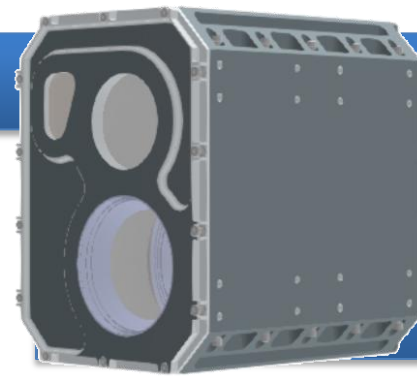
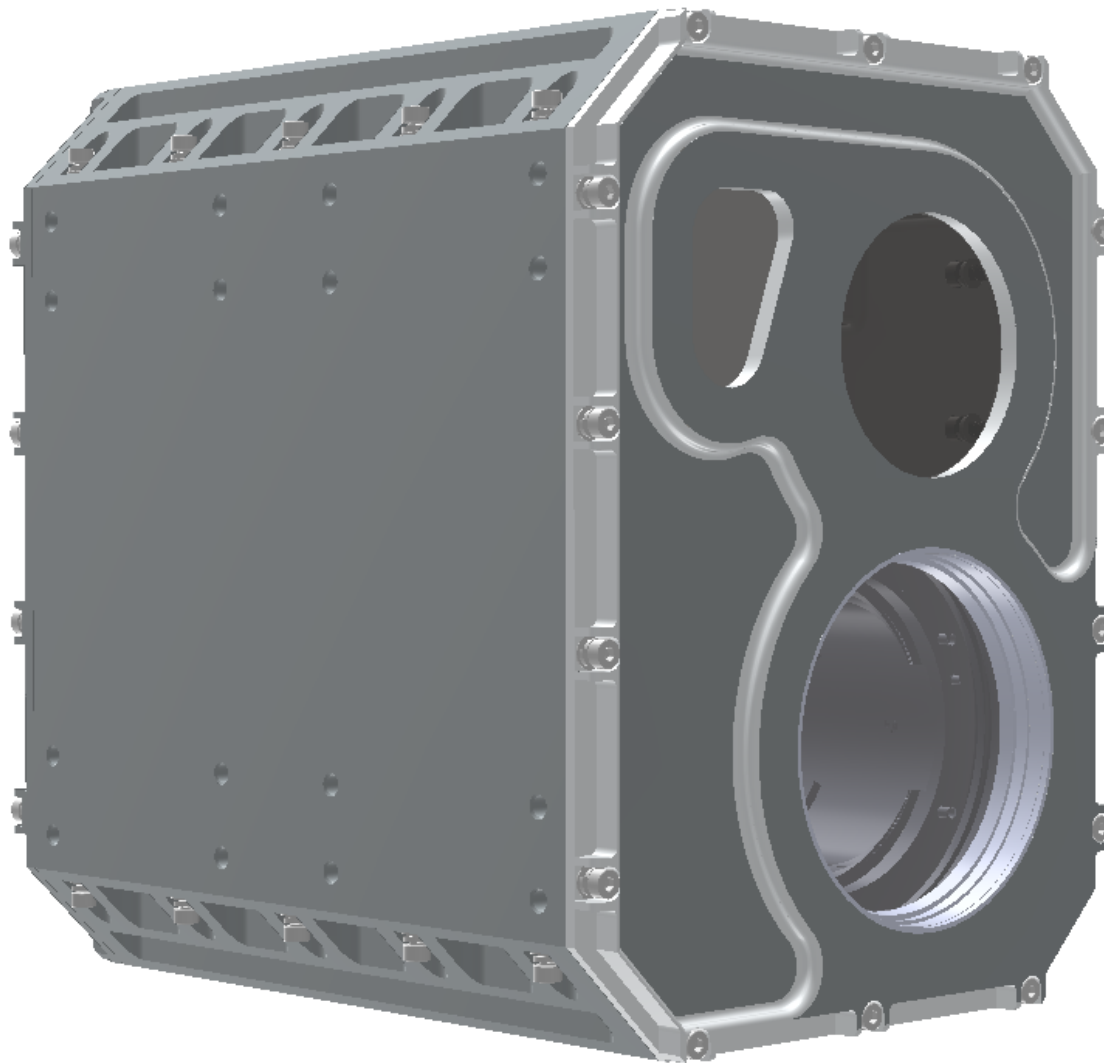




