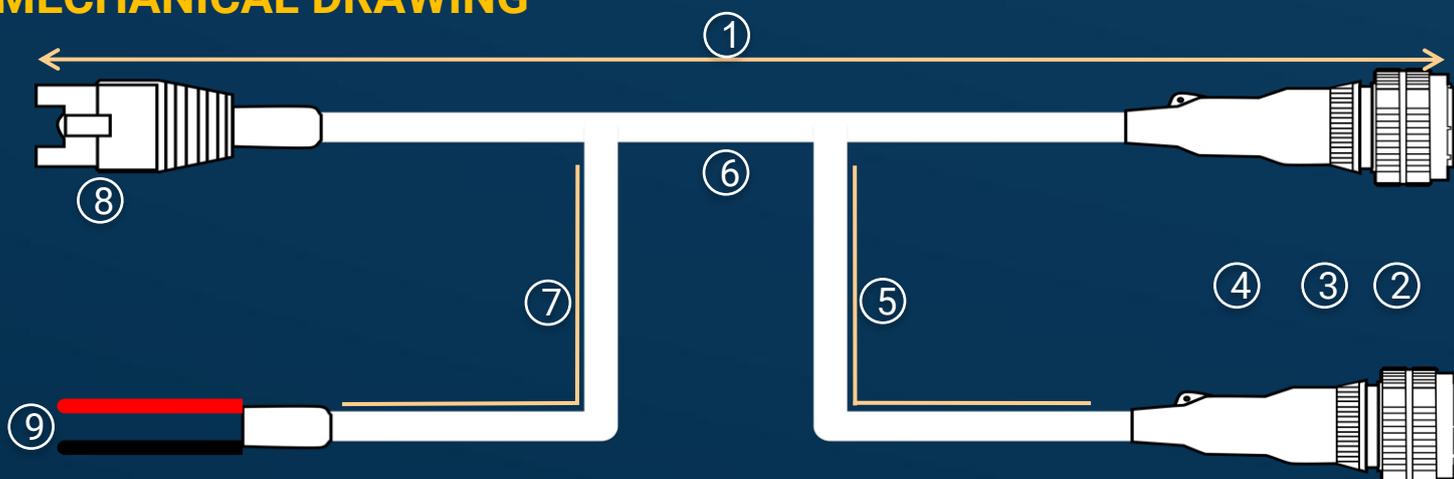
FUSION-F-CABLE is RQT1601875 Cable (6*20AWG + SPEC 55) with specified length and Additional Chained sensor connector.

The cable includes two connectors D38999/26KC35SN Mil. Std Stainless Steel that connects to the connectors

D38999/23YC35PN on the two FUSION-F.

On the other side of the cable there is a connection to Power 9-36V (open black wire + open red wire) and RJ45 Giga Ethernet connection.

MECHANICAL DRAWING



CABLE PART NUMBERING INDEX

#	P/N	DESCRIPTION
1	[LEN1]	Total Cable length (meters)
2	D38999/26KD35SN	Mil. Std Stainless Steel connector (200°C, firewall capability, 500 hour salt spray resistance)
3	RQND-40S2-S-1307	Stainless Steel Backshell
4	202K132-25-0/202K132-25-0	Boot
5	[LEN2]	Chained Cable Length (meter) from split
6	Cable RQT1601875	6*20AWG + SPEC55 (RAYCHEM DR-25)
7	Cable RQT1601875	6*20AWG + SPEC55 (1m) (RAYCHEM DR-25)
8	RJ45 Ethernet	Main Ethernet connector
9	Power Wires	20AWG For 9V-36V input

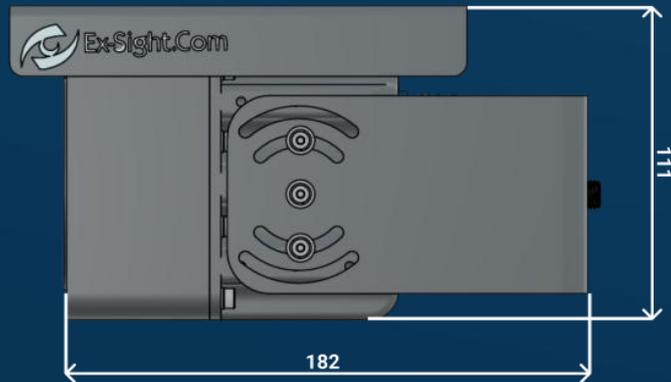
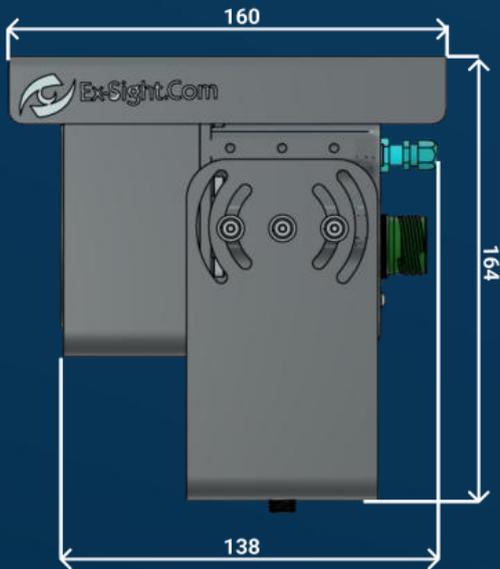
FUSION F BRACKET PART NUMBERING

FUSION-F-BRKT [BT]

[BT]	BRACKET TYPE	01 MATTE BLACK RAL 9005 ALUMINUM BRACKET (one line assembly)	
		02 MATTE BLACK RAL 9005 ALUMINUM BRACKET (one or two lines assembly)	02S MATTE BLACK RAL 9005 ALUMINUM BRACKET (one or two lines assembly)

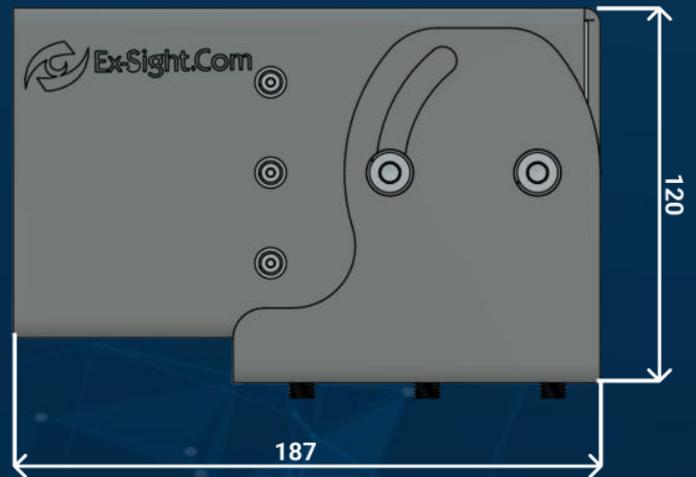
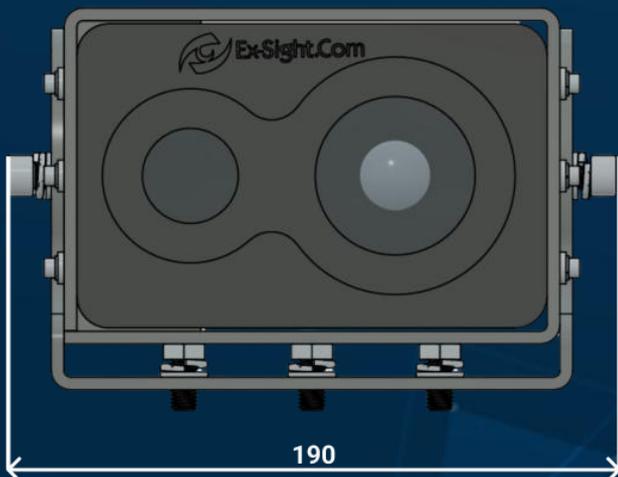
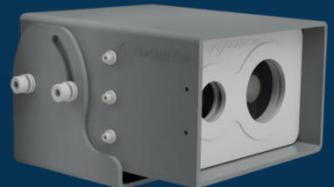
DIMENSIONS

