

Stabilized Observation System

FUSION-Z



FUSION-Z is designed for vision enhancement and surveillance during navigation in the dynamic marine environment. It integrates a FULL HD x32 Day Sensor and a 640 LWIR Sensor positioned on a Gyro Stabilized PAN TILT.

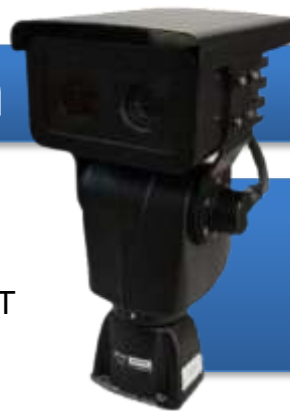
Gyro Stabilization stabilizes pointing of payloads and compensates for unwanted motion ensuring that the system is leveled horizontally regardless of the situations imposed to it.

Product Highlights

- LWIR Sensor 640x512 Pixels
- Fixed Up to 60mm Lens
- Full HDx32 Day Sensor
- Gyro Stabilized PAN TILT Platform
- IP67 Mil.STD Rugged
- Anodized Alum. CNC Housing



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THERMAL SENSOR

UNCOOLED LWIR 17 μ m, RESOLUTION (PIXELS) 640x480,
SPECTRAL BAND 7.5-14 μ m, SENSITIVITY (NEDT) <50mK, VIDEO OUTPUT
RS-170 (30Hz) / CCIR (25Hz), 1.0V p-p, 75ohm, LWIR LENSE 7.5 to 60mm

DAY SENSOR

2.13MP SONY PROGRESSING SCAN CMOS , FULL HD/1080P (1920 X 1080) + FULL
D1 (720 X 480) , FOCAL LENGTH F4.5~144MM (OPTICAL 32X) , VIDEO
COMPRESSION H.264 BP/MP/HP, H.265 MAIN PROFILE, MJPEG , HORIZONTAL
RESOLUTION >1000TVL (1920 X 1080P), MIN. ILLUMINATION RS-170 (30HZ) / CCIR
(25HZ), 1.0V P-P, 75OHM, S /N RATIO >52DB , ANGULAR FIELD OF VIEW (D*H*V)
WIDE: 67.8° X 59.8° X 40.5°
TELE: 2.77° X 2.34° X 1.48°

COMMUNICATION INTERFACES

OPTION 1 IP (PAYLOADS AND PAN TILT)
OPTION 2 ANALOG (PAYLOADS) ; IP OR RS-485 (PAN TILT)

GYRO STABILIZED PAN TILT PLATFORM

MAX. PAYLOAD 5.4 KG TOP MOUNT , PAN POSITION RESOLUTION 0.0075° , MIN
SPEED 0.0075°/SEC , MAX SPEED 120°/ SEC., PAN RANGE NX360-CONTINUOUS
OPTIONAL ,TILT RANGE FROM +30° TO -90 ° FROM LEVEL (120° RANGE) ,
OPERATING TEMPERATURE -30° C TO +70 ° C , OPERATING VOLTAGE 12-30VDC

PSU (POWER SUPPLY UNIT)

