PIX-NSP251SRA

2MP 25x Starlight IR WizSense Network PTZ Camera

WizSense

· 1/2.8" 2Megapixel STARVIS™ CMOS

· Powerful 25x optical zoom

· Starlight Technology

· Max. 50/60fps@1080P

· IR distance up to 150 m

· SMD PLUS

· Deep-learning-based perimeter protection

· Auto-tracking and IVS

· PoE+

· IP67, IK10

H.265	WDR	0.005 Lux	IP67	PoE+	Vandal-proof

Launched by Pixvideo Technology, WizSense is a series of AI products andsolutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Pixvideo's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

System Overview

Pixvideo PTZ AI network camera adopts advanced CNN deep learning algorithms to support smart capture and perimeter protection with high accuracy. Together with infrared illumination and Starlight technology, the camera is the perfect solution for dark, lowlight applications. The series combines a day/night mechanical IR cut filter for the highest image quality in variable lighting conditions during the day, and True WDR for applications with direct sunlight or glare.

Functions

Perimeter Protection
Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

Starlight Technology
For challenging low-light applications, Pixvideo's 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 featuresto balance light throughout the scene, resulting in clear images in dark environments.

PFA Technology
PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algo-rithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

Environmental
Pixvideo cameras operate in extreme temperature environments, ratedfor use in temperatures from-40 °C to +70 °C (-40 °F to +158 °F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable fordemanding outdoor applications.

Wide Dynamic Range
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.

SMD PLUS
With Deep-Learning Algorithm, Pixvideo SMD PLUS filters the motion de- tection alarm triggered by non-concerned target and recognizes humanand vehicle effectively, sending alarms when human and vehicle intrude.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Max. Resolution	1920 (H) × 1080 (V)
Pixel	2MP
ROM	4GB
RAM	1GB
Electronic Shutter Speed	1/3–1/30000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005Lux@F1.6 B/W: 0.0005Lux@F1.6 0Lux (IR light on)
Illumination Distance	150 m (492.13 ft)
Illuminator On/Off Control	Zoom Prio/Manual/SmartIR/Off
Illuminator Number	4

Lens

Focal Length	5.4 mm–135 mm
Max. Aperture	F1.6-F3.5
Field of View	H: 58.7°–3.1°; V: 33.2°–1.7°; D: 67.3°–3.9°
Optical Zoom	25x
Focus Control	Auto/Semi-Auto/Manual
Close Focus Distance	0.1 m–1.5 m (0.32 ft–4.92 ft)
Iris Control	Auto/Manual

	Detect	Observe	Recognize	Identify
DORI Distance	1655 m (5429.79 ft)	657 m (2155.51 ft)	331 m (1085.96 ft)	166 m (544.62 ft)

PTZ

Pan/Tilt Range	Pan: 0°–360°; Tilt: -15°–+90°
Manual Control Speed	Pan: 0.1°/s–300°/s; Tilt: 0.1°/s–200°/s
Preset Speed	Pan: 400°/s; Tilt: 300°/s
Presets	300
Tour	8 (up to 32 preset per tour)
Pattern	5
Scan	5
Speed Adjustment	Support
Power-off Memory	Support
Idle Motion	Preset/Tour/Pattern/Scanning
Protocol	DH-SD Pelco-P/D(Auto recognition)

General Intelligence

Event Trigger	Motion detection, video tampering, scene changing, Network disconnection, IP address conflict, illegal access, and storage anomaly.
IVS	Object Abandoned/Missing

Artificial Intelligence

Smart Capture	Support human, motor vehicle and non-motor vehicle image capture.
Perimeter Protection	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
SMD PLUS	Support
Auto Tracking	Support
Face Detection	Support

Video

Compression	H.265/H.265+/H.264+/H.264/MJPEG (Sub Stream)
Streaming Capability	3 streams
Resolution	1080P (1920 × 1080); 1.3 M (1280 × 960); 720P (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Frame Rate	Main stream: 1080P/1.3 M/720P (1–50/60 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 1080P/1.3M/720P/D1/CIF (1–25/30 fps)
Bit Rate Control	Variable/Constant
Bit Rate	H.265/H.264: 3 kbps–20480 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Support
WDR	120dB
HLC	Support
White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/Natural/Street lamp
Gain Control	Auto/Manual
Noise Reduction	2D/3D
Motion Detection	Support
Region of Interest (RoI)	Support
Image Stabilization	Electronic
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas, and up to 8 areas in the same view

Audio

Compression	G.711A;G.711Mu;G.726;AAC;MPEG2-Layer2;G.722.1;G.729;G.723

Network

Ethernet	1 RJ-45 Port 10/100Base-T
Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; Qos; FTP; SMTP; UPnP; SNMPv1/v2c/v3(MIB-2); DNS; DDNS; NTP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE; ARP; RTCP
Interoperability	ONVIF Profile S&G&T; CGI
Streaming Method	Unicast/Multicast
User/Host	20 (Total bandwidth 64M)

Storage	FTP; Micro SD card (256G); NAS
Browser	IE7 and newer versions Chrome 42 and older versions Firefox 52 and older versions Safari
Management Software	Smart Player / Smart PSS / DSS / Easy4ip
Mobile Phone	IOS/Android

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 UL:UL60950-1+CAN/CSA C22.2,No.60950-1

Port

Audio Input	1 (LINE IN; bare wire)
Audio Output	1 (LINE OUT; bare wire)
Alarm I/O	2/1

Power

Power Supply	AC24V/3A±25% POE+
Power Consumption	8W 20W (IR light on)

Environment

Operating Temperature	−40°C to +70°C (−40°F to +158°F)
Operating Humidity	≤95%RH
Protection	IP67; IK10; TVS 6000V lightning protection; surge protection

Structure

Casing	Metal
Dimensions	Φ190 mm×332 mm (7.48"×13.07")
Net Weight	4.7 kg (10.36 lb)
Gross Weight	8 kg (17.64 lb)

Ordering Information

Type	Model	Description
2MP WizSense PTZ Camera		
Accessories		

Accessories

Included:

Wall Mount Bracket

AC24V/3A
Power Adapter

Optional:

ACM228
Mount Adapter

ACM242
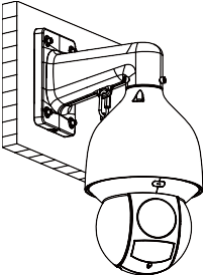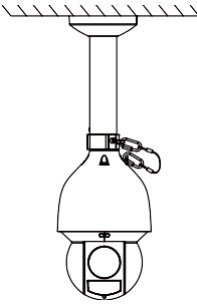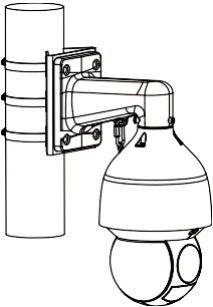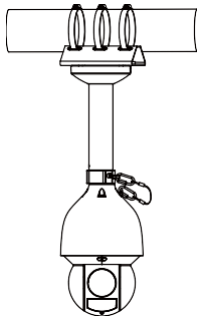Power Box

ACM211
Ceiling Mount Bracket

ACM204
Junction Box

ACM203
Pole Mount Bracket

ACM202
Corner Mount
Bracket

Wall Mount	Ceiling Mount
Pole Mount(Vertical)	Pole Mount(Horizontal)

Dimensions (mm[inch])