FUSION-F-BRKT-01



DIMENSIONS

FUSION-F-BRKT-02



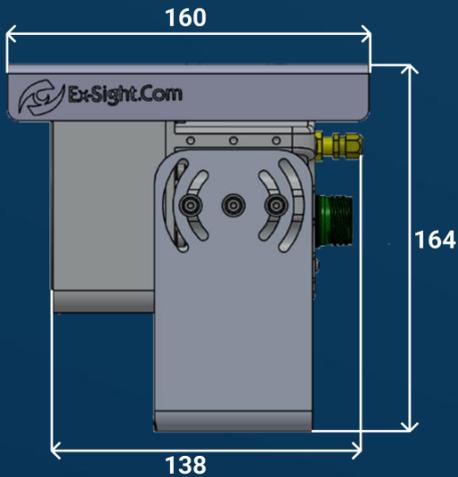
FUSIONF640

INSTALLATION

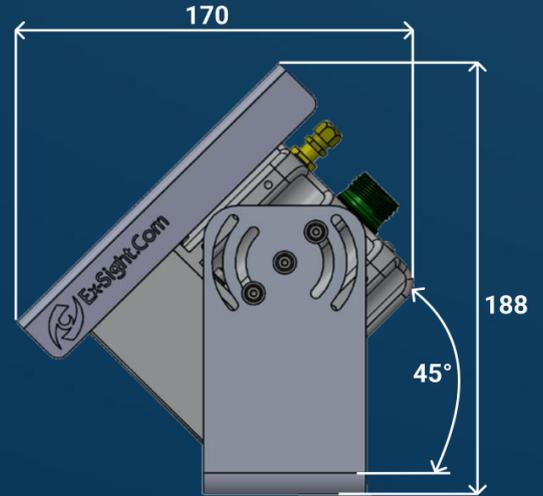
POSSIBLE INSTALLATION ANGLES

FUSION-F-BRKT-01

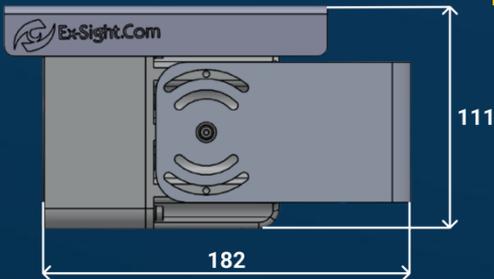
0°



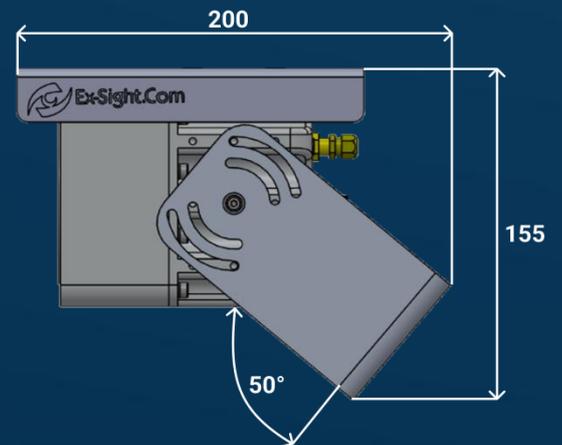
45°



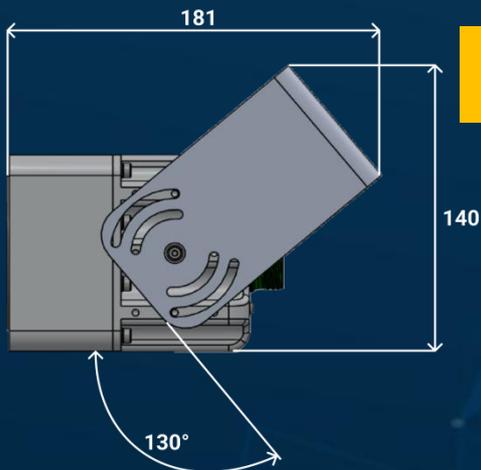
50°



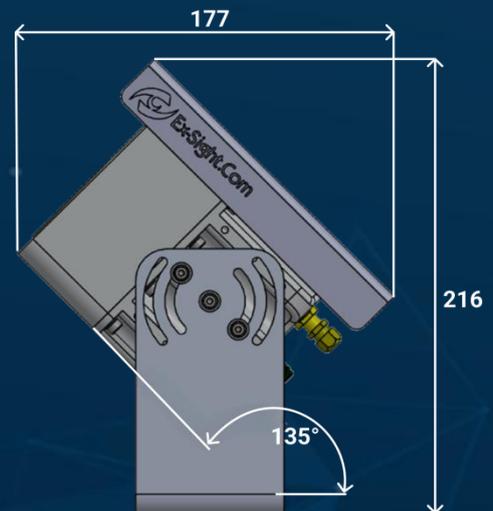
90°



130°



135°

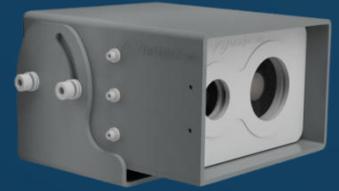


FUSIONF640

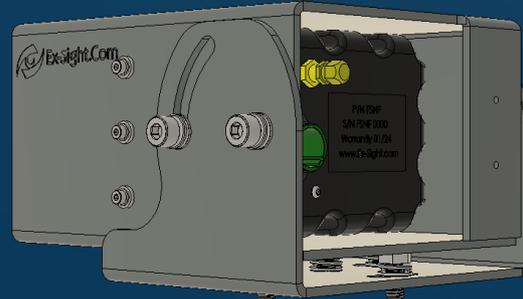
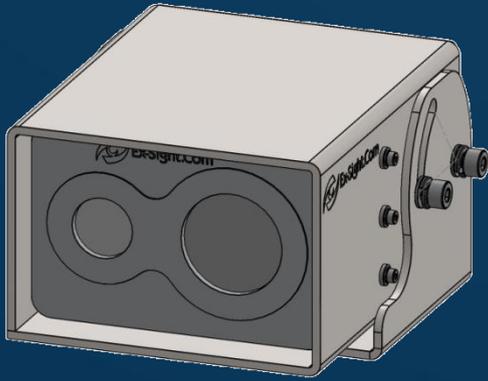
INSTALLATION

POSSIBLE INSTALLATION ANGLES

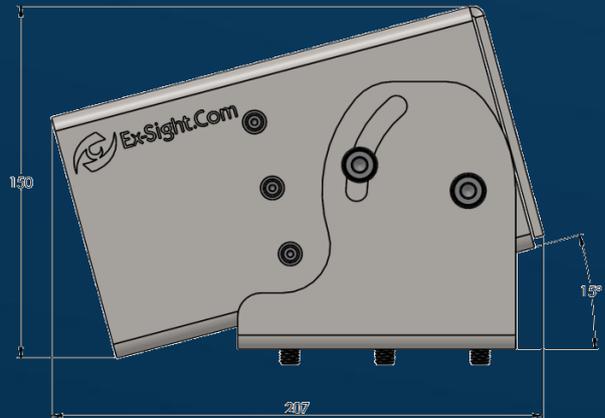
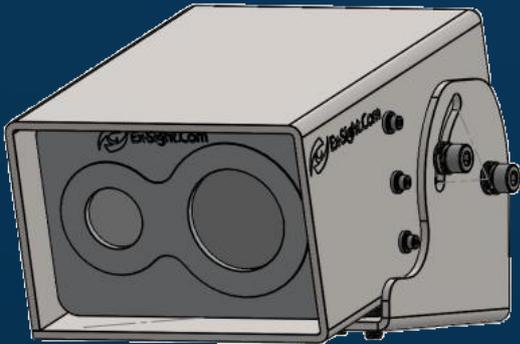
FUSION-F-BRKT-02



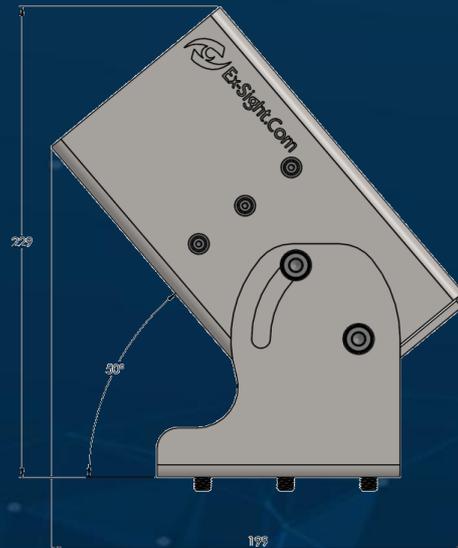
0°



-15°



50°



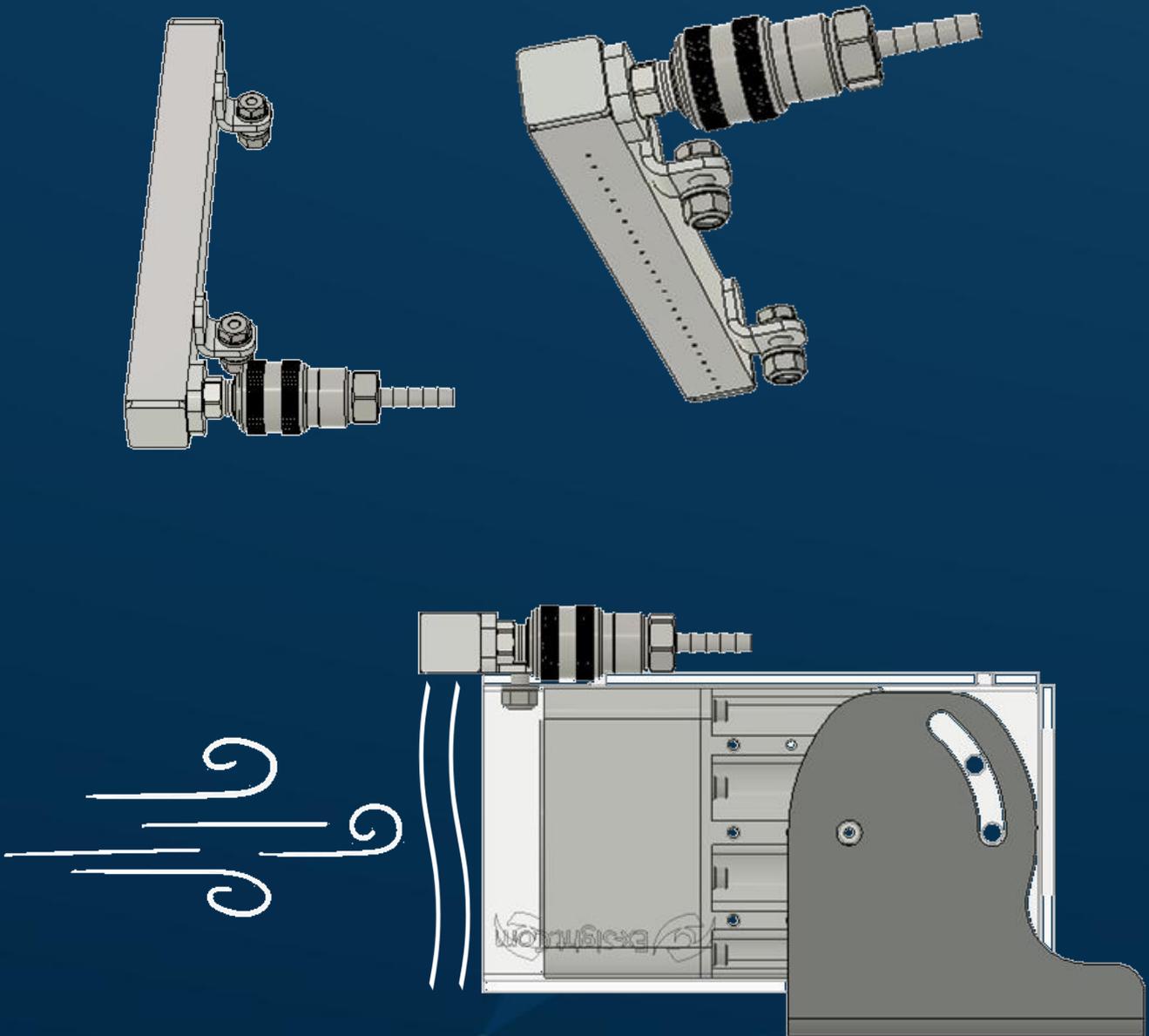
FUSIONF640

AIR-WALL

HOUSING

Black hard anodized aluminum, M6 stainless steel N316 screws, Industrial quick-disconnect hose coupling for Air Socket 0.25 size

