



**EVOKING TRUST**



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



# STARVIS 4K 180° IR BULLET IP CAMERA IP-30501LBO



**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.

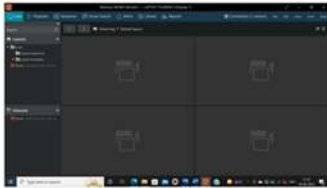
## Key Features

- 30fps at 8MP
- WaveStream: Smart Compression Technology based on bit rate Control, ROI
- True Day/Night and WDR
- UL, CE, FCC, BIS & RoHS Certification
- H.265, H.264 and MJPEG compression
- WaveVCA\*: Intelligence built-in Camera Analytics
- IP67 and IK10 Environmental Housing
- Power over Ethernet (IEEE 802.3af)

## 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

<b>Model</b>	<b>IP-30501LBO</b>
Image Sensor	SONY STARVIS EXMOR 1/1.8" 8.5M CMOS
Effective Pixels	3840(H) x 2160(V)
Scanning System	Progressive scanning
AGC Control	Auto
IRIS Type	Auto Exposure
Minimum Illumination	Color: 0.29 Lux / B/W: 0 Lux (IR LED On)
Lens	2.3mm, F2.8
Angle of View	Horizontal: Approx. 180°, Vertical: Approx. 80°
Shutter Speed	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 (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
<b>IR ILLUMINATOR</b>	
IR LED	4 x High Power LED
Smart IR	WaveIR :- Advanced Smart IR
IR Working Distance	25M
<b>VIDEO</b>	
Video Compression	H.265, H.264, MJPEG
Profile	H.264 : MP / HP , H.265: MP
Multiple Profile Streaming	3840x2160p30 + 480p30 with H.264,H265 + MJPEG
Max Resolution	3840 x 2160
Video Bit Rate	100Kbps ~ 10Mbps Multi-rate for Preview and Recording
Bitrate Control	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

#### AUDIO

Audio Streaming	Two way
Audio Compression	G.711
Audio input / output	1/1
<b>EVENT</b>	
Event Trigger	Motion Alarm, Temperature critical, DI
Pre-Post Recording	Pre: 1~5 sec Post: 1~240 sec
Event Notification	FTP, E-mail, Alarm-out, SD card
Smart Edge Analytics	WaveVCA: Intelligence built-in Cameras Analytics
<b>NETWORK</b>	
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.Ix, Digest Authentication
Plug In	ONVIF Profile S, CGI API
<b>GENERAL</b>	
Material	Aluminum Die-casting, White
External I/O Terminals	1 x Alarm In / 1 x Alarm Out
Language on web page	English
Power Source	DC12V, PoE(IEEE 802.3af)
Power Consumption	Max 8.9W, PoE Max 12.3W
Operating Conditions	Humidity 10 ~ 90% RH (non-condensing) [DC12V / PoE] -30°C ~ 50°C (-22°F ~ 122°F)
Approvals	FCC, CE, IP67, IK09,UL
Weight	0.97 kg
Dimensions(D x H)	228mm x 96.7mm
NDAA	Compliant
<b>EDGE STORAGE</b>	
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



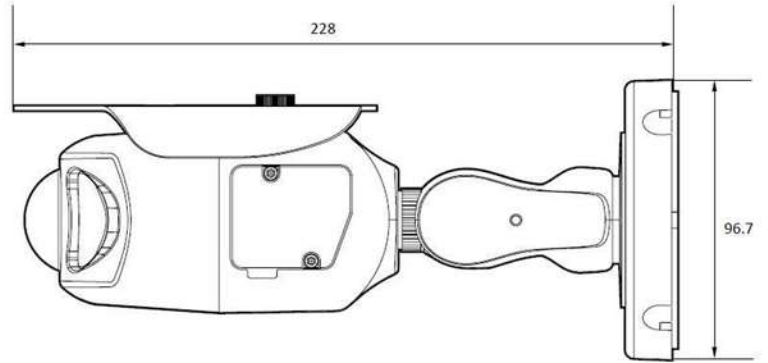
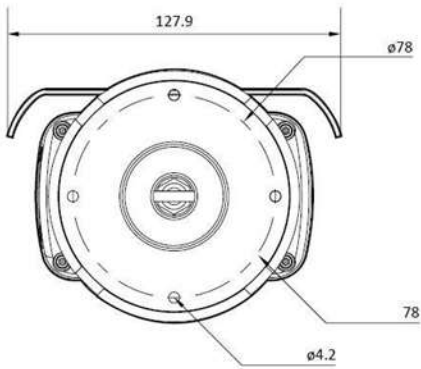
Abandoned Object Filter



Counting Lines



**DIMENSIONS**



**ACCESSORIES**



BP01



BCO01



BJC07