



EVOKING TRUST



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



STARVIS 8MP IR Bullet Ai IP CAMERA

IP-50503LBOV622



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 IP50 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.

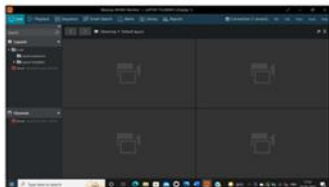
Key Features

- . 30fps at 8MP
- . 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



Key features of WVMS



WVMS Professional – Monitoring Console



WVMS Enterprise – Wall & Redundancy



WVMS Facial Recognition Module



WVMS Video Content Analytics



WVMS License Plate Recognition



WVMS Mobile Application

Specification

CAMERA	
Model	IP-50503LBOV622
Image Sensor	SONY STARVIS EXMOR 1/2.8" 8.6 M CMOS
Effective Pixels	3864(H) X 2228(V)
Scanning System	Progressive scanning
AGC Control	Auto
IRIS Type	P-IRIS
Minimum Illumination	COLOR: 0.05Lux,BW: 0Lux with IR
Lens	6mm-22 mm, F1.6
Angle of View	D:20.7°~49.6°, H:16.5°~39.2°, V:12.4°~29.2
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 ,120dB 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	6x High Power LED
IR Working Distance	35 m,depend upon the object size
VIDEO	
Video Compression	H.265, H.264, MJPEG
Profile	H.264 : MP / HP H.265 : MP
Multiple Profile Streaming Performance	3840x2160/30 + 800x600/30 with H.264,H265 + MJPEG
Max Resolution	3840(H) X 2160(V)
Video Bit Rate	100Kbps ~ 10Mbps
Bitrate Control	Multi-rate for Preview and Recording Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth)
Digital Noise Reduction	3D-DNR
Privacy Mask	16 programmable zones
Special Features	WaveStream: Smart Compression Technology based on bit rate Control- Region of Interest
Other Image Processing	Configurable Exposure, White Balance, Sharpness
Image Orientation	Flip / Mirror / Corridor Mode
Analogue Output	1 (Installation only) CVBS 1.0V p-p (75Ω), 4:3 aspect ratio

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
Protocol	TCP/IP, UDP, AutoIP, RTP(UDP/TCP), RTSP, NTP, HTTP, 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 802.3at Class 4) DC Max 8.8W PoE Max 11.1W
Power Consumption	PoE Max 11.1W
Operating Conditions	Humidity 10 ~ 90% RH (non-condensing) [DC12V / PoE] -20°C ~ 50°C (-40°F ~ 122°F)
Cold Start	Supported
Approvals	FCC, CE, IP67, IK10,UL
NDAA	Compliant
Weight	1.2kg
Dimensions (D x H)	310mm x 97mm
EDGE STORAGE	
Storage	1x microSD / microSDHC / microSDXC (card not included)



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

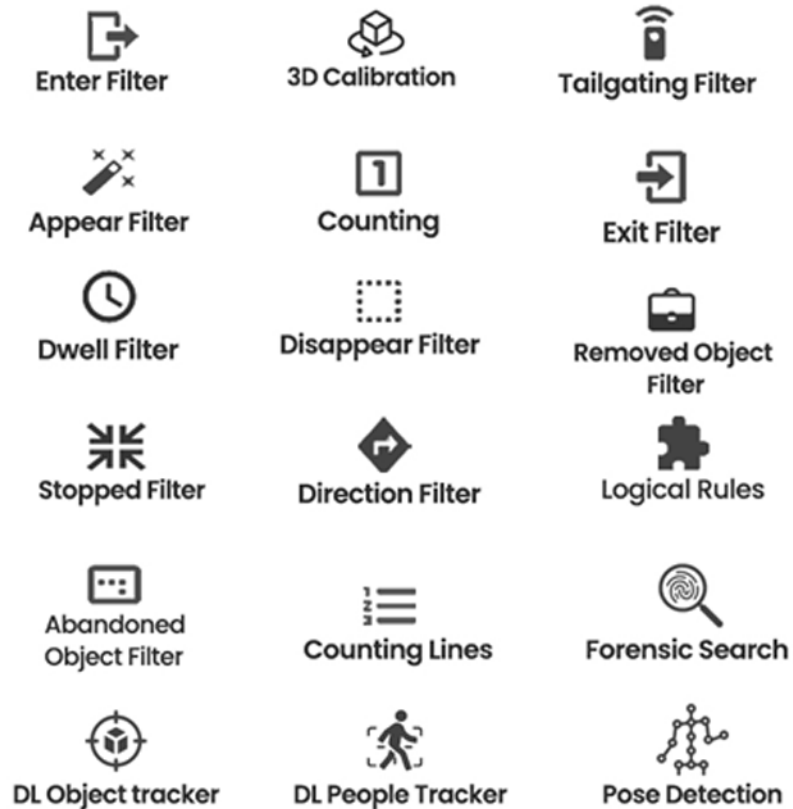
Detection Behavior Enter, Exit, Appear, Disappear, Stop, Direction, Dwell filter, Abandoned/Removed object filter, Tailgating

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

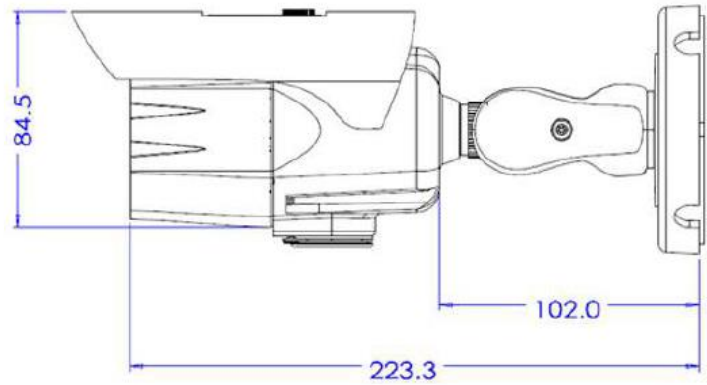
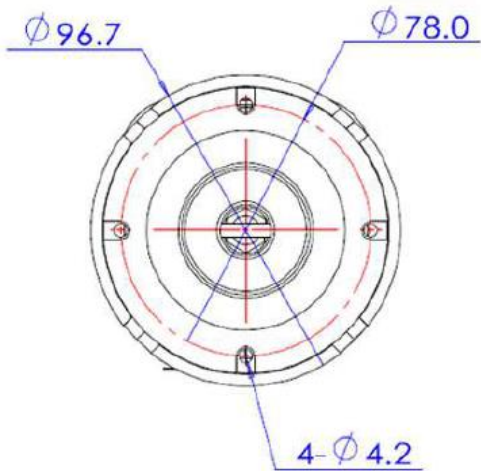


Optional features

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



Dimensions



ACCESSORIES



BP07