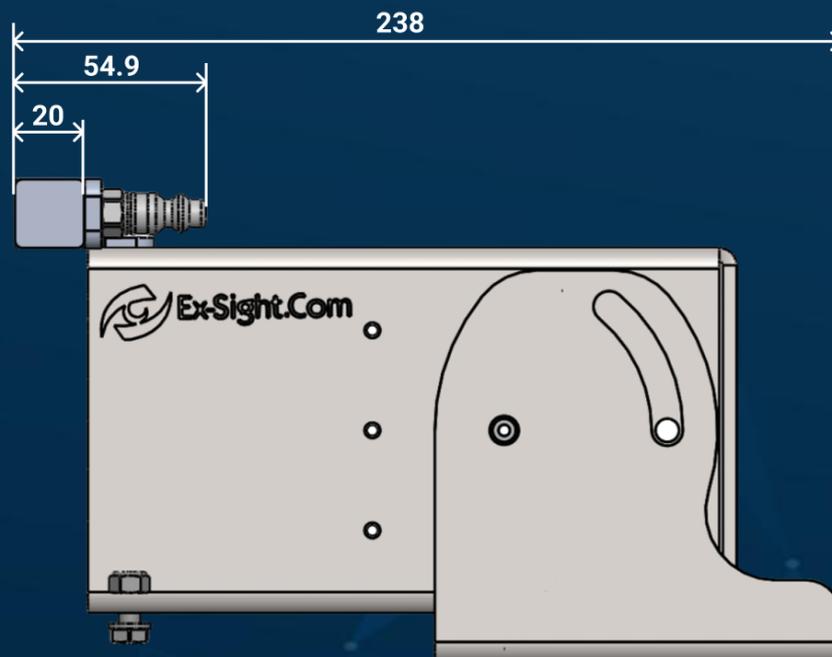
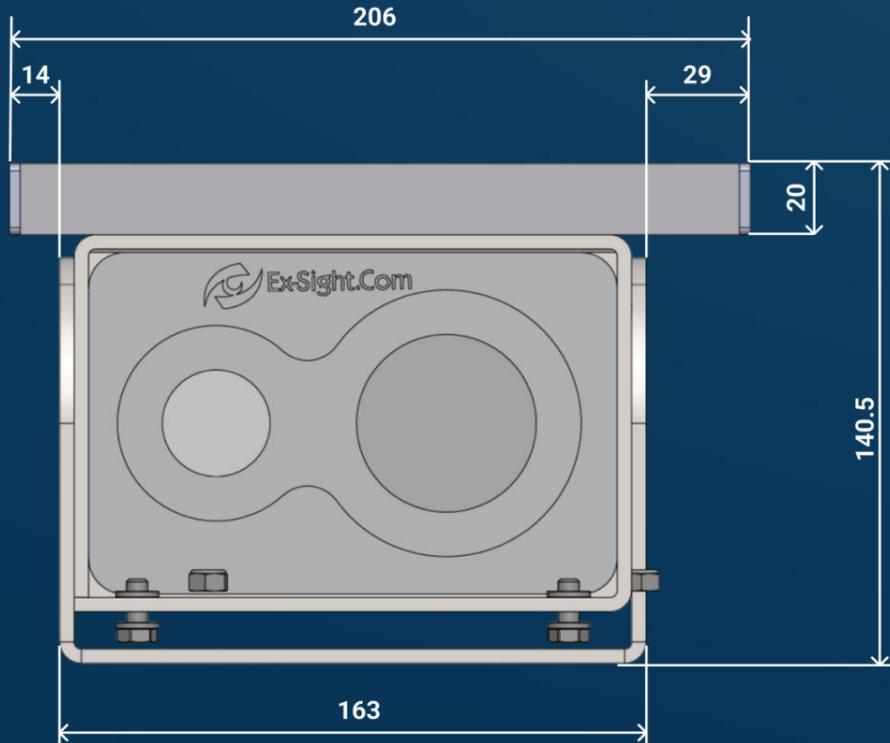
Flange with 25 holes designed to create an air barrier in front of the glass, preventing the formation of dust deposits.



FUSIONF640

AIR-WALL

DIMENSIONS (LxWxH, mm) 206x55x20mm



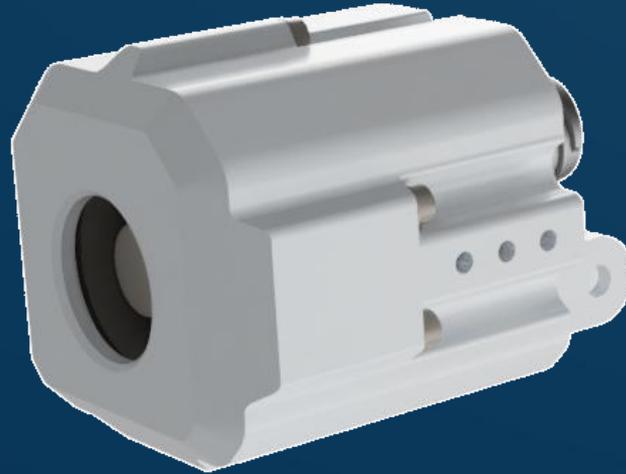


xEye

LOW LIGHT VISION SYSTEM

xEye is a ruggedized micro digital sensor that was created for superior low light vision scenarios

xEye is IP67, all-weather robust, light weight and unobtrusive. Resistant towards challenging environmental conditions, such as water damage, failure of electrical, mechanical, and optical components



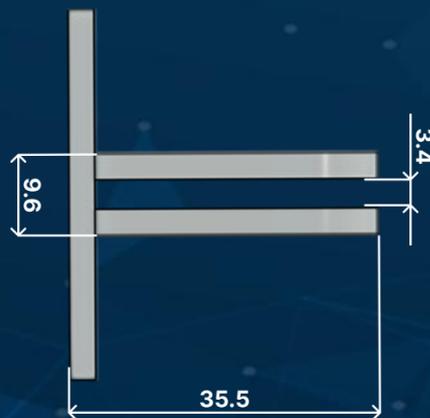
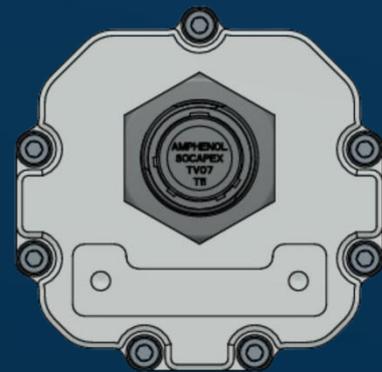
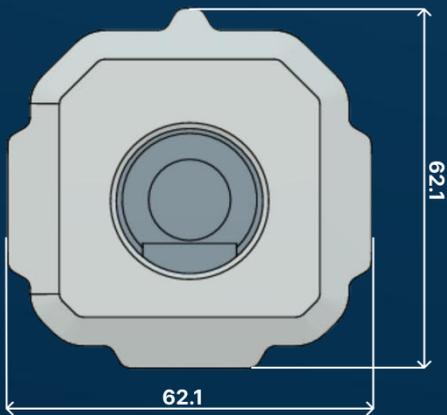
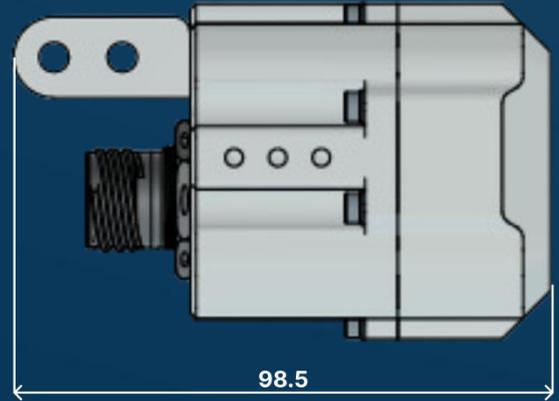
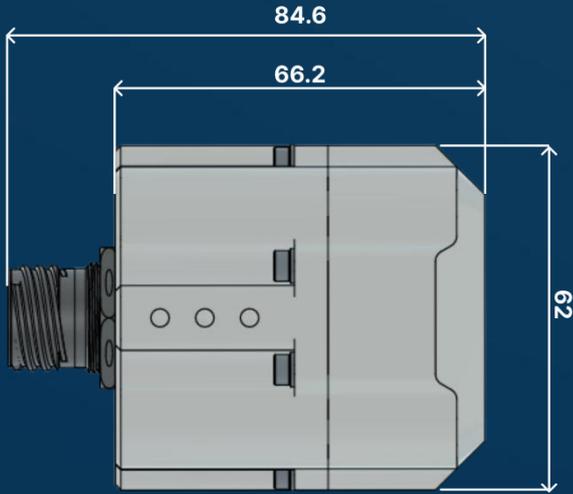
LOW LIGHT VISION SYSTEM

- 1/2.8" SONY IMX 327, FULL HD 1920x1080 pixels
- FRAME RATE 30 FPS, FULL HD + FULL D1 + CVBS ELECTRONIC SHUTTER SPEED 1/10000s to 1/25s
- Full-HD low light 1920x1080 sensors Lens 4mm , (H) 90° (V) 46°, 4mm DC DRIVE M12, Sapphire window
- Sensor daisy chain via Ethernet to save cabling
- 12VDC <2W MAX
- CVBS COMPOSITE VIDEO, ETHERNET (RTSP/HTTP/ONVIF)
- Optional SD card recording
- IP-67 Hermetic sealed chassis, Nitrogen purged, MIL.STD Hermetic connectors
- Operating temp -20°C to +80°C
- **Dimensions** (LxWxH, mm) 62x62x85
- **Weight** 270 gm

xEye

DIMENSIONS (LxWxH, mm) 62x62x85

WEIGHT 352g



CONNECTION INTERFACE

① D38999/24WB35PN

Mil. Std Stainless Steel connector



xEye PART NUMBERING				
xEye [FOV]-[CT]-[VDC]				
[FOV]	FIELD OF VIEW	70 – 5mm, 70° DAY (70.7°x43.5°)	89 – 4mm, 89° DAY (84.6°x45.9°)	
[CT]	CONNECTOR TYPE	CD – D38999 Crimp Olive Drab Cadmium	BR – D38999 Crimp Bronze	SS – Hermetic D38999 Solder Stainless Steel
[VDC]	INPUT VOLTAGE	12 – 12VDC	72 – 17VDC to 72VDC	

OPTIONAL CONNECTOR

D38999/24WB35PN

Termination Style: Crimp
Olive Drab Cadmium

TVS07RB-11-35PN

Termination Style: Crimp
Bronze

23YB35PN

Termination Style: Solder
Stainless Steel

PANEL PIN LAYOUT

D38999/24WB35PN CONNECTOR

PIN	+12VDC INPUT POWER
1	+9VDC to 36VDC INPUT POWER
2	GND INPUT POWER
3	ETHERNET TX-P
4	ETHERNET TX-N
5	ETHERNET RX-P
6	NC
7	NC
8	NC
9	NC
10	NC
11	ETHERNET RX+ N
12	COMPOSITE VIDEO SIGNAL
13	COMPOSITE VIDEO GND

xEye

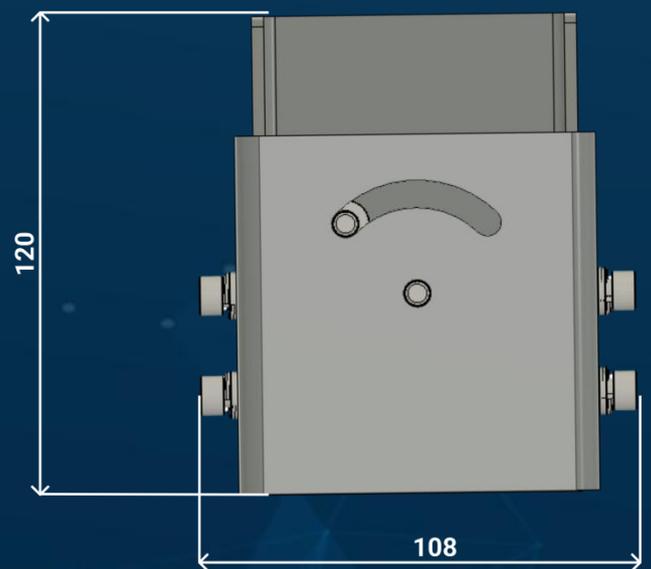
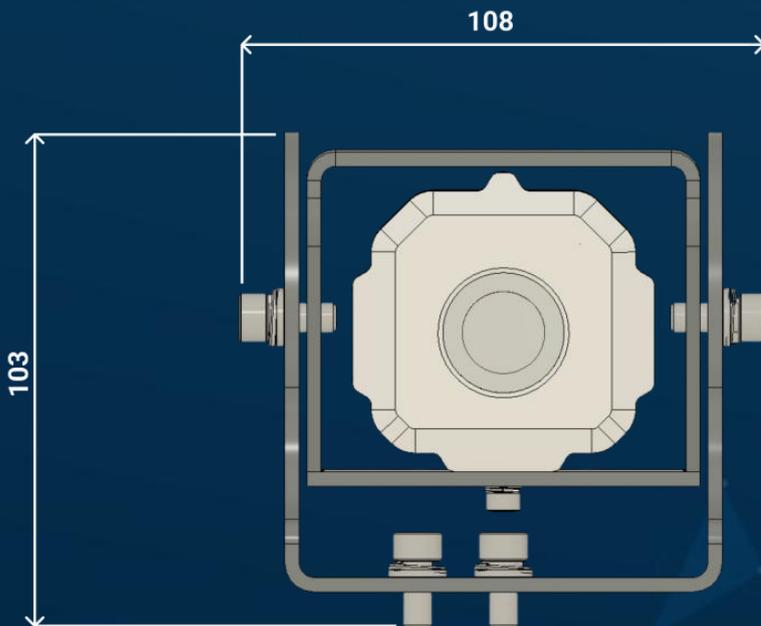
BRACKET DIMENSIONS

xEye-BRKT-M/MS

xEye-BRKT-[BT]

