

# FUZION-Z-x32-FT

## X32 Day Zoom, Fixed LWIR, Gyro\* Pan Tilt

### OVERVIEW

The system 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.



*Full HD x32  
Day Sensor*

*LWIR Sensor  
640 x 512 Pixels  
Fixed Up to 60mm Lens*

*Gyro Stabilized  
PAN TILT Platform*

# FUZION-Z-x32-FT

Rev 150821

Date 15-08-2021

## X32 Day Zoom, Fixed LWIR, Gyro\* Pan Tilt

### LWIR & DAY SENSORS

#### LWIR IMAGER

Uncooled 640 VOX Microbolometer

##### RESOLUTION (PIXELS)

17μ / 640 X 480

##### LENS TYPE

Athermalized (focus Free)

##### SPECTRAL BAND

7.5 - 14 μm

##### SENSITIVITY (NEDT)

<50 mK

##### VIDEO OUTPUT

RS-170 (30Hz) / CCIR (25Hz), 1.0V p-p, 75ohm

##### LENS TYPE

Athermalized (focus Free)

##### LWIR LENSE

7.5 to 60mm

#### DAY IMAGER

2.13MP Sony Progressing scan CMOS

##### TOTAL / EFFECTIVE PIXELS

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

COLOR : 0.05LUX (F1.6,AGC On), IRC On

##### 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

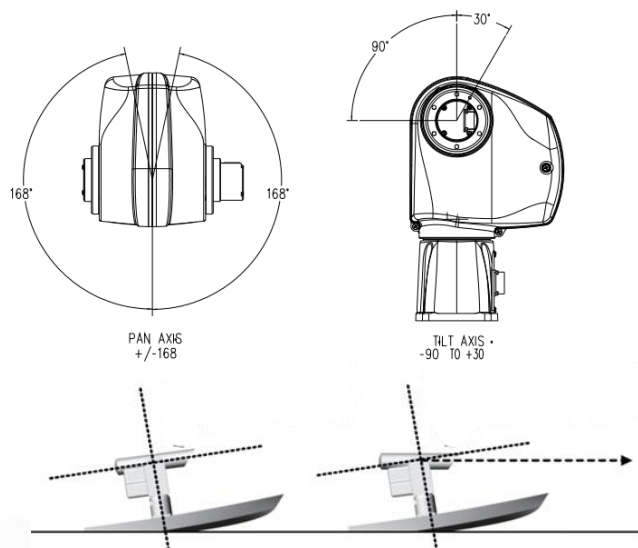
#### OPTION 1

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°

#### TILT POSITION RESOLUTION

0.0075° (with microstep)

#### MIN PAN SPEED

0.0075° / Sec.

#### MAX PAN SPEED

120° / Sec.

#### MIN TILT SPEED

0.0075° / Sec.

#### MAX TILT SPEED

120° / Sec

#### PAN RANGE

Nx360-continuous optional

#### TILT RANGE

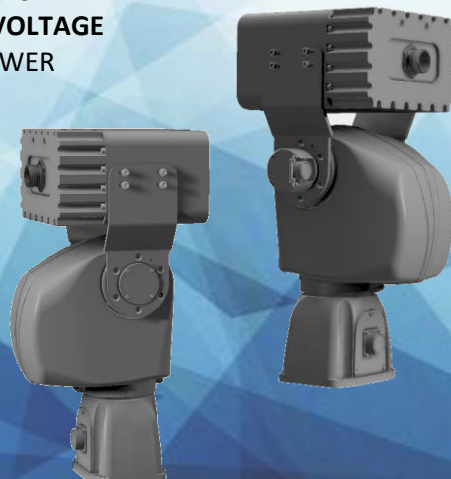
From +30° to -90° from level (120° range)

#### OPERATING TEMPERATURE

-30° C to +70° C

#### OPERATING VOLTAGE

12-30VDC POWER

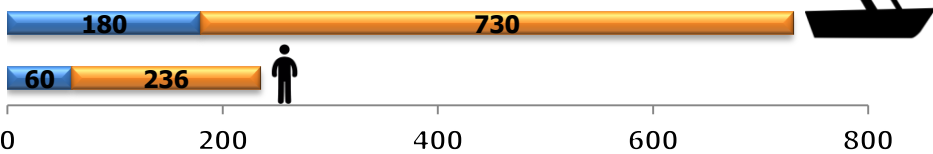


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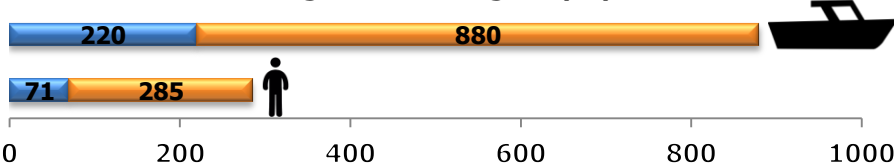
## 7.5mm Lens, 90° x 69°

Detection & Recognition Ranges (m)



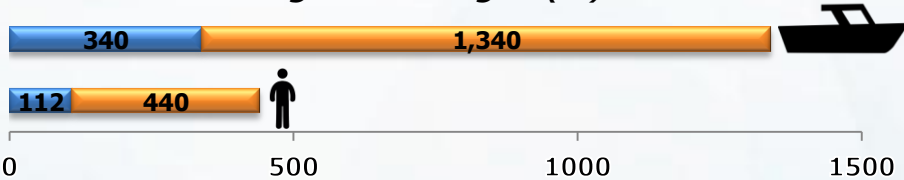
## 9mm Lens, 69° x 56°

Detection & Recognition Ranges (m)



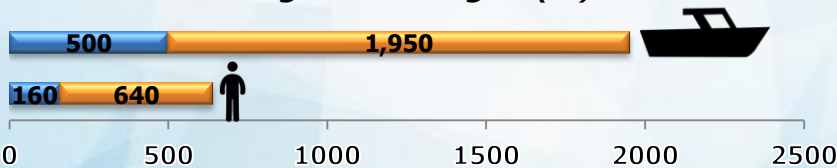
## 13mm Lens, 45° x 37°

Detection & Recognition Ranges (m)



## 19mm Lens, 32° x 26°

Detection & Recognition Ranges (m)



## 25mm Lens, 25° x 20°

Detection & Recognition Ranges (m)

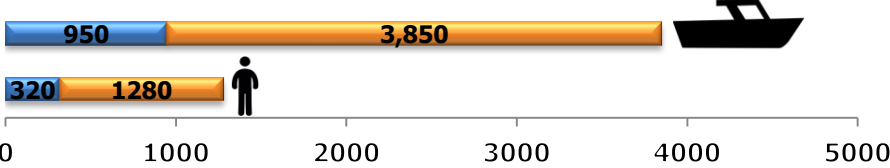


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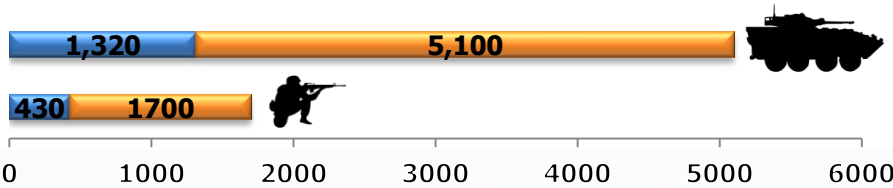
## 35mm Lens, 18° x 14°

Detection & Recognition Ranges (m)



## 50mm Lens

Detection & Recognition Ranges (m)



## 60mm Lens

Detection & Recognition Ranges (m)