SIGHT20-100



SIGHT20-100 is a multi sensor electro-optical payload designed for easy integration in remote controlled weapon stations and long range surveillance and reconnaissance. It features a high resolution uncooled LWIR imager, a color CCD camera, and a Laser Range Finder and an integrated ballistic computer.

It optionally can include a DUAL GPS and a Digital Magnetic Compass with inclinometer for target acquisition and geo referencing.

IR and Day imagers are with continuous optical zoom optics and are optically, mechanically and digitally aligned to high precision for demanding applications. The sensors also have preset matched FOVs through out the zoom range increasing situational awareness.

It also features inbuilt electronic video stabilization and video target tracking capability. It optionally can incorporate Ex-Sight's state of the art Sensor FUSION technology that intelligently fuses the videos from IR and Day cameras in real time, combining critical spectral information from IR with the Visible day camera further enhancing the situational awareness.

Designed to survive shock of up to 0.50 caliber (12.7mm) weapons and qualified as per MIL-STD-810G / 461F. It is an ideal solution for on the move or fixed remote controlled weapon stations for land and naval applications.



SIGHT SYSTEM SPECIFICATION

HD GLOBAL SHUTTER X36 DAY SENSOR

1/2.8" 2MP PROGRESSIVE SCAN GLOBAL SHUTTER CMOS,
1600X1300@60FPS/30FPS, H.265/H264 COMPRESSION,
LENS F=4.5MM~162MM, OPTICAL ZOOM 36X, F1.5 (WIDE)~F4.0 (TELE), ICR,
PRIVACY MASK FUCTION, HIGH LIGHT COMPENSATION,
WDR/BLC/HLC/AGC/3D-DNR, ZOOM SPEED APPROXIMATELY 3.5S (OPTICAL
LENS, WIDE TO TELE), COLOR:0.001 LUX @(F1.5,AGC ON); B/W:0.0005LUX
@(F1.5,AGC ON), SHUTTER 1/25S TO 1/100,000S, ANGLE OF VIEW (D, H, V)
59.0° ~ 2.4° (WIDE~TELE), MOTION DETECTION / DEFOG FUNCTION,
SUPPORTS VISCA, ONVIF, PELCO PROTOCOL, VIDEO OUT IP

UNCOOLED LWIR SENSOR

RESOLUTION 640X512 PIXEL, 12μM PIXEL PITCH,
FRAME RATE 50HZ, SPECTRAL BAND 8~4μM, NETD≤50MK@25°C, F#1.0.
BRIGHTNESS AND CONTRAST ADJUSTMENT, IMAGE PROCESSING:
NUC/DNR/DDE, ANALOG VIDEO OUTPUT 1-CHANNEL PAL/NTSC, DIGITAL
VIDEO OUTPUT LVCMOS/BT.656/BT.1120/LVDS, COMMUNICATION
INTERFACE ETHERNET
LWIR LENS 20~100MM AUTOFOCUS LENS / F1.2 640*512, 12μM

CONNECTION INTERFACE

HERMETIC Type C: D38999/23YE35PN, ETHERNET/RTSP/ONVIF VIDEO &
CONTROL

PSU (POWER SUPPLY UNIT)

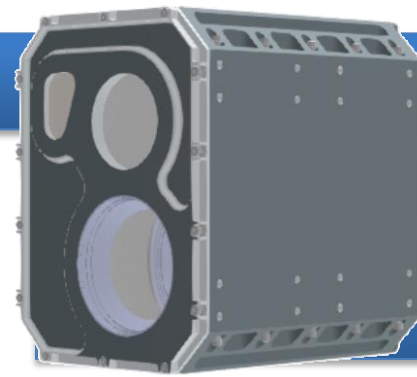
18-32VDC 120W Max. MIL.STD704, MIL.STD810G POWER STABILIZER

