

Multi Layered Deep Learning Ai Analytics at Edge IP- 50 Camera Series



# STARVIS 5MP IR DOME Ai IP CAMERA IP-50303LDOV622

**About the Camera :** IP 50 Series cameras are Artificial Intelligence powered latest camera series by Wavesys. It is built on advanced system-on-chip technology from California based company Ambarella and Sony Starvis Sensors. The IP 50 series cameras are integrated with Wavesys Open Platform Enterprise Level Video Management Software WVMS. Wavesys is a video-based business intelligence leader with deep knowledge of different applications of intelligent video across distinct verticals.

#### **Key Features**

- . 30fps at 5MP
- WaveStream: Smart Compression Technology based on bit rate Control, ROI
- . Power over Ethernet (IEEE 802.3af)
- . UL, CE, FCC, BIS & RoHS Certification

- . H.265, H.264 and MJPEG compression
- . WaveVCA\*: Intelligence built-in Camera Analytics
- . IP67 and IK10 Environmental Housing
- . P Iris with Motorized Remote Zoom and Focus
- . Deep Learning Object Tracker/People Tracker

### Application









WVMS Professional - Monitoring Console



WVMS Video Content Analytics

### Specification



WVMS Enterprise - Wall & Redundancy



WVMS License Plate Recognition



WVMS Facial Recognition Module



WVMS Mobile Application

CAMERA	
Model	IP-50303LDOV622
Image Sensor	SONY STARVIS EXMOR 1/2.8" 5M CMOS
Effective Pixels	2592(H) x 1944(V)
Scanning System	Progressive scanning
AGC Control	Auto
IRIS Type	P-IRIS
Minimum Illumination	Color: 0.12 Lux / B/W : 0 Lux (IR LED On)
Lens	6 mm -22 mm F1.4
Angle of View	D:20.7°~50.8°, H:18.1°~49.3°, V:10.2°~24.3°
Shutter Time	Auto / Manual: 1/30 ~ 1/32,000, Anti-Flicker, Slow Shutter (1/2,1/3,1/5,1/6,1/7.5,1/10)
Day & Night	True Day & Night (Removable IR-cut filter)
Wide Dynamic Range	True WDR 120 dB or above
Smart Capture Technology	WaveCapture: Smart Advanced Wide Dynamic Capture for
	high details in challenging conditions
S/N Ratio	50 dB
IR ILLUMINATOR	
Smart IR	WaveIR :- Advanced Smart IR
IR LED	2 x High Power LED
IR Working Distance	Up to 30m, depend upon object size
VIDEO	
Video Compression	H.265, H.264, MJPEG
Profile	H.264 : MP / HP H.265 : MP
Multiple Profile Streaming Performance	2592x1944/30 + 480p30 with H.264, H265 + MJPEG
renonnance	2352x1344/30 + 400p30 within 204, 1203 + Will Ed
Max Resolution	2592 x 1944
Max Resolution	2592 x 1944
Max Resolution	2592 x 1944 100Kbps ~ 10Mbps
Max Resolution Video Bit Rate	2592 x 1944 100Kbps ~ 10Mbps Multi-rate for Preview and Recording
Max Resolution Video Bit Rate	2592 x 1944 100Kbps ~ 10Mbps Multi-rate for Preview and Recording Multi Streaming CBR/VBR
Max Resolution Video Bit Rate Bitrate Control	2592 x 1944 100Kbps ~ 10Mbps Multi-rate for Preview and Recording Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth)
Max Resolution Video Bit Rate Bitrate Control Digital Noise Reduction	2592 x 1944 100Kbps ~ 10Mbps Multi-rate for Preview and Recording Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth) 3D-DNR
Max Resolution Video Bit Rate Bitrate Control Digital Noise Reduction Privacy Mask	2592 x 1944 100Kbps ~ 10Mbps Multi-rate for Preview and Recording Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth) 3D-DNR 16 programmable zones
Max Resolution Video Bit Rate Bitrate Control Digital Noise Reduction Privacy Mask	2592 x 1944 100Kbps ~ 10Mbps Multi-rate for Preview and Recording Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth) 3D-DNR 16 programmable zones WaveStream: Smart Compression Technology based on bit
Max Resolution Video Bit Rate Bitrate Control Digital Noise Reduction Privacy Mask Special Features	2592 x 1944 100Kbps ~ 10Mbps Multi-rate for Preview and Recording Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth) 3D-DNR 16 programmable zones WaveStream: Smart Compression Technology based on bit rate Control- Region of Interest
Max Resolution Video Bit Rate Bitrate Control Digital Noise Reduction Privacy Mask Special Features Other Image Processing	2592 x 1944 100Kbps ~ 10Mbps Multi-rate for Preview and Recording Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth) 3D-DNR 16 programmable zones WaveStream: Smart Compression Technology based on bit rate Control- Region of Interest Configurable Exposure, White Balance, Sharpness