**M MATTE BLACK RAL 9005 ALUMINUM
BRACKET**

MS BLACK STEEL BRACKET





AixSERIES

GRAPHIC PROCESSING UNIT



AIxSERIES

GRAPHIC PROCESSING UNIT

The AIXSERIES is a powerful video processing platform. It can perform thousands of tasks simultaneously, making it perfect for complex neural networks.

The **AIXSERIES** is flexible and can be used in many areas, including robotics, video processing, edge computing, and mission management.

It ensures clear video streaming over satellite and IP networks.

			
	AixNPU	AixGPU	AixNPU-360 Kit
OS	MICROSOFT WINDOWS 11	UBUNTU LINUX	MICROSOFT WINDOWS 11
CPU	Intel® Core™ Ultra	NVIDIA ORIN 64GB FORECR	Intel® Core™ Ultra
RAM	64GB	64GB	64GB
STORAGE SSD	1TB	256GB	1TB
DISPLAY	2 x HDMI 2.1 TMDS	HDMI 2.0 (MAX RESOLUTION 3840x2160)	2 x HDMI Ports MIL.STD Connector
ETHERNET	2.5 Gigabit LAN	1x Gigabit Ethernet	2.5 Gigabit LAN
PERIPHERALS	1 x USB4 2 x M.2 Key M, 1 x M.2 Key E (WiFi-6E Module) 2 x HDMI 2.1 TMDS 1 x DP 2.1 (from Type-C) 1 x DP 1.4a (from Type-C)	2x USB 3.1 Type-A 1x CAN Bus 1x RS232/422/485 (software configurable) 2x USB-C (Debug/Recovery) 2x Digital Input 3x Digital Output	1 x USB4 2 x M.2 Key M, 1 x M.2 Key E (WiFi-6E Module) 2 x HDMI 2.1 TMDS 1 x DP 2.1 (from Type-C) 1 x DP 1.4a (from Type-C)BUZZER ALARM
POWER SUPPLY	9-40VDC-DC POWER SUPPLY WITH EMI FRI FILTER		
DIMENSIONS mm (LxWxD)	221x225x91	228x105x277	250x250x150
OUTPUT VIDEO OPTIONS	HDMI, 2 x FULL HD RTSP (H.264/265) (EMBEDDED HARDWARE)	HD-SDI, HDMI	HDMI

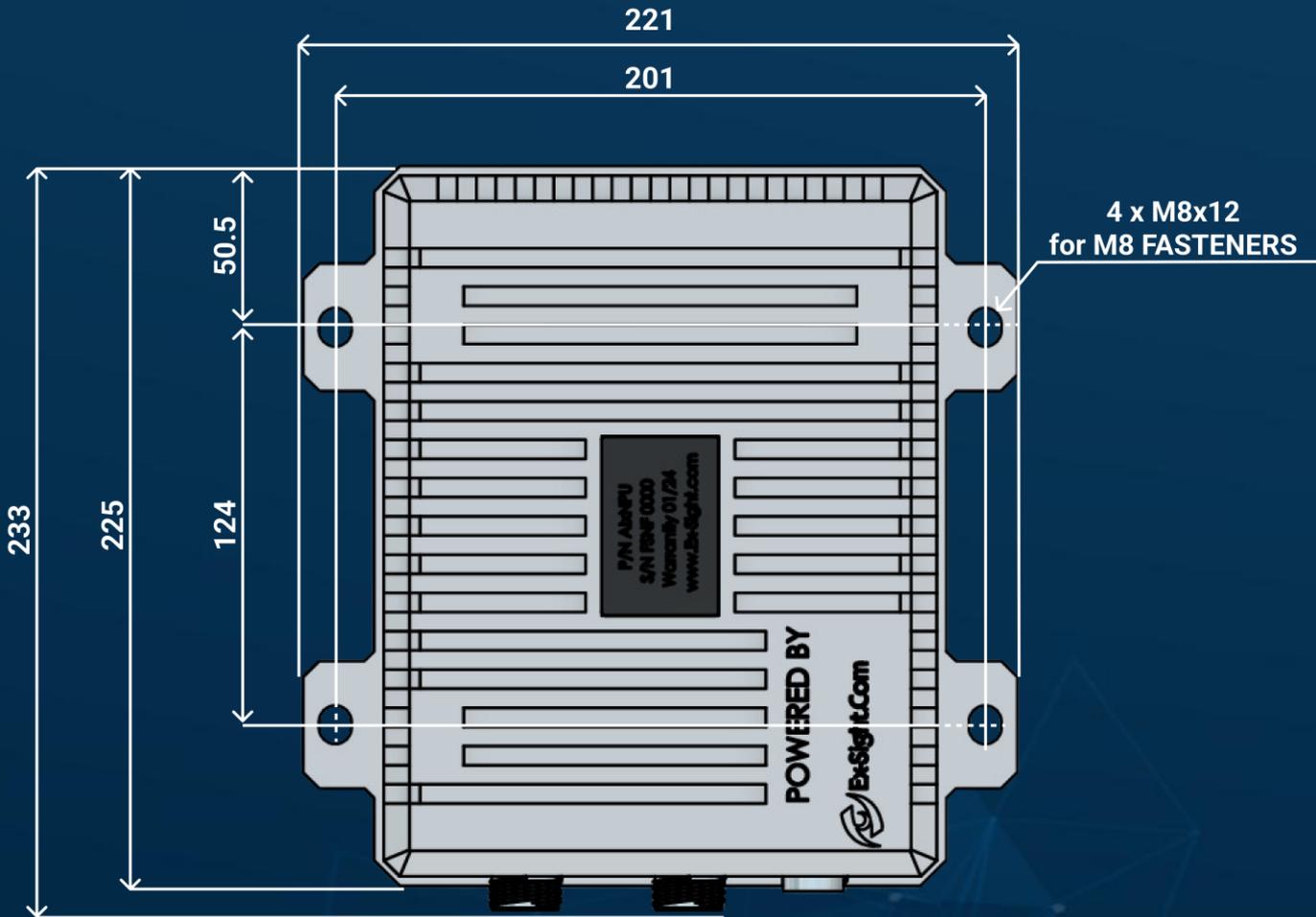


AixNPU

WINDOWS BASED GRAPHIC PROCESSING UNIT

- Intel® Core™ Ultra processors (Meteor Lake-H)
- 2 x 262-pin SO-DIMM DDR5 5600MHz up to 96GB (48GB per DIMM)
- 1 x USB4/Thunderbolt™4, 5 x USB 3.2 Gen2, 2 x M.2 Key M, 1 x M.2 Key E (WiFi-6E Module)
- 1 x Intel 2.5 Gigabit LAN
- Supports Quad display, 2 x HDMI 2.1 TMDS
- 1 x DP 2.1 (from Type-C), 1 x DP 1.4a (from Type-C)
- 19V Power Adapter
- VMD RAID 0/1
- Designed to Extended Temp. (-40°C to +85°C)
- 9-40VDC Power Supply with EMI Filter
- **Dimensions** (LxWxH, mm) 221x225x91
- **Weight** 7 kg

DIMENSIONS (LxWxH, mm) 221x225x91
WEIGHT 6 kg

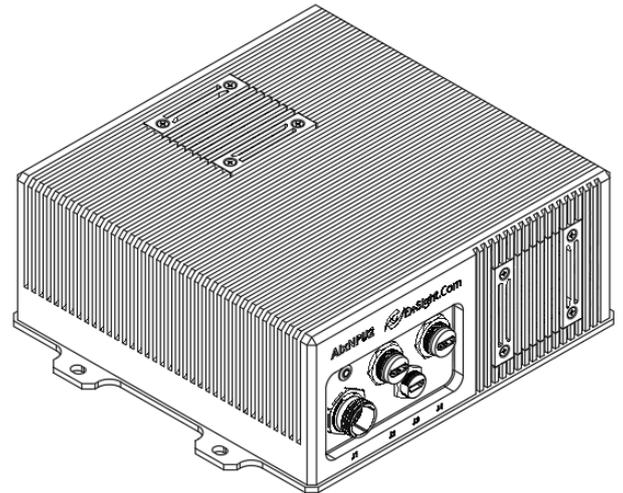
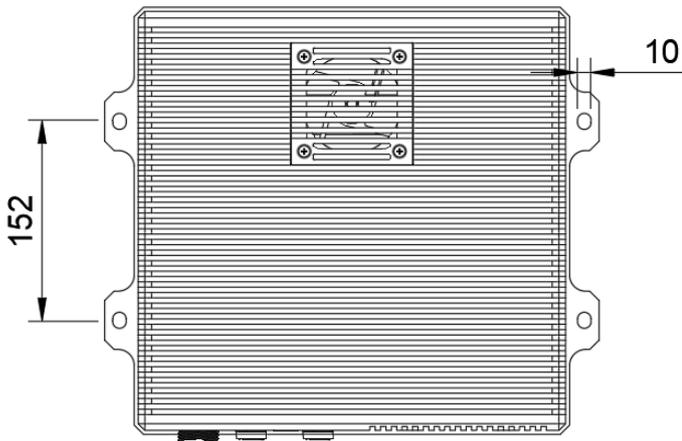
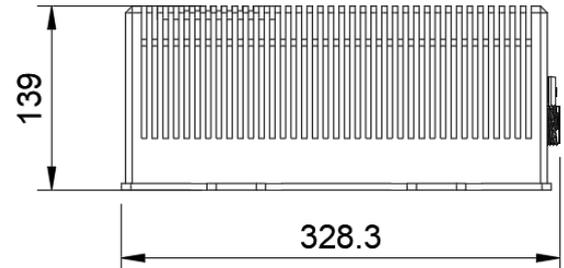
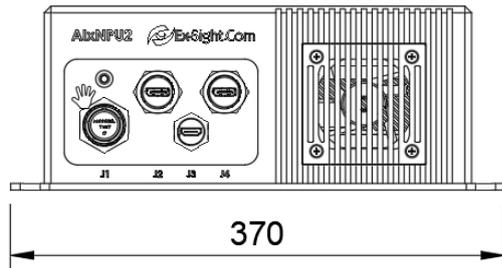




