



**EVOKING TRUST**



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



## 20MP 360° SURROUND VIEW IP CAMERA

### IP-30303LDO4



**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

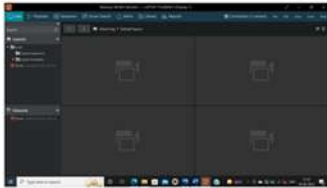
- 4 x 5MP(20MP), 30fps at 5MP per sensor
- Flexible positioning for four camera heads
- One IP Address for four cameras
- IP67 and IK10 Environmental Housing
- H.265, H.264 and MJPEG compression
- Easy position setting by a magnet
- Power over Ethernet (IEEE 802.3af)
- UL, CE, FCC, BIS & RoHS Certification

### 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>	IP-30303LDO-4 Surround View, Motorized Focus & Zoom lens
<b>Image Sensor</b>	4 x SONY STARVIS EXMOR 1/2.8" 5M CMOS
<b>Effective Pixels</b>	2592(H) x 1944(V) per sensor
<b>Scanning System</b>	Progressive scanning
<b>AGC Control</b>	Auto
<b>IRIS Type</b>	Auto Exposure
<b>Minimum Illumination</b>	Color: 0.13 Lux / B/W : 0.005 Lux
<b>Lens</b>	2.8 – 8 mm, F1.6
<b>Angle of View</b>	Horizontal: Approx. 93° (Wide) to 51° (Tele)
<b>Shutter Time</b>	Auto / Manual: 1/30 ~ 1/32,000, Anti-Flicker, Slow Shutter (1/2,1/3,1/5,1/6,1/7.5,1/10)
<b>Day &amp; Night</b>	True Day & Night (Removable IR-cut filter)
<b>Wide Dynamic Range</b>	True WDR, 120 dB or above
<b>Smart Capture Technology</b>	WaveCapture: Smart Advanced Wide Dynamic Capture for high details in challenging conditions
<b>S/N Ratio</b>	50 dB
<b>VIDEO</b>	
<b>Video Compression</b>	H.265, H.264, MJPEG
<b>Profile</b>	H.264: MP / HPH. H.265: MP
<b>Multiple Profile Streaming Performance</b>	2592x1944/30 + 480p30 with H.264,H265 + MJPEG
<b>Max Resolution</b>	2592 x 1944
<b>Video Bit Rate</b>	100Kbps ~ 10Mbps Multi-rate for Preview and Recording
<b>Bitrate Control</b>	Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth)
<b>Digital Noise Reduction</b>	3D-DNR
<b>Privacy Mask</b>	16 programmable zones
<b>Special Features</b>	Wavestream: Smart Compression Technology based on bit rate Control-Region of Interest
<b>Other Image Processing</b>	Configurable Exposure, White Balance, Sharpness

<b>Analogue Output</b>	1 (Installation only) CVBS 1.0V p-p (75Ω), 4:3 aspect ratio ,Camera selectable
<b>AUDIO</b>	
<b>Audio Compression</b>	G.711
<b>Audio input / output</b>	1 / 1 (For the 1st Camera)
<b>EVENT</b>	
<b>Event Trigger</b>	Motion Alarm, Temperature critical, DI
<b>Pre-Post Recording</b>	Pre: 1-5 sec Post: 1-240 sec
<b>Smart Edge Analytics</b>	WaveVCA: Intelligence built-in Cameras Analytics
<b>Event Notification</b>	FTP, E-mail, Alarm-out, SD card
<b>NETWORK</b>	
<b>Ethernet Standard</b>	10/100/1000Base-T(1Gbps)
<b>Protocol</b>	TCP/IP, UDP, AutoIP, RTP(UDP/TCP), RTSP, NTP, HTTP, HTTPS, SSL, DNS, DDNS, DHCP, FTP, SMTP, ICMP, SNMPv1/v2/v3(MIB-2), ONVIF
<b>Security</b>	HTTPS(SSL), IP filtering, 802.1x, Digest Authentication
<b>Plug In</b>	ONVIF Profile S, CGI API
<b>GENERAL</b>	
<b>Material</b>	Aluminum Die-casting, White
<b>External I/O Terminals</b>	1 x Alarm In / 1 x Alarm Out (For the 1st Camera)
<b>Language on webpage</b>	English
<b>Power Source</b>	DC12V, Ultra PoE(IEEE 802.3bt Class5)
<b>Power Consumption</b>	Max 28W, PoE Max 31W
<b>Operating Conditions</b>	Humidity 10 ~ 90% RH (non-condensing) [DC12V / PoE] -30°C ~ 50°C (-22°F ~ 122°F)
<b>Approvals</b>	FCC, CE, IP67,IK10
<b>Weight</b>	2.1 kg
<b>Dimensions (D x W)</b>	Ø210mm x 92mm
<b>EDGE STORAGE</b>	
<b>Storage</b>	4 x 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



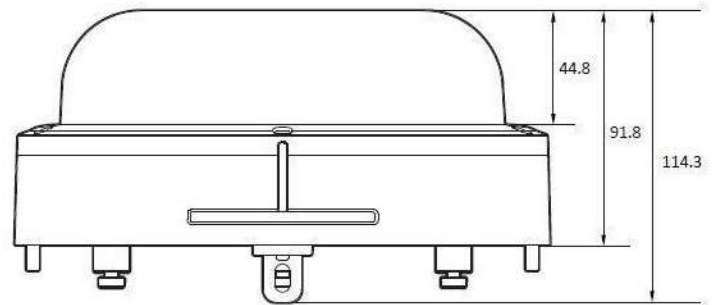
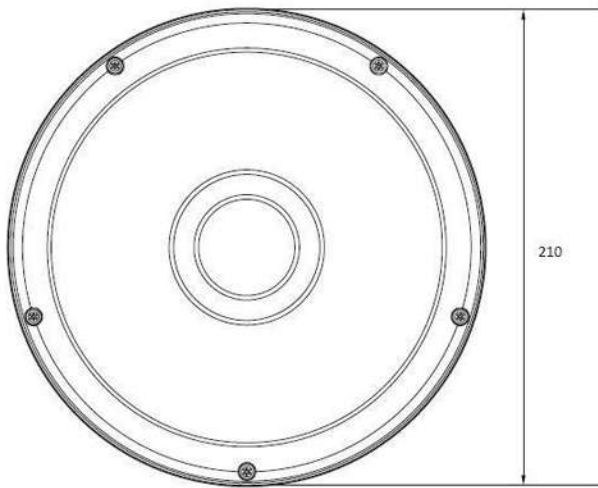
Abandoned Object Filter



Counting Lines



## DIMENSIONS



## ACCESSORIES



**BJC06**



**BC15**



**BW15**



**BCO01**



**BP01**