ENVIRONMENTAL

IP-67, NITROGEN PURGED, HERMETIC SEALED, ALUMINUM CHASSIS (6061)
STAINLESS STEEL SCREWS (N316)

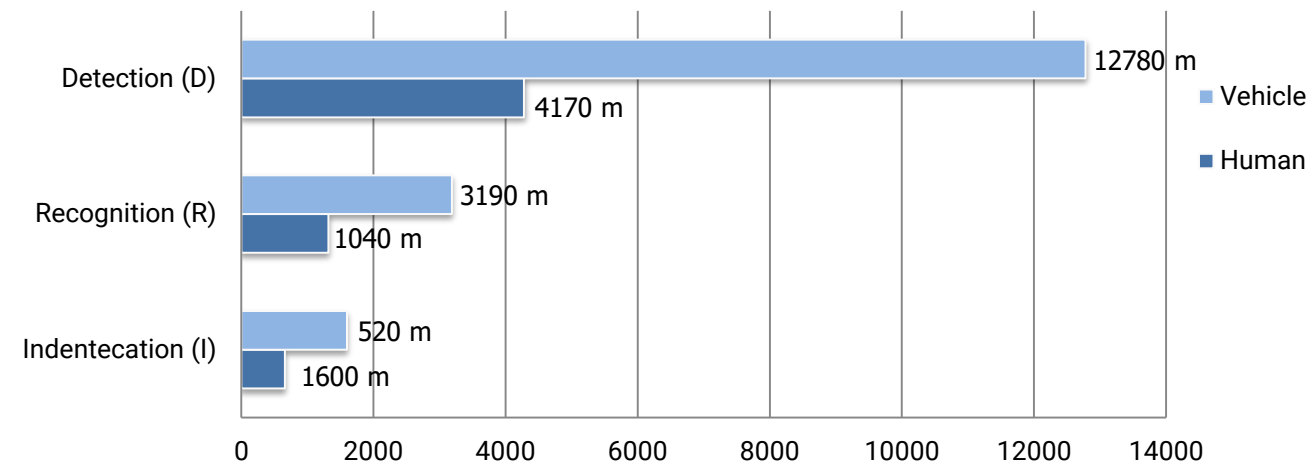
32KM LRF (LASER RANGE FINDER)

EYE SAFE 8.6KM NATO TARGET, 0.5-0.01M PRECISION, 0.6 MRAD BEAM
DIVERGENCE, 1M RESOLUTION, TARGET DISCRIMINATION <30M, ALIGNMENT
POINTER, SAPPHIRE WINDOW



SIGHT20-100

SIGHT20-100 DRI LWIR (m)



PART NUMBERING

SL-640-100-36

SL-[RES]-[LENS]-[ZOOM-DS]-[LRF]

[RES] LWIR RESOLUTION

640 (LWIR 640x512 , 5.8mm)