AixNPU2

PERFORMANCE GRAPHIC PROCESSING UNIT

- Performance: Achieve top-tier Intel® Core™ Ultra 9 performance
Intel® Core™ Ultra 9 Processor
185H, cTDP 65W
- Speed: NVIDIA® GeForce RTX™ Discrete Graphics, Intel® Arc™ GPU*
- Five 4K Display
- 64GB RAM DDR5-5600 SO-DIMM x 2
- 1TB SSD Storage
- AI Enabled: Exploits the prowess of Intel® Core™ Ultra processors' three AI engines – GPU, NPU, and CPU – for high throughput, low power, and quick reaction.
- PSU: 24VDC IN, 330W
- Embedded 4 Shock absorbers
- Windows 11 Pro
- **Dimensions** (LxWxH, mm) 370x329x139
- **Weight** 14 kg



AixNPU2



AixNPU2 - PINOUT - Performance Connector

PIN	NAME	COLOR	DESCRIPTION
1	Vin+	Red	POWER
2	Vin+	Red	
3	Vin+	Red	
4	Vin+	Red	
5	Vin-	Black	
6	Vin-	Black	
7	Vin-	Black	
8	Vin-	Black	
9	BI_DA+	White/Orange	ETHERNET
10	BI_DA-	Orange	
11	BI_DB+	White/Green	
12	BI_DC+	Blue	
13	BI_DC-	White/Blue	
14	BI_DB-	Green	
15	BI_DD+	White/Brown	
16	BI_DD-	Brown	

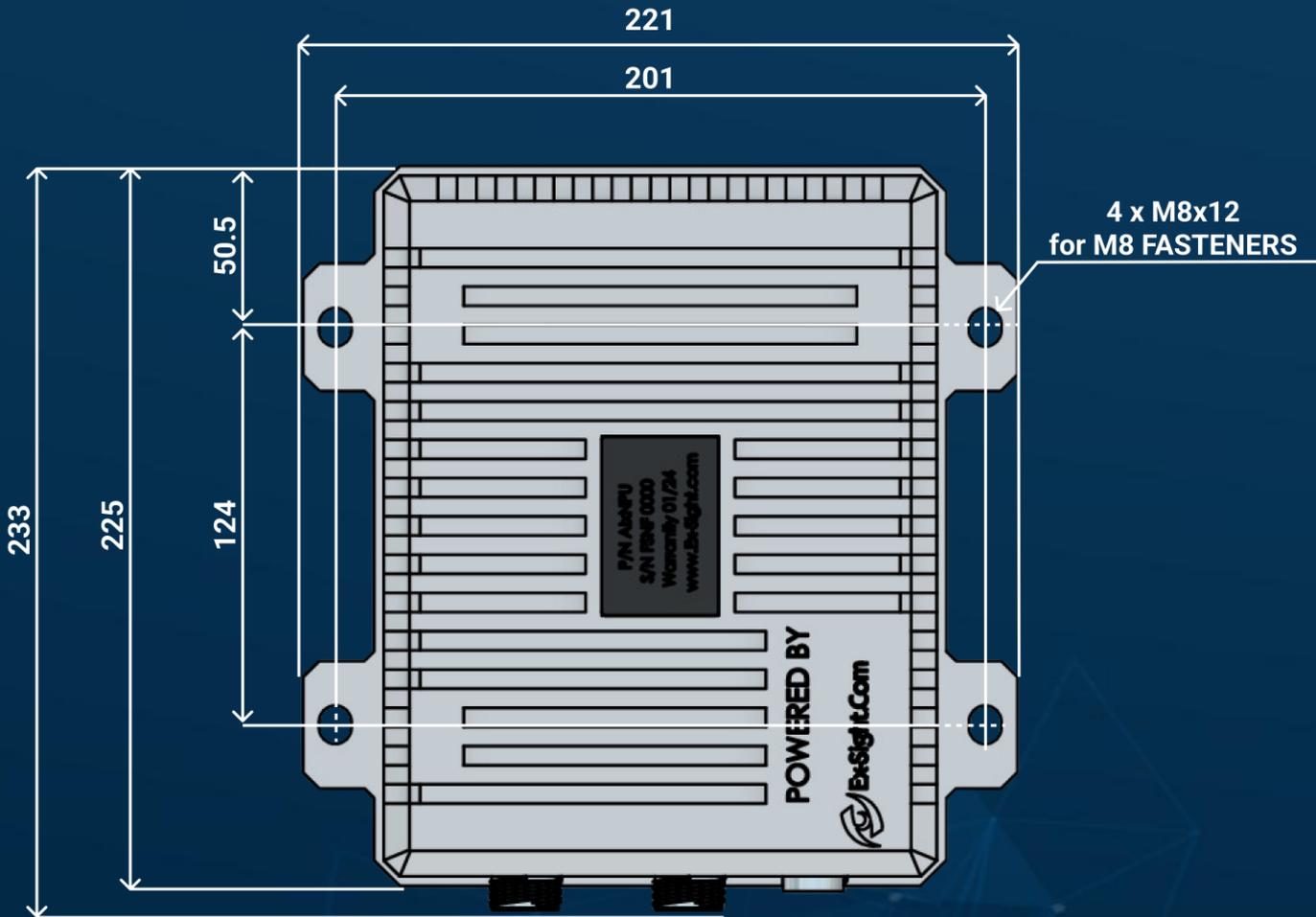
PIN	NAME	COLOR	DESCRIPTION
17	Audio Left	Blue	AUDIO
18	Audio Right	Red	
19	MIC	Yellow	
20	Ground	Green	
21	5V	Red	USB2.0 (1)
22	Data-		
23	Data+		
24	GND	Black	
25	5V	Red	USB2.0 (2)
26	Data-		
27	Data+		
28	GND	Black	
29	5V	Red	USB2.0 (3)
30	Data-		
31	Data+		
32	GND	Black	

PIN	NAME	COLOR	DESCRIPTION
33	5V	Red	USB2.0 (4)
34	Data-		
35	Data+		
36	GND	Black	
37	5V	Red	USB3.0 (1)
38	Data-		
39	Data+		
40	GND	Black	
41	Rx-		
42	Rx+		
43	GND		
44	Tx-		
45	Tx+		
46	5V	Red	USB3.0 (2)
47	Data-		
48	Data+		

PIN	NAME	COLOR	DESCRIPTION
49	GND	Black	USB3.0 (2)
50	Rx-		
51	Rx+		
52	GND	Black	
53	Tx-		
54	Tx+		
55	NC		



DIMENSIONS (LxWxH, mm) 221x225x91
WEIGHT 6 kg





AixGPU

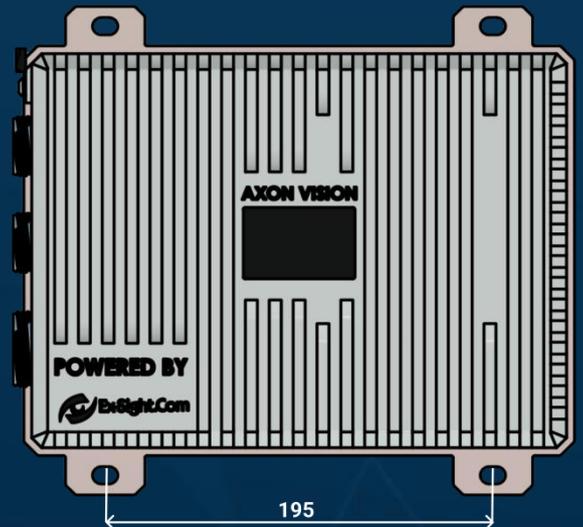
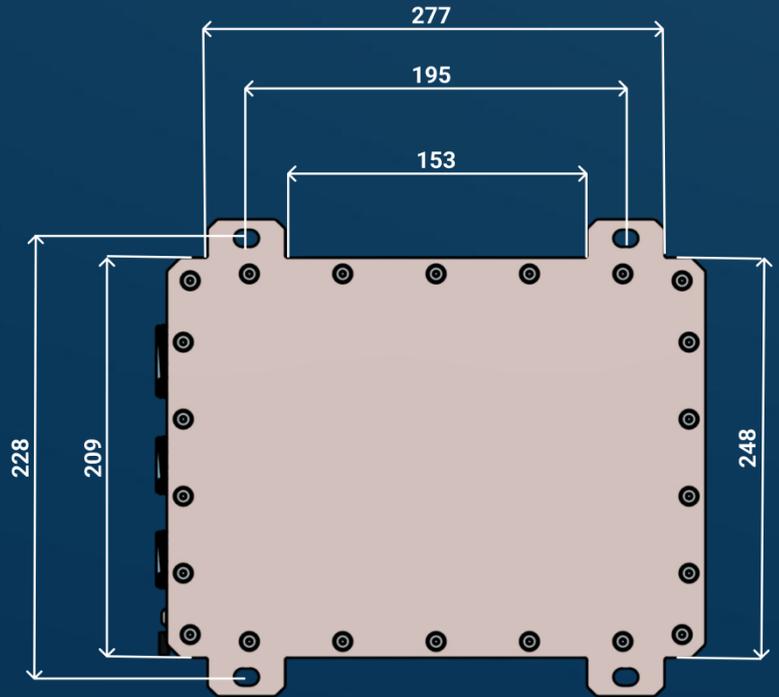
NVIDIA ORIN 64 AI GRAPHIC PROCESSING UNIT

- NVIDIA ORIN 64GB with Internal 256GB SSD Storage
- HD-SDI out option(HDMI Out replacement)
- HD-SDI Video Grabber x 3
- PAL Video Grabber x 3
- 5 x Port Industrial Gigabit Ethernet Switch
- 4 x RS-232 | RS-422 | RS-485 Gateway as option
- Embedded GPIO CANBUS, RS422, isolated 3*DO, 2*DI
- Designed to MILSTD 1275/704
- Designed to Extended Temp. (-40°C to +85°C)
- 9-40VDC Power Supply with EMI Filter
- **Dimensions** (LxWxH, mm) 277 x 248 x 105
- **Weight** 8.1 kg

AixGPU

DIMENSIONS (LxWxH, mm) 228x105x277

WEIGHT 8.1kg





AixNPU-360KIT

GRAPHIC PROCESSING UNIT

AixNPU-360kit is a constant platform guard, real time object detection video analyzer which helps reading and understanding risks, based on real time video data from multiple sources and sensors.

The kit is based on up to 8 devices, which can be single or dual sensors.

The system can detect, track and classify targets on both channels, day and night providing 24/7 visual RADAR display.