AUDIO	
Audio Streaming	Two way
Audio Compression	G.711
Audio input / output	1/1
EVENT	
Event Trigger	Motion Alarm, Temperature critical, DI
Smart Edge Analytics*	WaveVCA: Intelligence built-in Cameras Analytics*
Pre-Post Recording	Pre: 1~5 sec Post:
	1~240 sec
Event Notification	FTP, E-mail, Alarm-out, SD card
NETWORK	
Ethernet Standard	10 / 100 / 1000Base-T
IP	IPv4
	TCP/IP, UDP, AutoIP, RTP(UDP/TCP), RTSP, NTP, HTTP,
Protocol	HTTPS, SSL, DNS, DDNS, DHCP, FTP, SMTP, ICMP,
	SNMPv1/v2/v3(MIB-2), ONVIF
Security	HTTPS(SSL), IP filtering, 802.1x, Digest Authentication
Plug In	ONVIF Profile S, CGI API
GENERAL	
Material	Aluminum Die-casting, White
External I/O Terminals	1 x Alarm In / 1 x Alarm Out
Language on webpage	English
Power Source	DC12V, PoE(IEEE 802.3af)
	DC Max 13.1W
Power Consumption	PoE Max 15.0W
Operating Conditions	Humidity 10 ~ 90% RH (non-condensing)
	[DC12V / PoE] -30°C ~ 50°C (-22°F ~ 122°F)
Approvals	FCC, CE, IP67, IK10,UL
NDAA	Compliant
Weight	1.42 kg
	146mm x130mm
Dimensions (D x H)	1401111 X15011111
Dimensions (D x H) EDGE STORAGE	
, ,	1x microSD / microSDHC / microSDXC
EDGE STORAGE	



#### WaveVCA : Intelligence built-in Cameras Analytics

#### **Basic features**

Analytics Engine WVCA Technology's advanced tracking algorithm with rich library of detection behaviors

Detection Zones and Rules 40 zones (Multi-segment Polygons and Lines) in total, 60 rules in total as standard

Intrusion Detection Detection of the presence an object

Tamper Detection Supported as standard Detection Behavior Enter, Exit, Appear, Disappear, Stop, Direction, Dwell filter, Abandoned/Removed object filter, Tailgating Logical Rules Extends standard rules to allow various combinations of the inputs **3D Behavior** Perspective Corrected Size and **Speed Filters** 

**Object Classification** - Configured Max./Min. object sizes and Max./Min. speeds Counting Line High accuracy people and vehicle counting, 20 counters in total Meta Data JSON format, Plain XML format

**Optional features** 

**Enter Filter** 



**Appear Filter** 

**Dwell Filter** 

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**Stopped Filter** 

**3D** Calibration

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Counting

**Disappear Filter** 





**Tailgating Filter** 



Exit Filter

**Removed Object** Filter

Logical Rules

•••: Abandoned **Object Filter** 



**DL Object tracker** 





**Forensic Search** 

**DL People Tracker** 



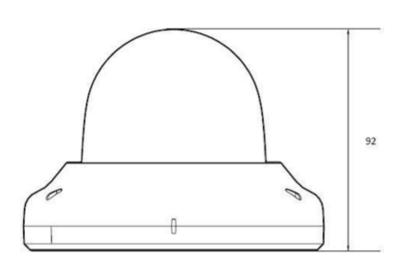
**Forensic Search** 

Forensic Search Works with age, sentiment, gender, and ethnicity estimation





## **Dimensions**



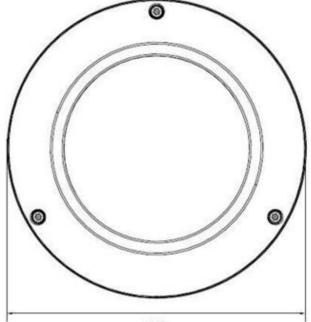




BW10



**BP04** 



ø125



BC10







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