9-36VDC

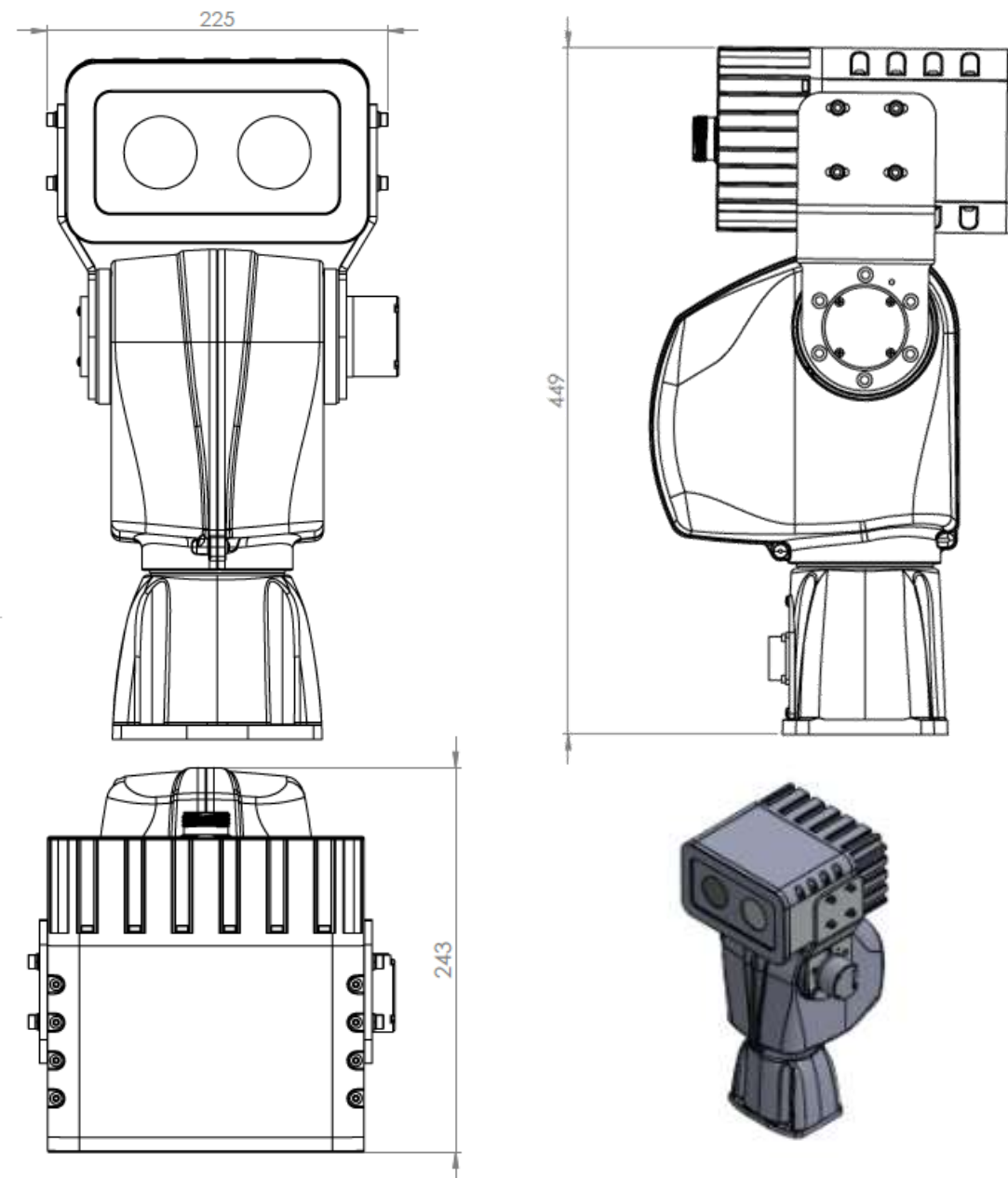
HOUSING

BLACK HARD ANODIZED ALUMINUM, IP67 Mil.STD Rugged, CNC Housing

DIMENSIONS

(LxWxH, mm) 449x225x243mm, WEIGHT 15 Kg

DIMENSIONS (mm)



