Y830

OVERVIEW

Ship-mounted Optical Thermal PTZ is a high-tech night vision and forensics system designed for safe navigation of ships. It integrates infrared thermal imaging, infrared lens, telephoto multi-fold high-definition integrated movement, high-sensitivity laser range finder, the long-distance laser night vision system and the Gyro Stabilization PTZ integrated into one system. It can penetrate the night and has good performance in the smog and rain and snow environment, providing all-weather image monitoring. Equipped with advanced digital circuits and image processing algorithms, it can output delicate and smooth images. In terms of ship night flight, it is possible to monitor the obstacles and water conditions on the navigation channel in time, and use high-definition color autofocus cameras during the day to monitor distant water targets so that the driver can react quickly and protect the ship and the cargo on board safely, and the target in front can be seen through the thermal imaging component at night. The PTZ has IP66 protection grade. The PTZ body is made of aluminum alloy and light alloy material. The structure is firm and fully sealed, and the surface is resistant to oxidation and salt spray. It is resistant to typhoons and can work normally at the wind speed that below 100 kilometers / hour. Remote heating defrost, anti-frogging function, good waterproof and high temperature resistance, can adapt to all kinds of harsh environments all day work, be suitable for using on various ships and port terminals

TECHNICAL SPECIFICATIONS

Physical characteristics	
Use environment	Outdoor
Installation method	Flat base mounting, base with shock absorber
Power supply	AC24V ±10%　I_{in}≥10A
Total Power	≤150W，including heater≤350W
Temperature and humidity	-40℃~+65℃　(Except frozen, power-on state below 0 degrees); 35%～90%(Relative humidity)
Dust-proof and water-proof	IP66, Anti-rust, anti-corrosion coating, anti-salt spray at pH 6.5-7.2, continuous spraying for 24 hours
Heavy	35Kg (around)
Size	560（L）x335（W）x335（H）mm

Day Camera	
Sensor	1/1.8 CMOS, HIS 3519 + SONY IMX344
Pixel	HD 4K
Video compression format	H.265/H.264/MJPEG
Minimum illumination	0.001LuxF1.2(night)；0.01LuxF1.2(DAY)
Color B/W conversion	Day/night automatic conversion, ICR mechanical dual filter switching, external control
BLC	Auto
Gain control	Auto
White balance	Manual /Auto
Strong light suppression	support
IRIS adjustment	Support auto iris, manually adjust Iris
Lens focal length	6-540mm
Lens control	Electric zoom
Focus mode	Auto Focus / One Focus / Manual Focus
Optical zoom	90X
Digital Zoom	16 X
penetrating fog	support
Electronic image stabilization	support
Others	Penetrating fog imaging, day and night infrared correction 400-1100nm, with lens preset
Interface Protocol	ONVIF,GB28181
Thermal imaging Camera	
Sensor	Vanadium oxide uncooled infrared focal plane detector
Detector type	Alarm type uncooled
Pixel	640X512
Pixel spacing	17μm
wave response	8-14μm
Detector frequency	50HZ
Len F value	F1.0-F1.2
Optical zoom	5X ; focal length: 30-150mm
Digital zoom	8X, 1.0-8.0 continuous zoom

Field of view	4.2°-3.3°~20.6°-16.5°
focusing	Electric continuous focusing
Lens auto focus	Far and near targets can be automatically focused
Alarm	Realize image mark alarm, serial communication alarm, IO alarm
Alarm reaction time	≤0.2S
polarity	Black hot / white hot
Pseudo-color	support
Image Processing	Image Detail Enhancement (DDE), Automatic Gain Control (AGC), Digital Filter Noise Reduction
Brightness contrast adjustment	Manual / Auto
Analog video output	1ch PAL system
Digital video output	10-bit or 14-bit LVDS-H/F、10-bit or 14-bit LVCMOS、BT.656、BT.1120
Control interface	RS-232/RS-485/UART/RS-422
Omnidirectional PTZ	
Horizontal rotation speed	Constant speed 3°/s or variable speed 0-30°/s
Vertical rotation speed	Constant speed 1.5°/s or variable speed 0-25°/s
Horizontal rotation range	360° endless rotation
Vertical rotation range	±45°（adjustable）
Stable way	Support dual axis gyroscope stability
Gyro Accuracy	0.8mrad
Communication control	Rs-485/422，Pelco P、D，2400、4800、9600 optional
Keyboard control	Support joystick keyboard control
Preset	255pcs
Patrol function	8 Patrols，each patrol include 8 presets
Optical video window size	Can be customized according to the lens
Thermal imaging window	Can be customized according to the lens
Laser video window	Can be customized according to the lens
Laser ranging window	Can be customized according to the lens
Temperature control function	Automatic temperature control heating, air cooling
Glass Cover installation	Mounting screw ring on the outside of the cover glass
LRF (Laser Range Finder)	

Wave length	905nm
Max Ranging Distance	0.8KM~3KM (for Civil use)
Range method	Semiconductor laser Range
Ranging Accuracy	+/- 0.3m (depends on different distances)
Effective Objective Lens diameter	LCD display in the filed of View/Eyepiece
Focus mode	Eyepiece focusing
Lens Coating	Multi-layer Coating
LRF	3KM
Gyro: Model No. STIM210	