IPEL-P2030X-S1
2MP 30x Starlight Anti-Corrosion PTZ Network Camera

IC REALTIME

- 1/2.8" 2 Megapixel STARVIS™ CMOS
- Powerful 30x optical zoom
- Max. 60fps@1080P
- Auto tracking and IVS
- Anti-Corrosion, Stainless Steel casing
- Starlight support, no IRs (IR Sensitive)
- Supports 24VAC Or PoE+, IP68, IK10, NEMA 4x

System Overview

IC Realtime's IPEL-P2030X-S1 is rated for the toughest, most corrosive marine conditions. The IPEL-P2030X-S1 is our latest camera designed exclusively for marine applications. The IP68 rated camera is constructed entirely out of stainless steel and blocks the harshest and most abrasive environments from damaging the camera.

The PTZ features a 1080P 1/2.8" 2MP CMOS Starlight sensor producing the ultimate sharpness in video imaging, while also producing vibrant color in low light situations. Atop the imager sits a powered zoom block with a 4.5mm - 135mm motorized lens with a 30 times powered zoom. This camera also contains the latest Intelligent Video System from IC Realtime. This camera is capable of Auto tracking and AI rules such as Tripwire, intrusion, Missing or Abandoned Object, and Face Detection.

Functions

Starlight Technology
For challenging low-light applications, Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Wide Dynamic Range (WDR)
The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Auto-tracking
This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically

Smart H.265+
Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

Environmental
With a temperature range of -40 °F to +140 °F (-40 °C to +60 °C), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

Intelligent Video System (IVS)
With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a predetermined line has been crossed, ideal for business intelligence, workforce optimization, and actionable intelligence.

Interoperability
The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

Technical Specification

Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Effective Pixels	1920(H) x 1080(V), 2 Megapixels
RAM/ROM	512MB/ 128MB
Scanning System	Progressive
Electronic Shutter Speed	1/1s~1/30,000s
Minimum Illumination	Color: 0.005Lux@F1.6 B/W: 0.0005Lux@F1.6
S/N Ratio	More than 55dB
IR Distance	N/A
IR LEDs	N/A

Lens

Lens Type	4.5mm ~ 135mm
Max. Aperture	F1.6 ~ F4.4
Angle of View	H: 67.8° ~ 2.4°
Optical Zoom	30x
Focus Control	Auto/Manual
Close Focus Distance	0.32ft- 3.28ft (100mm ~ 1000mm)

PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -0° ~ 90°,auto flip 180°
Manual Control Speed	Pan: 0.1° ~300° /s; Tilt: 0.1° ~200° /s
Preset Speed	Pan: 600° /s; Tilt: 500° /s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan ,Auto Scan
Speed Setup	Human-oriented focal Length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period
Protocol	ICR-SD, Pelco-P/D (Auto recognition)

Intelligence

Auto Tracking	Supported
IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection

Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	Main stream: 1080P/1.3M/720P(1~60fps) Sub stream1: D1/CIF(1 ~ 30fps) Sub stream2: 1080P/1.3M/720P (1~30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265/H.264: 448K ~ 8192Kbps
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / WDR(120dB)
White Balance	Auto, ATW, Indoor, Outdoor, Manual

Gain Control	Auto / Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detection	Support
Region of Interest	Support
Electronic Image Stabilization (EIS)	Support
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Audio

Compression	G.711a / G.711Mu / AAC / G.722 / G.726 / MPEG2-L2

Network

Ethernet	RJ-45 (10Base-T/100Base-TX)
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x
Interoperability	ONVIF, PSIA, & CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 users
Edge Storage	Network Attached Storage (NAS) / Local PC for instant recording / Micro SD card 128GB
Web Viewer	IE, Chrome, Firefox
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

Interface

Video Interface	1 port(BNC)
Audio Interface	1/1 channel In/Out
RS485	1
Alarm I/O	7/2

Electrical

Power Supply	AC24V, 3A (±25%), PoE+ (802.3at)
Power Consumption	13W, 20W (Heater on)

Environmental

Operating Conditions	-40° F ~ +140° F (-40° C ~ +60° C) / Less than 95% RH
Ingress Protection	IP68
Vandal Resistance	IK10

Construction

Casing	316L stainless steel
Dimensions	8.7"x11.5" (222mmx 292mm)
Net Weight	13.01lb (5.9kg)
Gross Weight	24.25lb (11.0kg)

Dimensions (mm/in)

Ø47mm

292mm

Ø157mm

Ø222mm