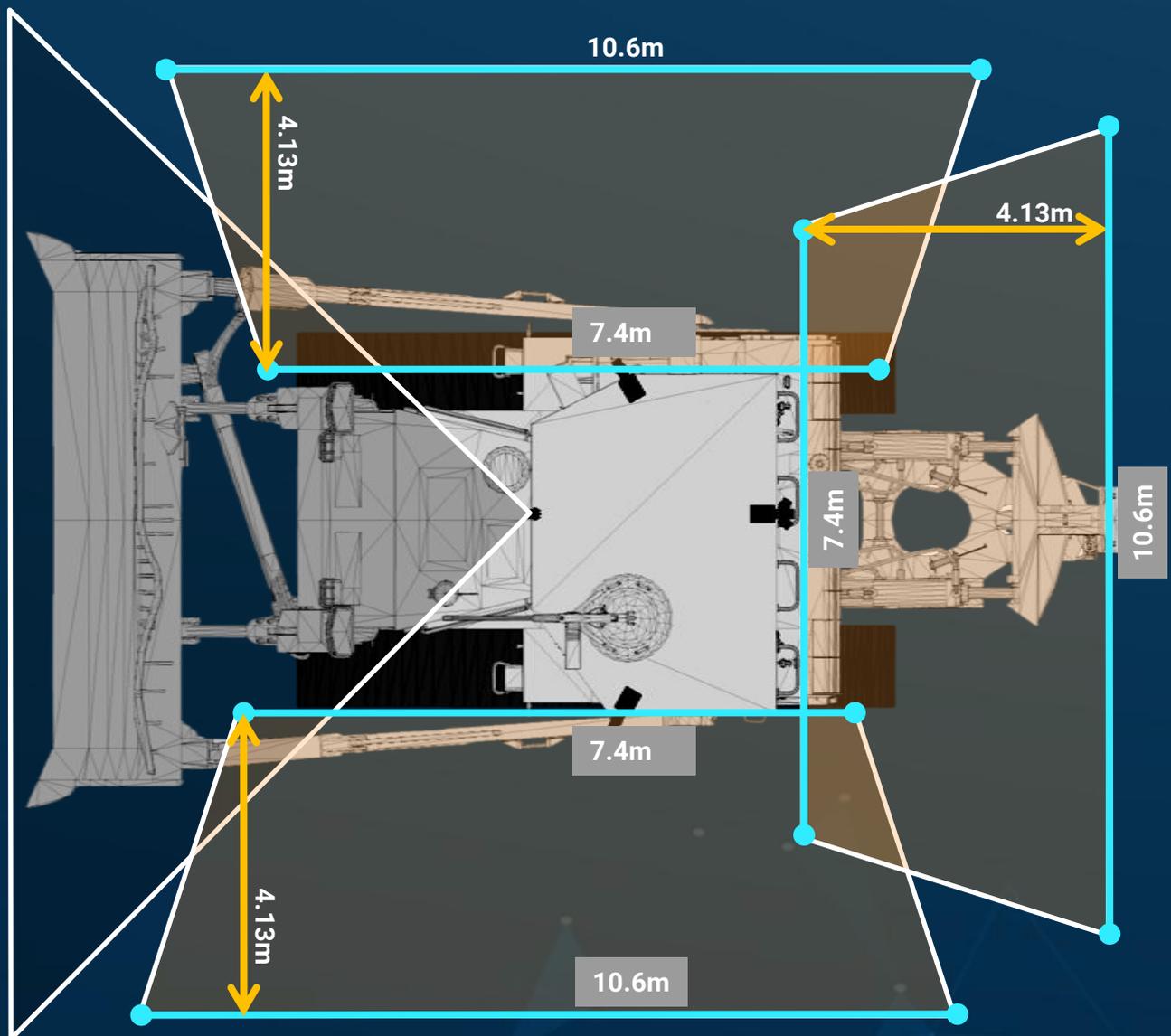
AIxNPU-360KIT

AI GRAPHIC PROCESSING KIT WITH CAMERA PORTS

- 1275 AI PROCESSOR SYSTEM
- INTEL® CORE™ ULTRA PROCESSORS (METEOR LAKE-H)
- 2 x HDMI Ports MIL.STD Connector
- 3 x ETHERNET MODULE SWITCH MIL.STD D38999
- 1 x POWER CONNECTOR + BUZZER SIZE B
- 120W MIL-COTS , 9 to 40V Input Isolated Quarter Brick MIL-STD-461, MIL-STD-1275, MIL-STD-704, RTCA DO-160
- Designed to MILSTD 1275/704
- Operating Temperature -20°C~60°C, Storage Temperature -30°C~80°C
- STORAGE M.2 SSD 1TB
- IP RATING IP66
- 9-40VDC Power Supply with EMI Filter
- **Dimensions** (LxWxH, mm) 248 x 248 x 150
- **Weight** 5 kg

AI-360 KIT CAMERA SYSTEM SET FOR VISIBILITY FIELD REVIEW

	FIELD OF VIEW of LONG RANGE CAMERA 50 meter
	FIELD OF VIEW of SHORT RANGE TOP CAMERAS
	WIDTH/LENGTH OF THE FIELD



xEye CAMERA BRACKET



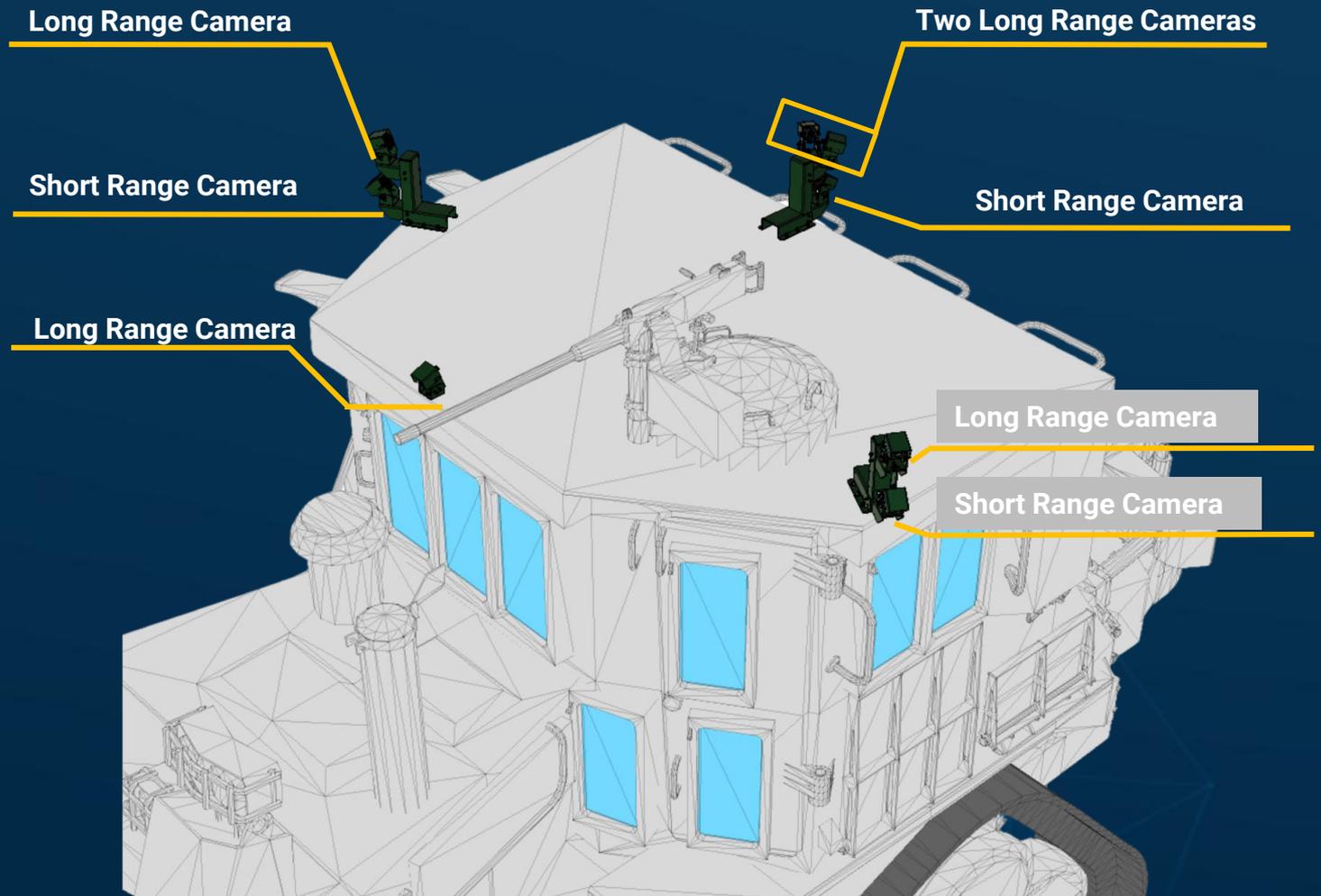
SINGEL CAMERA BRACKET:
Long Range Camera



DUAL CAMERA BRACKET:
Long Range Camera
Short Range Camera



TRIPLE CAMERA BRACKET:
Two Long Range Camera
Short Range Camera

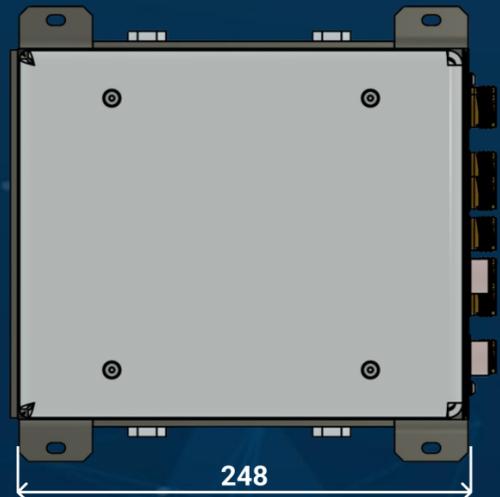
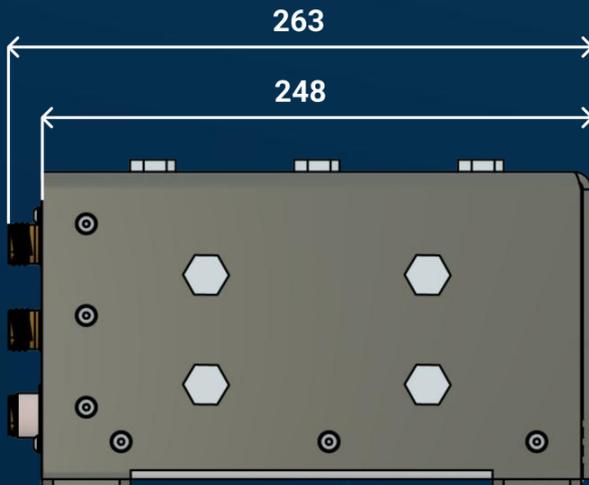
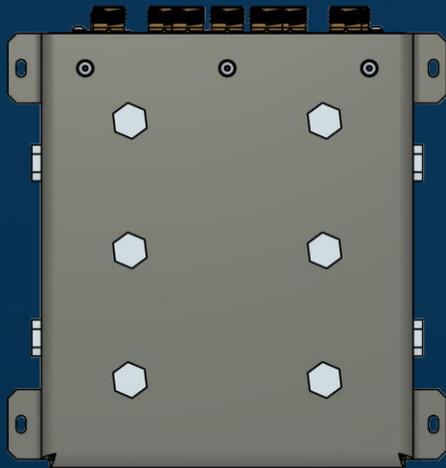


