

# YHW750 IP Optical & Thermal Series

Explosion proof PTZ  
camera station



## Overview

Made from 304 or 316L stainless steel and designed specifically for use in hazardous area and harsh environmental conditions. This hard-wearing and corrosion resistant fixed thermal camera station is suitable for a variety of applications both onshore and offshore in oil & gas, marine, wind, chemical and many other industries where quality and durability are a pre-requisite.

The continuous 360° pan rotation and tilt from -90° to +90° gives an unrestricted view of the surrounding area. The belt driving gear box design keeps the movement smooth and ensures a long lifecycle use without mechanical frictions leading to internal damages.

With ONVIF protocol as standard and multiple options of optical & thermal camera blocks, the YHW750 has the operational capability for most demanding video surveillance applications.

## Features

- CNEx certified.
- Patented Ex protection design with thermal camera window.
- 304 or 316L stainless steel enclosure.
- HD IP optical imaging.
- Thermal imaging resolution 640x512 or 384x288 option available.
- Temperature measurement range: -20°C to +150°C or 0°C to +550°C.
- Work temperature -40°C to +60°C.
- IP68.



## Certifications

Ex mark:	Ex d IIC Gb, Ex tD A21 IP68 T80°C
Certificate No:	CNEx21.2455X

## Specifications

Material:	304 or 316L Stainless Steel enclosure
Finish:	Natural, polished or powder coated option available
Operating temp:	-40°C to +60°C
Atmospheric pressure:	80~110KPa
Humidity:	≤95%RH -10°C)
Automatic heater:	Activates at -10°C (±5°C)
Ingress protection:	IP68(1.2m / 45min)
Pan:	360° continuous
Pan speed:	0.1°/S to 45°/S
Tilt:	+90° to -90°
Tilt speed:	0.1°/S to 40°/S
Presets:	128
Preset accuracy:	≤0.1°
Cable entries:	2 x M25x1.5
Weight:	32Kg
Ship weight:	35Kg
Wall bracket load:	100Kg
Voltage:	110VAC to 240VAC (±10%)
Current:	≤1A
Mounting mode:	Wall mounting, base mounting

## Typical Camera Spec

### 22x zoom 3MP HD IP camera:

Image Sensor:	Progressive scan CMOS 1/2.8"
Resolution:	2304 x 1296 @ 30fps
Lens:	22x zoom 5.2~114.4mm F1.5~F3.8, angle of view 53.74° - 2.96°,
Min illumination:	Colour : 0.002Lux@(F1.5,AGC ON) B/W : 0.001Lux@(F1.5,AGC ON)
Streams:	Triple streams in H.265 / H.264
Features:	AGC, AE,AWB,TDN,DNR,BLC,EIS,WDR,Defog,OSD,Day & Night Auto Colour/BW (IR-cut with auto switch)
Standards protocols:	L2TP, IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, DNS, DDNS, NTP, FTP, UPnP, HTTP, SNMP, SIP

### 33x zoom 3MP HD IP camera:

Image Sensor:	Progressive scan CMOS 1/2.8"
Resolution:	2304 x 1296 @ 60fps
Lens:	33x zoom 4.5~148.5mm F1.5~F4.0, angle of view 56.11° - 2.67°,
Min illumination:	Colour : 0.001Lux (F1.5, AGC ON), B/W 0.0005Lux (F1.5, AGC ON)
Streams:	Triple streams in H.265 / H.264
Features:	AGC, AE,AWB,TDN,DNR,BLC,EIS,WDR,Defog,OSD,Day & Night Auto Colour/BW (IR-cut with auto switch)
Standards protocols:	L2TP, IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, DNS, DDNS, NTP, FTP, UPnP, HTTP, SNMP, SIP

### 22x zoom 5MP HD IP camera:

Image Sensor:	Progressive scan CMOS 1/2.7"
Resolution:	2880 x 1620 @ 30fps
Lens:	22x zoom 5.2~114.4mm F1.5~F3.8, angle of view 55.46° - 3.09°
Min illumination:	Colour : 0.003Lux (F1.5, AGC ON), B/W 0.001Lux (F1.5, AGC ON)
Streams:	Triple streams in H.265 / H.264
Features:	AGC, AE,AWB,TDN,DNR,BLC,EIS,WDR,Defog,OSD,Day & Night Auto Colour/BW (IR-cut with auto switch)
Standards protocols:	L2TP, IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, DNS, DDNS, NTP, FTP, UPnP, HTTP, SNMP, SIP

