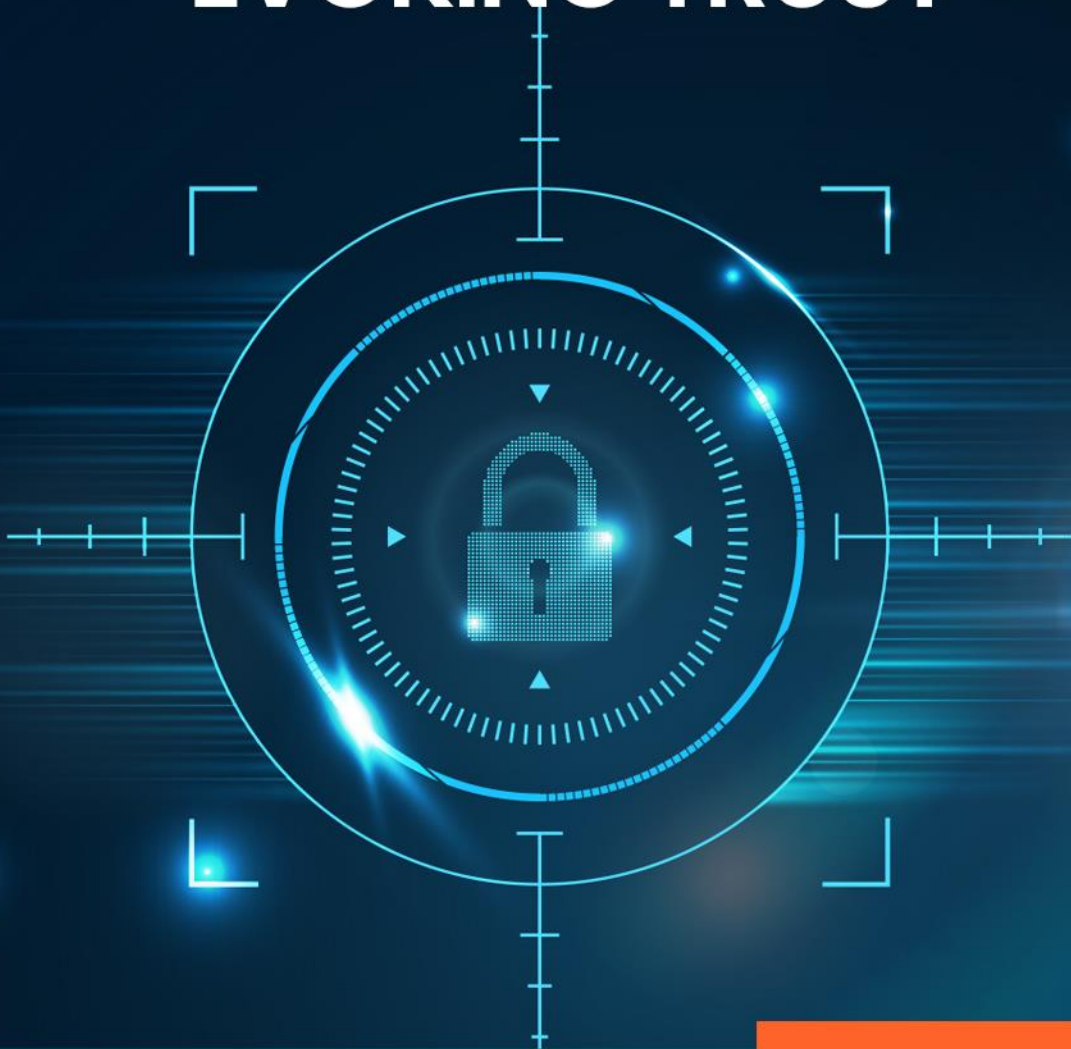




EVOKING TRUST



**Intelligent Video
Analysis at Edge
IP-30 Camera Series**



STARVIS 8MP IR Bullet IP CAMERA

IP-30503LBO



About the Camera : IP 30 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 IP30 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.