AI-360-KIT

AIxNPU Rugged HOST Unit

DIMENSIONS (LxWxH, mm) 248x248x150

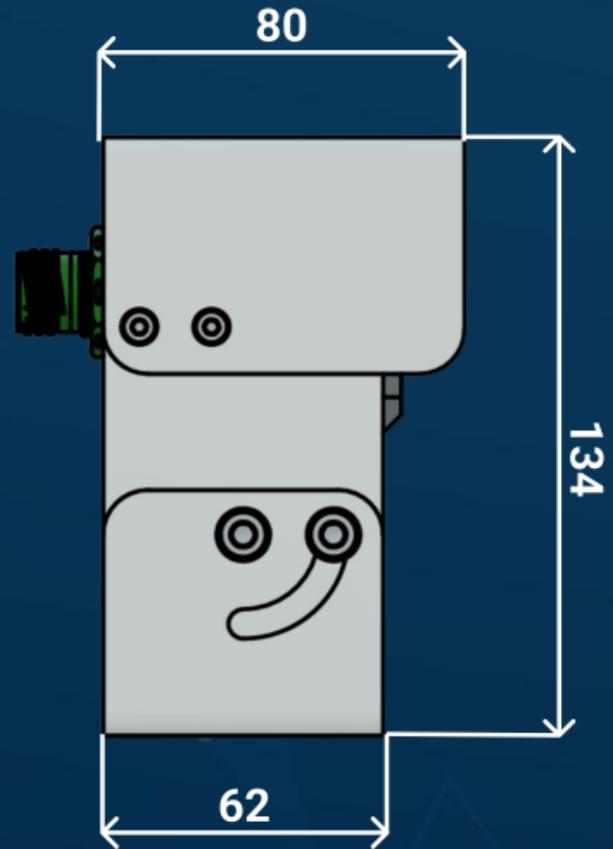
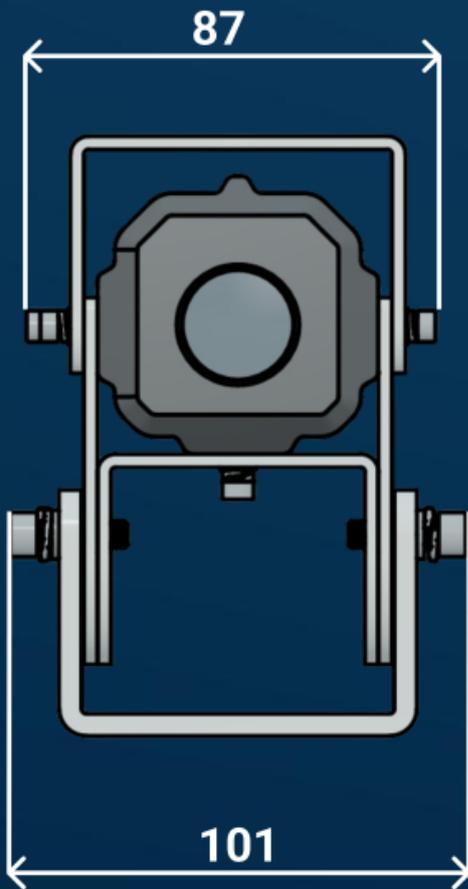
WEIGHT 5 kg



AI-360-KIT

SINGLE CAMERA BRAKET

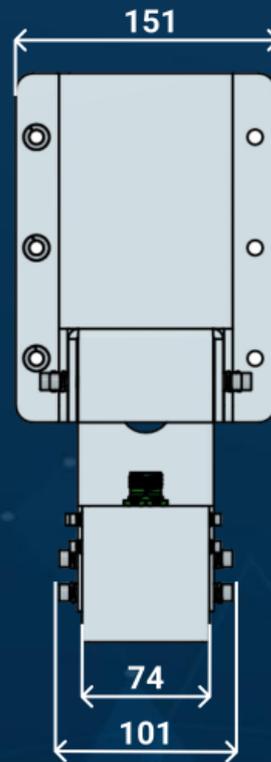
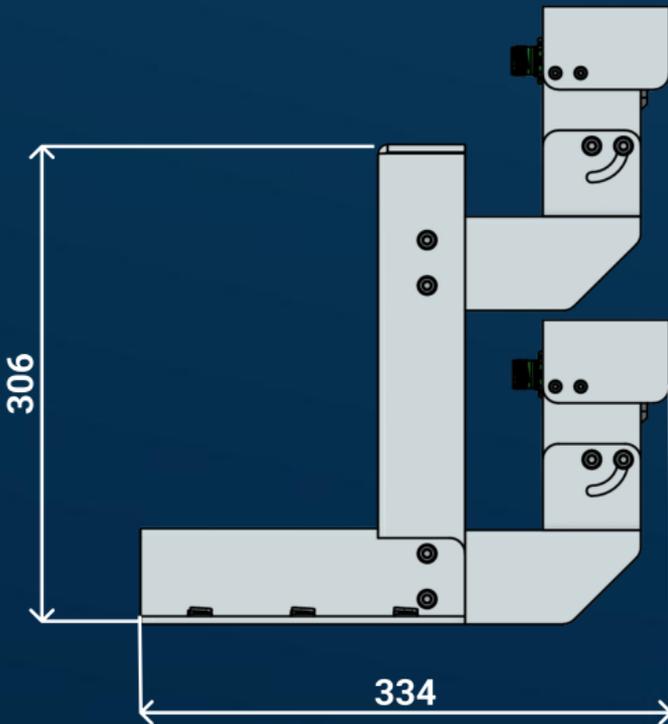
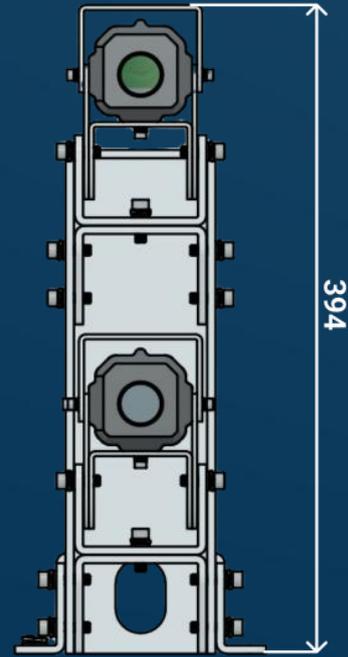
DIMENSIONS (LxWxH, mm) 101x80x134



AI-360-KIT

DUAL CAMERA BRACKET

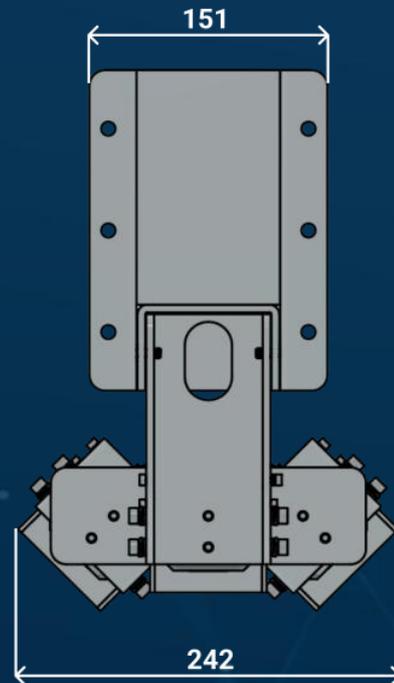
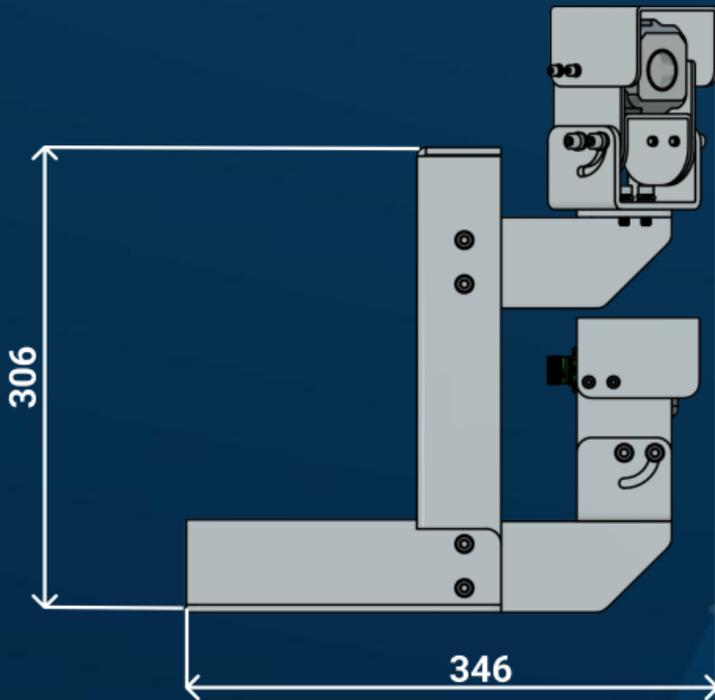
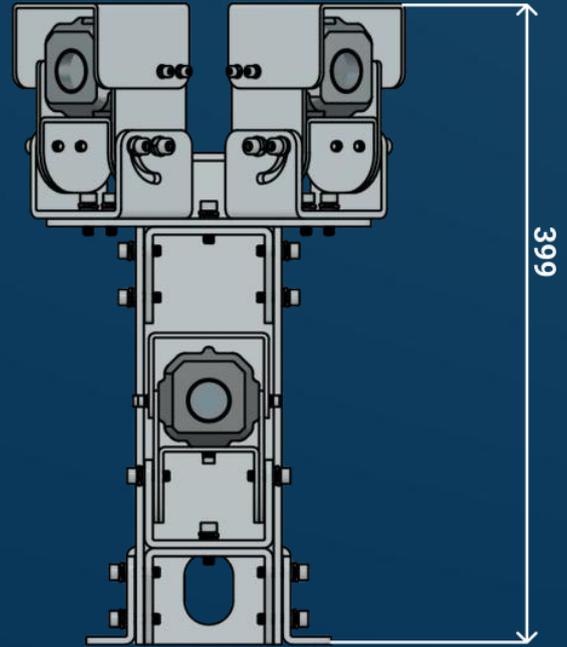
DIMENSIONS (LxWxH, mm) 151x334x394