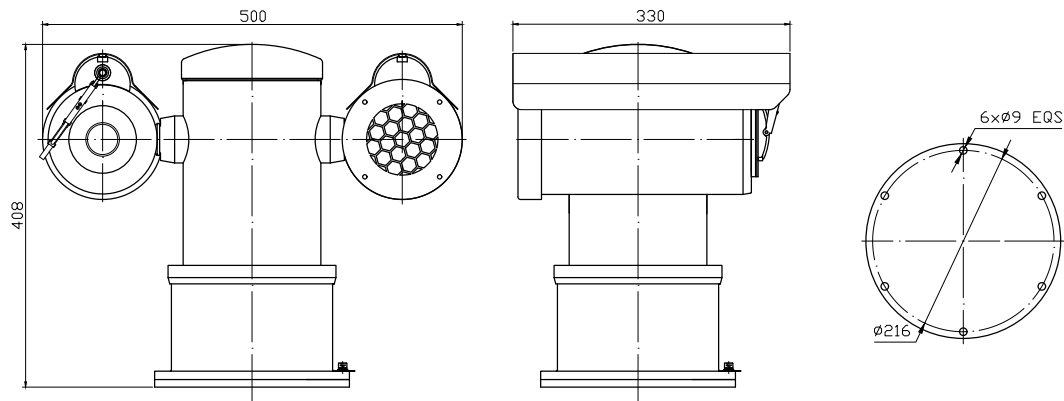
## Thermal spec and options

<b>Thermal detector</b>	Uncooled FPA detector
<b>Resolution</b>	640×512, 25HZ or 384×288, 50HZ
<b>NETD</b>	<50mK
<b>Temp. measurement range</b>	-20°C~150°C or 0°C~550°C
<b>Temp. measurement accuracy</b>	±2°C or ±2% whichever is higher
<b>Temp. measurement mode</b>	Any fixed point, Full screen max./min. temperature capture, Center spot, Line/Area analysis tool, isothermal analysis, temperature range selection
<b>Ethernet protocol</b>	Ethernet/IP, TCP, UDP, SNTP, RTSP, HTTP, ICMP, SMTP, DHCP, UPnP, PPPOE
<b>VMS compliance</b>	ONVIF, GB28181
<b>Image polarity adjustment</b>	Heat in black or white image
<b>Image palette</b>	Up to 18 palette options available
<b>Video compression</b>	H.264/265
<b>Alarm function</b>	Support configurable area, line or other individual alarms and external equipment to trigger alarms
<b>Ethernet interface</b>	Standard Ethernet RJ45 10M/100M/1000M self-adaptive
<b>Alarm interface</b>	1 alarm input and 1 alarm output.

### Options available

Resolution	Lens focus length	Field of view(H×V)	IFOV
384×288	4mm	90.3°×68.7°	4.250mrad
384×288	6.2mm	61.5°×45.7°	2.742mrad
384×288	9.7mm	37.9°×28.7°	1.753mrad
384×288	13mm	28.2°×21.3°	1.308mrad
384×288	19mm	19.5°×14.7°	0.895mrad
384×288	25mm	14.9°×11.2°	0.680mrad
384×288	35mm	10.6°×8°	0.486mrad
384×288	50mm	7.4°×5.6°	0.340mrad
640×512	4.1mm	89.8°×75.7°	2.92mrad
640×512	5.8mm	70°×57°	2.06mrad
640×512	9.1mm	48°×38°	1.31mrad
640×512	13mm	33.5°×26.9°	0.92mrad
640×512	19mm	22.9°×18.4°	0.63mrad
640×512	25mm	17.4°×14°	0.48mrad
640×512	35mm	12.5°×10°	0.34mrad
640×512	55mm	8°×6.4°	0.21mrad

## General arrangement drawing (all dimensions in mm)



# Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by the code for each selection. Any special requirement please consult Eaton technical sales department.

