



**EVOKING TRUST**



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



# STARVIS 5MP IR BULLET IP CAMERA IP-30303LBO-V650



**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

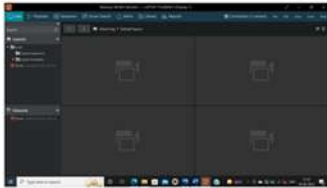
- 30fps at 5MP
- P Iris with Motorized Remote Zoom and Focus
- WaveVCA\*: Intelligence built-in Camera Analytic
- Power over Ethernet (IEEE 802.3af)
- UL, CE, FCC, BIS & RoHS Certification
- H.265, H.264 and MJPEG compression
- WaveStream: Smart Compression Technology based on bit rate Control, ROI
- IP67 and IK10 Environmental Housing

## 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-30303LBO-V650</b><br>Outdoor , Motorized Focus & Zoom lens   |
| Image Sensor                           | SONY STARVIS EXMOR 1/2.8" 2.1M CMOS  |
| Effective Pixels                       | 2592 (H) x 1944 (V)  |
| Scanning System                        | Progressive scanning   |
| AGC Control                            | Auto   |
| IRIS Type                              | P-IRIS   |
| Minimum Illumination                   | Color : 0.08 Lux / BW : 0 Lux (IR LED ON)  |
| Lens                                   | 6-50mm , F1.6  |
| Angle of View                          | Dimension: Approx. 52° (Wide) to 8.6° (Tele)<br>Horizontal: Approx. 40.8° (Wide) to 6.9° (Tele)<br>Vertical: Approx. 30.2° (Wide) to 5.2° (Tele) |
| Shutter Speed                          | Auto / Manual (1/15 ~ 1/60000), Slow Shutter (off, 2x-8x)  |
| 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  |
| <b>IR ILLUMINATOR</b>                  |  |
| Smart IR                               | WaveIR :- Advanced Smart IR  |
| IR Working Distance                    | 120ft-140 ft Depending upon object size  |
| <b>VIDEO</b>                           |  |
| Video Compression                      | H.265, H.264, MJPEG  |
| Profile                                | H.264: MP / HP, H.265: MP  |
| Multiple Profile Streaming Performance | 4:3Mode: 2592x1944/30 + 480p30 with H.264, H.265 + MJPEG<br>16:9 Mode: 1440p30 + 480p30 with H.264, H.265 + MJPEG                                |
| Max Resolution                         | 2592 x 1944  |
| Video Bit Rate                         | 100Kbps ~ 10Mbps Multi-rate for Preview and Recording  |
| Bitrate Control                        | Multi Streaming CBR/VBR<br>(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  |

#### AUDIO

|                   |                    |
|-------------------|--------------------|
| Audio Streaming   | 2 Way              |
| Audio Compression | G.711              |
| Audio input       | 1[1.0Vrms, 3K ohm] |
| Audio Output      | 1                  |

#### EVENT

|                       |   |
|-----------------------|---|
| Event Trigger         | Motion Alarm, Temperature critical, Network disconnection |
| Smart Edge Analytics* | WaveVCA: Intelligence built-in Cameras Analytics*         |
| Pre-Post Recording    | Pre: 1-5 sec<br>Post: 1-240 sec                           |
| Event Notification    | FTP, E-mail, Alarm-out, SD card                           |

#### NETWORK

|                   |  |
|-------------------|--|
| Ethernet Standard | 10 / 100 Base-T  |
| 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 Plug In  | HTTPS(SSL), IP filtering, 802.1x, Digest Authentication, ONVIF Profile S, CGI API  |

#### GENERAL

|                              |   |
|------------------------------|---|
| Material                     | Aluminum Die-casting, White   |
| Housing Environmental Rating | IP66  |
| Housing Impact Rating        | IK10  |
| External I/O Terminals       | 1 x Alarm In / 1 x Alarm Out  |
| Power Source                 | DC12V, PoE(IEEE 802.3af)  |
| Power Consumption            | DC12V Max 9W, PoE Max 10.5W   |
| Operating Conditions         | Humidity 10 ~ 90% RH (non-condensing)<br>[DC12V / PoE] -40°C ~ 50°C (-40°F ~ 122°F) |
| Approvals                    | UL,FCC, CE, ROHS, BIS   |
| Weight                       | 0.9 kg  |
| Dimensions(D x H)            | 247.2mm x 96.7mm  |

#### EDGE STORAGE

|         |   |
|---------|---|
| Storage | 1 x MicroSD/microSDHC (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



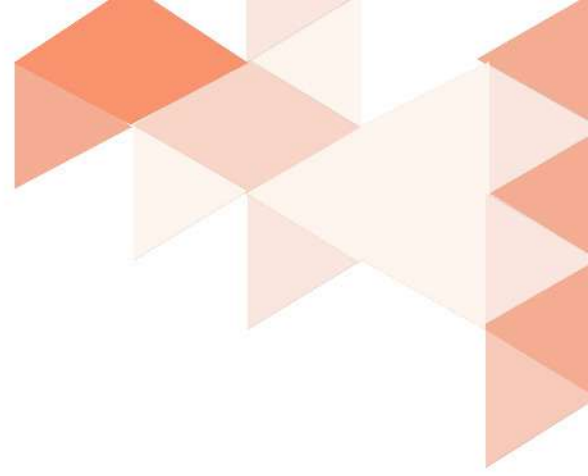
Logical Rules



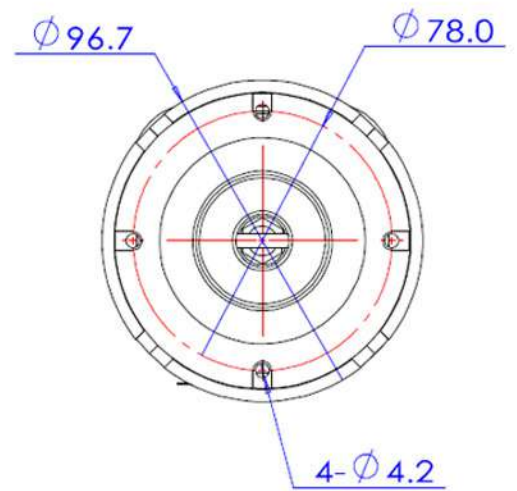
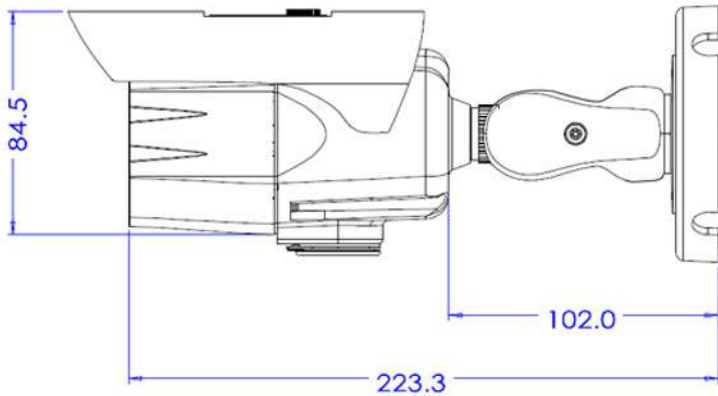
Abandoned Object Filter



Counting Lines



## DIMENSIONS



## ACCESSORIES



W-BP07