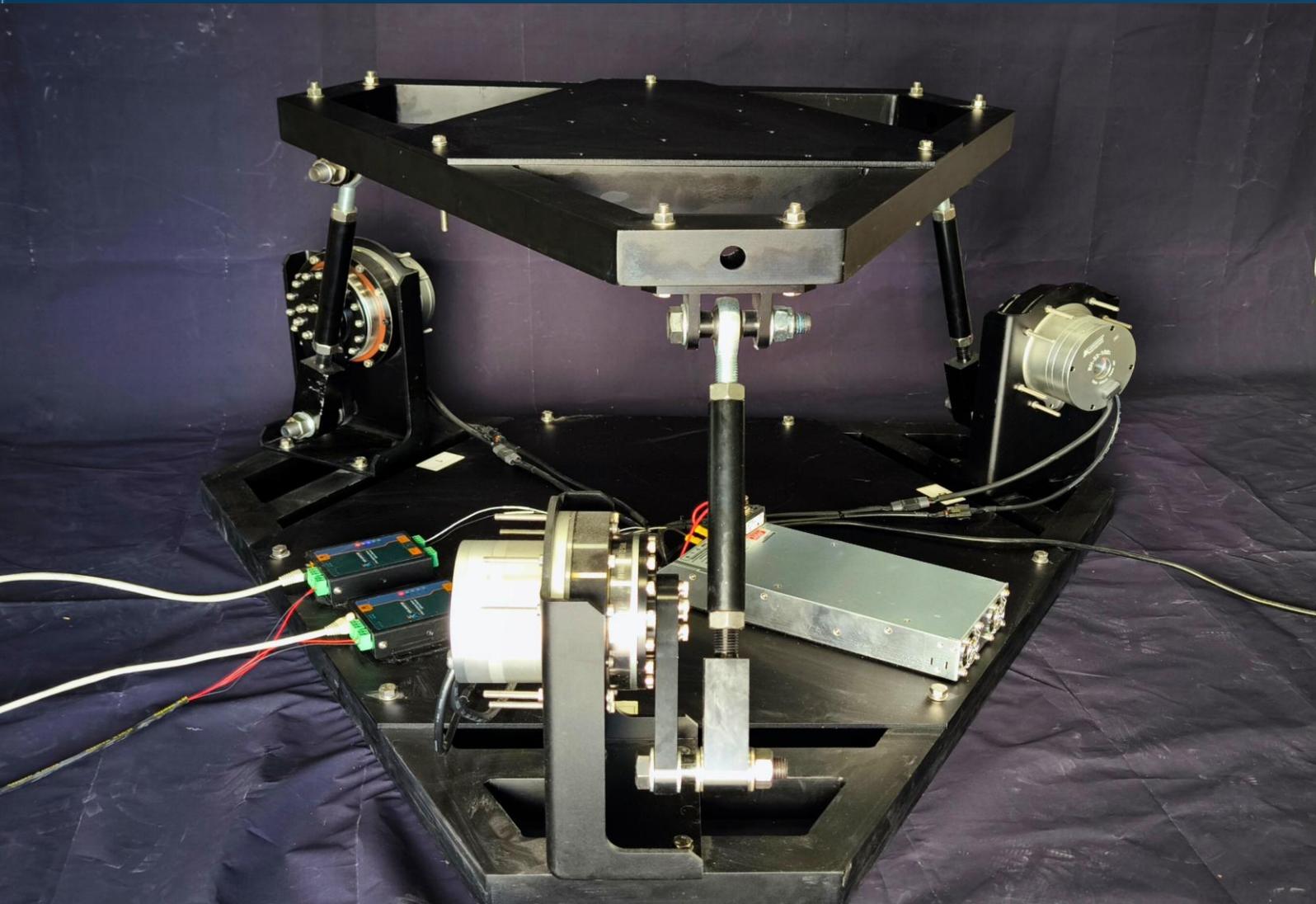


AI-360-KIT

TRIPLE CAMERA BRACKET

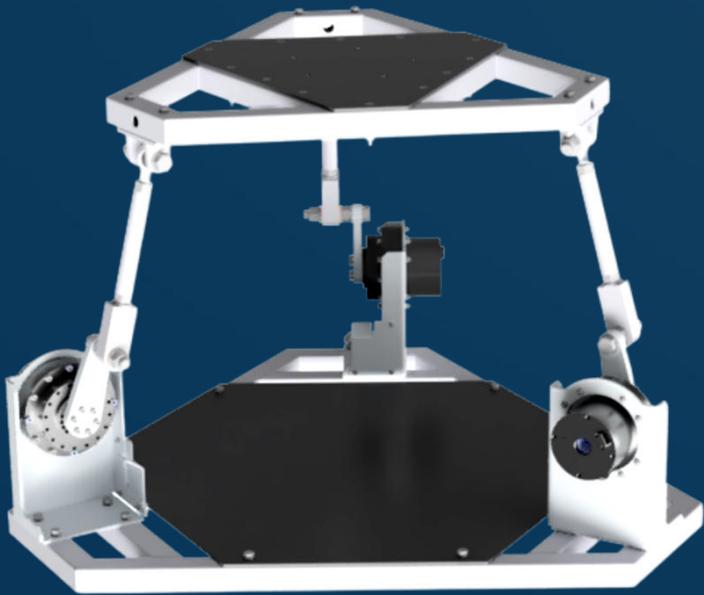
DIMENSIONS (LxWxH, mm) 151x346x399





Motion TriPOD

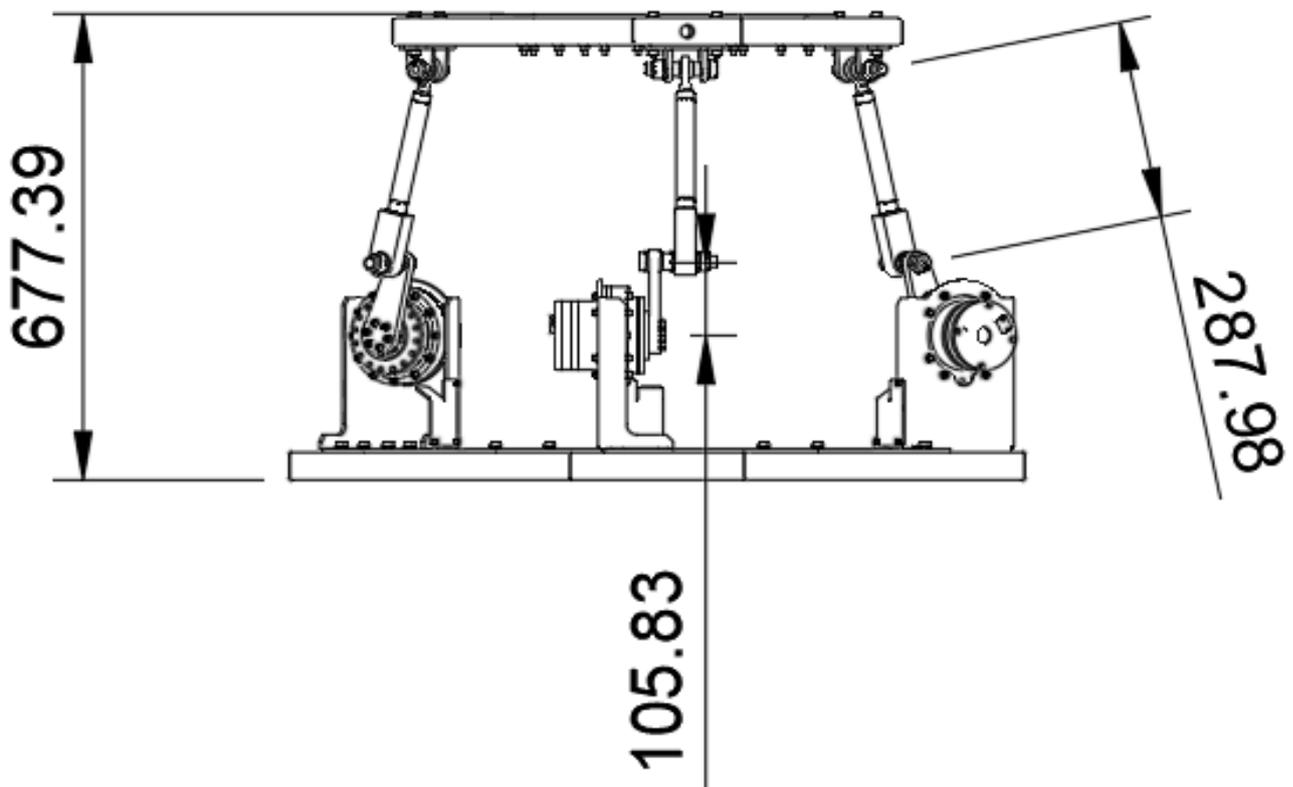
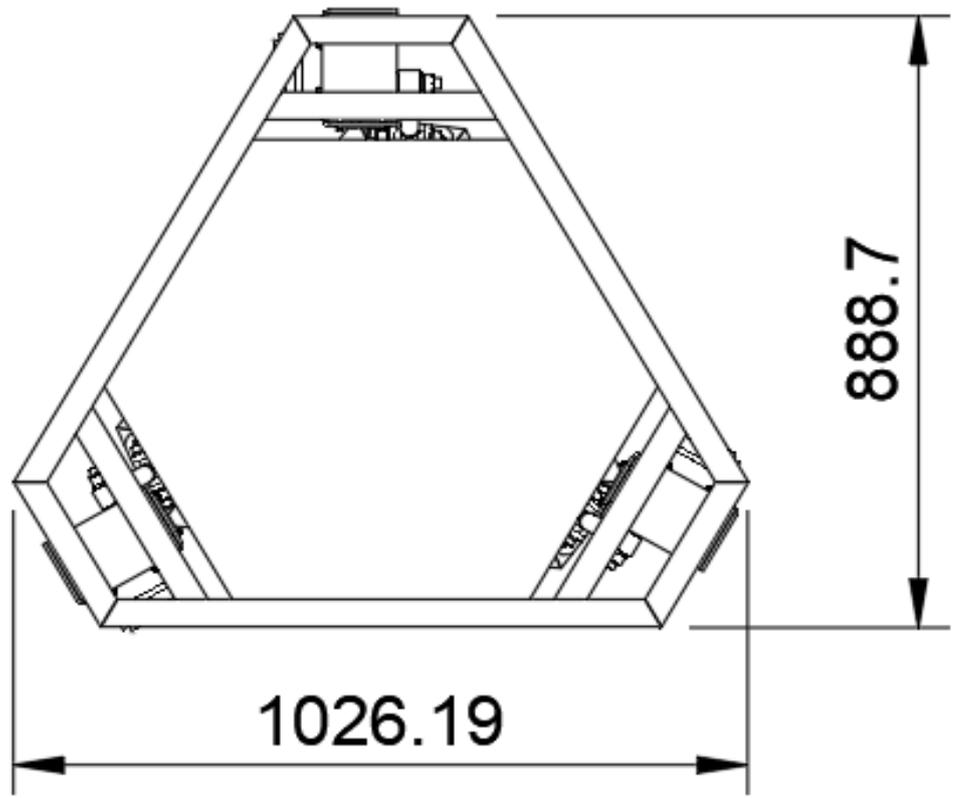
3 AXIS MOTION PLATFORM



Motion TriPOD

3D AXIS MOTION PLATFORM

- 3 Axis x360 deg Movement
- Ethernet Controlled Platform
- Max Amplitude Movement Height on 3 axis: 235 mm, 22 deg each AXIS
- Max Payload ± 50 Kg
- Provided with software (Open Source)
- Max Torque: 3x150NM
- Including Power Supplier (220VAC)
- Ability to play recorded IMU/INS files
- Ability to play motion profile
- Accuracy: 0.01 deg
- Brakes: Included
- Speed: max. 120 deg/sec





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