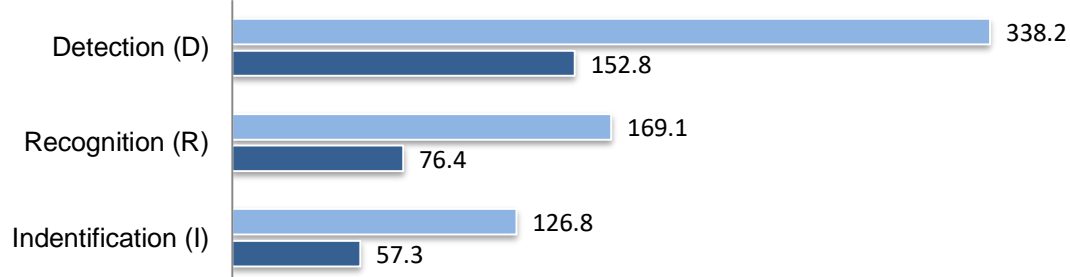
Stabilized Observation System



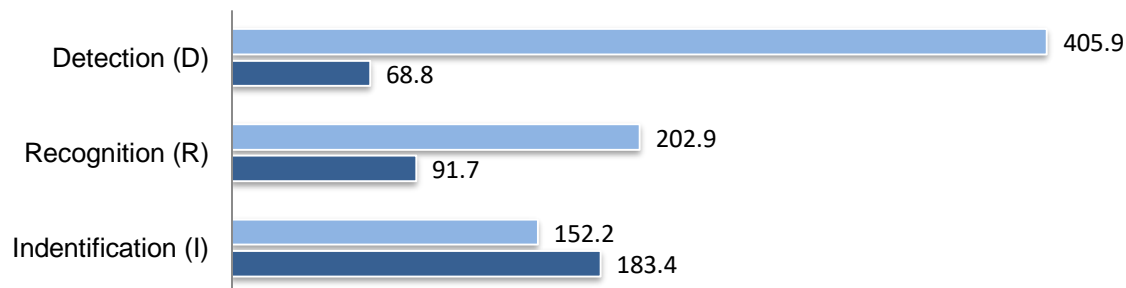
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FUSION-Z DRI (m)