[LENS] LWIR LENS

100 Focal Length 20mm~100mm

[ZOOM-DS] ZOOM DAY SENSOR

36x Optical Zoom

[LRF] LRF

Blank - No LRF

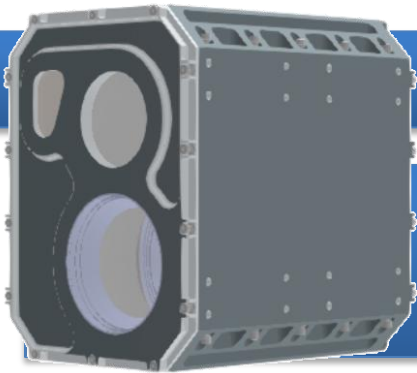
LRF1 - LRX-20A 32Km

LRF2 - LR6000 6Km

SYSTEM OVERVIEW

PART NUMBERING INDEX

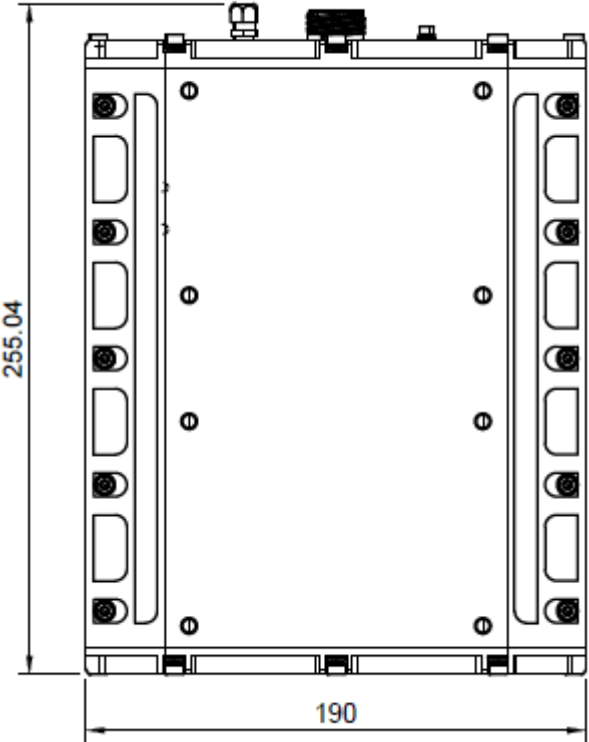
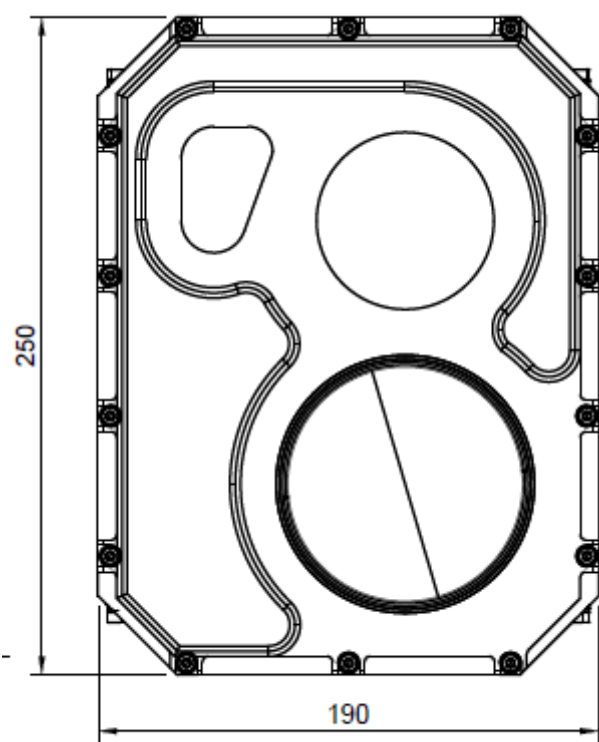
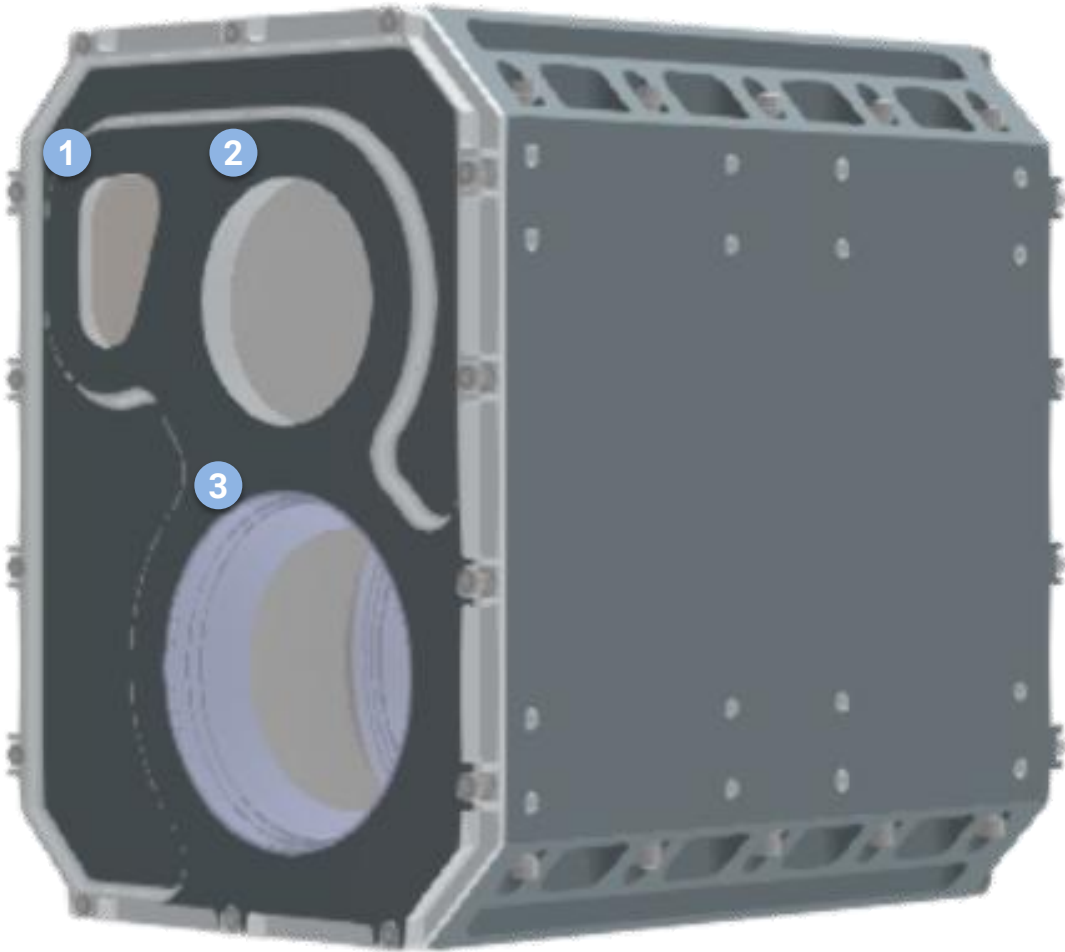
#	PART	DESCRIPTION
1	LRF	LASER RANGE FINDER SAPPHIRE Window
2	DAY Sensor	FULLHD GLOBAL SHUTTER X36 DAY SENSOR SAPPHIRE Window
3	LWIR Sensor	LWIR Sensor & LWIR LENS



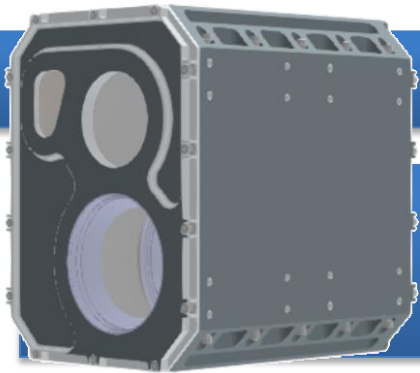
SIGHT20-100

DIMENSIONS

LxWxH (mm) 250x190x255 mm, WEIGHT 9,000 gm



SYSTEM OVERVIEW



SIGHT20-100

PART NUMBERING INDEX

#	P/N	DESCRIPTION
1	D38999/23YE35PN	Mil. Std Stainless Steel connector
2	MS51377-2 MS51607-1 MS20813-1	Nitrogen Valve Core Nitrogen MS Valves Nitrogen Fitting
3	M5x10 Screw, Socket Head	Ground screw
4	M3x6 Screw, Socket Head	Security cable Screw
5	MS3212-25	Nitrogen self locking screw military



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