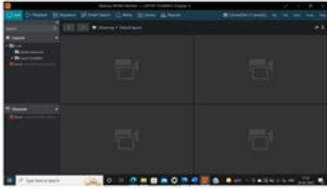
Key Features

- . 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 IK09 Environmental Housing
- . P Iris with Motorized Remote Zoom and Focus

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-30503LBO
Image Sensor	SONY STARVIS EXMOR 1/2.8" 8.29M CMOS
Effective Pixels	3840(H) x 2160(V)
Scanning System	Progressive scanning
AGC Control	Auto
IRIS Type	P-IRIS
Minimum Illumination	Color: 0.09 Lux / B/W : 0 Lux (IR LED On)
Lens	2.7 – 13.5 mm, F1.4
Angle of View	Horizontal: Approx. 96°, Vertical: Approx. 31°
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(Max. 15fps when WDR is on)
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	6 x High Power LED
IR Working Distance	40 -50 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	3840x2160p30 + 480p30 with H.264,H265 + MJPEG
Max Resolution	3840x2160
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 u-law 8KHz, AAC-LC 48Kbps at 8KHz
Audio input	Line in, Supply voltage : 3VDC(3mA), Input impedance : 3K Ohm
Audio output	Line Out, MAX. Output Level : 1Vrms
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)
Power Consumption	DC12V Max 9W, PoE Max 10.5W
Operating Conditions	Humidity 10 ~ 90% RH (non-condensing) [DC12V / PoE] -40°C ~ 50°C (-40°F ~ 122°F)
Cold Start	Supported
Approvals	FCC, CE, IP67, IK10
NDAA	Compliant
Weight	1.2 kg
Dimensions (D x H)	309.8mm x 96.7mm
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 of an object

Tamper Detection Supported as standard



Intrusion Detection



Tamper Detection



Zones & lines

Optional features

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



Enter Filter



3D Calibration



Tailgating Filter



Appear Filter



Counting



Exit Filter



Dwell Filter



Disappear Filter



Removed Object Filter



Stopped Filter



Direction Filter



Logical Rules

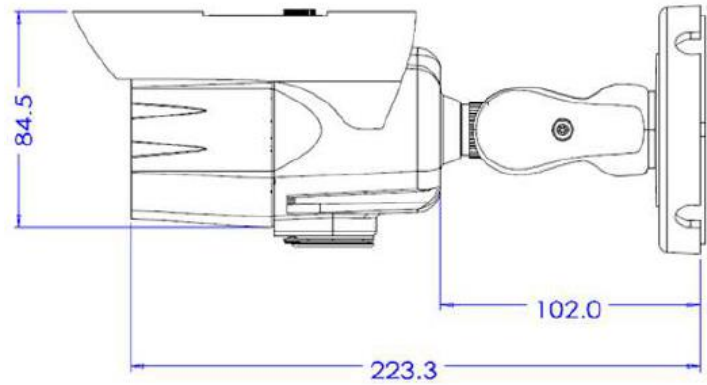
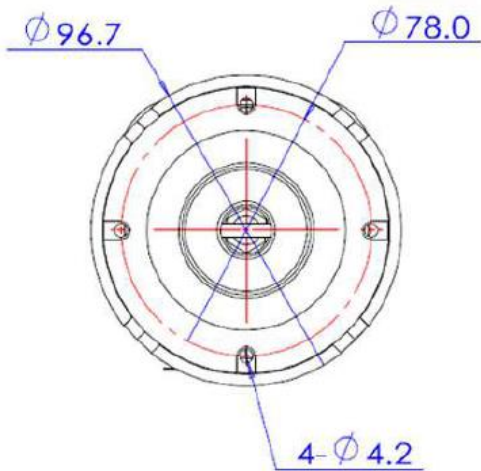


Abandoned Object Filter



Counting Lines

Dimensions



ACCESSORIES



BP07