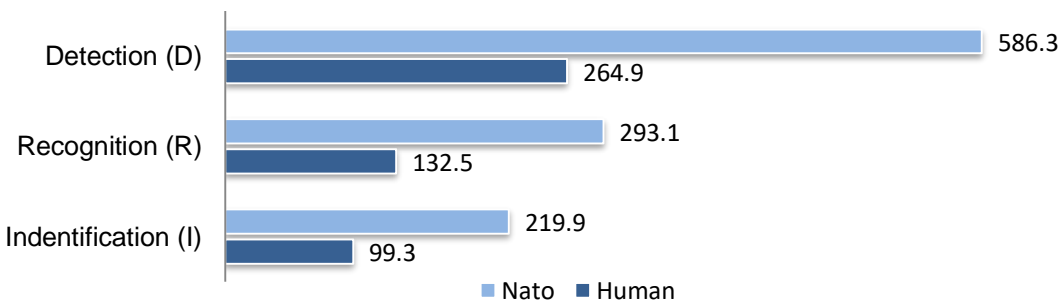
LWIR LENS 7.5mm



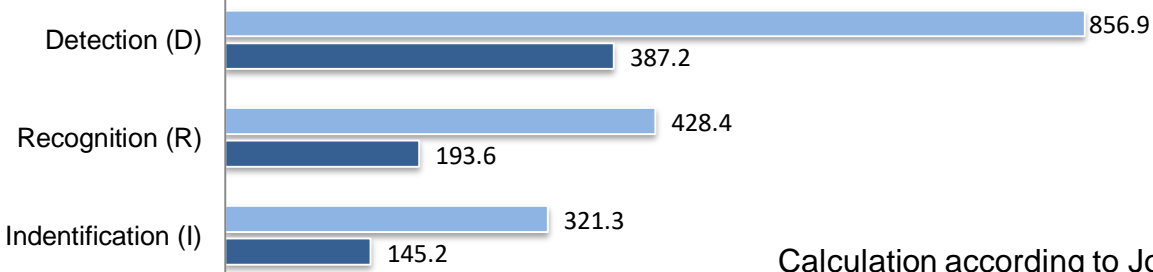
LWIR LENS 9mm



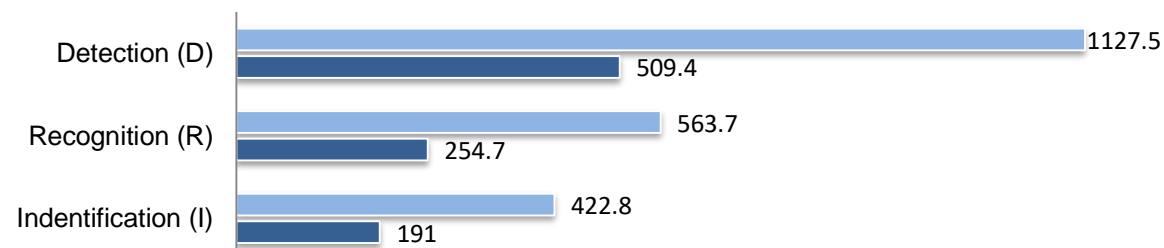
LWIR LENS 13mm



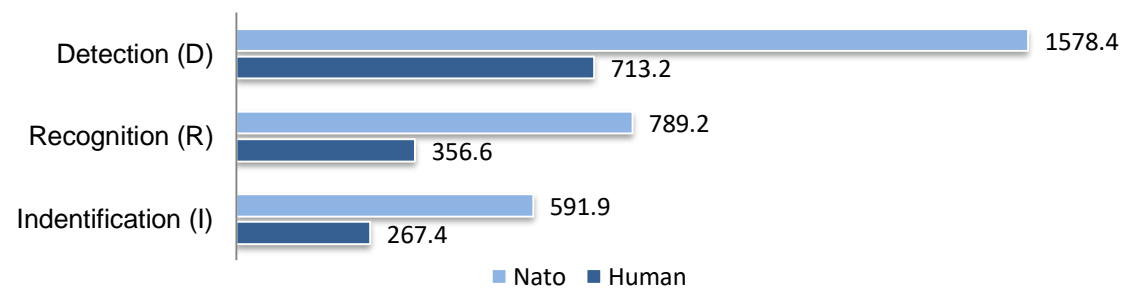
LWIR LENS 19mm



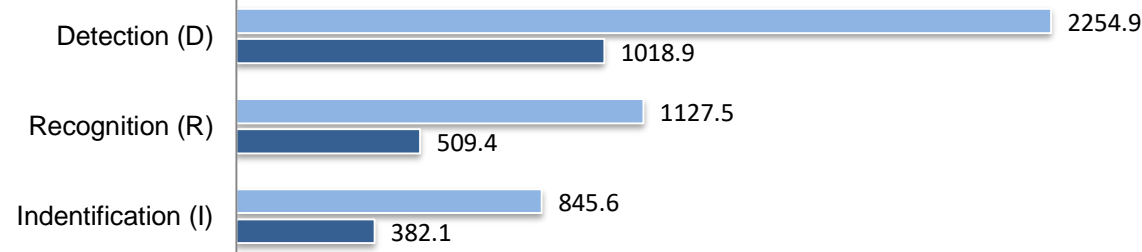
LWIR LENS 25mm



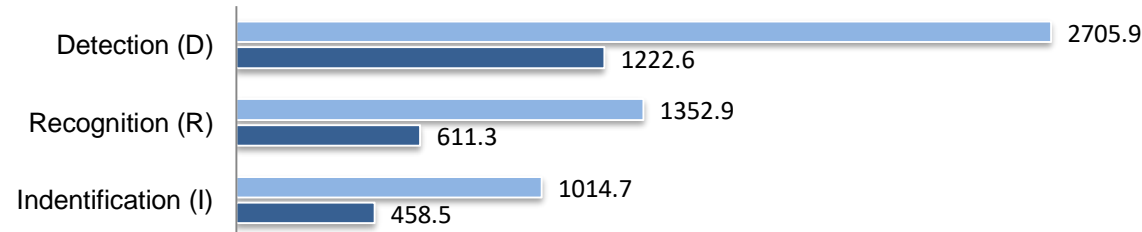
LWIR LENS 35mm



LWIR LENS 50mm



LWIR LENS 60mm



Calculation according to Johnson Criteria

Stabilized Observation System

SYSTEM OVERVIEW



FUSION-Z

#	DESCRIPTION	OPERATION
1	Day Imager x32 FHD 1080p	Day Digital Video Output
2	LWIR Imager 1280x1024	Thermal Digital Video Output
3	PTU - Tilt	-30 to 90 deg
4	PTU - Pan	360 deg cont.

FUSION-Z PART NUMBERING:

FUSION-Z-[LEN]-[POS]

[LEN] LWIR LENS
7.5mm-60mm

