



EVOKING TRUST



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



STARVIS 2MP IR BULLET IP CAMERA

IP-30203LBO-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.

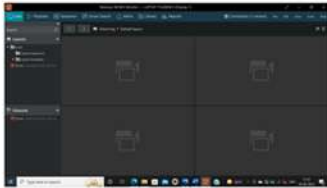
Key Features

- Full HD 1080p 30fps
- 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 License Plate Recognition



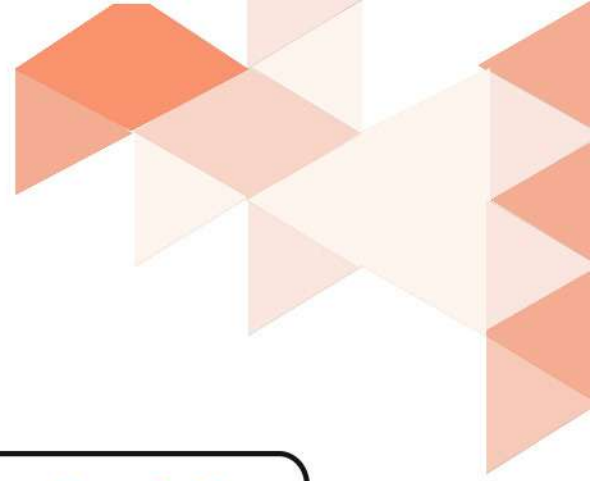
WVMS Mobile Application

Specification

Camera

Model	IP-30203LBO -V650 Outdoor , Motorized Focus & Zoom lens
Image Sensor	SONY STARVIS EXMOR 1/2.8" 2.1M CMOS
Effective Pixels	1945(H) x 1109(V)
Scanning System	Progressive scanning
AGC Control	Auto
IRIS Type	P-IRIS
Minimum Illumination	Color : 0.02 Lux / BW : 0 Lux (IRLED ON)
Lens	6mm-50mm , F1.6
Angle of View	Dimension: Approx. 113° (Wide) to 41° (Tele) Horizontal: Approx. 96° (Wide) to 35° (Tele) Vertical: Approx. 51° (Wide) to 20° (Tele)
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 , 120 DB 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 Working Distance	120ft-140ft , Depend upon object size
VIDEO	
Video Compression	H.265, H.264, MJPEG
Profile	H.264 : MP / HP , H.265: MP
Multiple Profile Streaming Performance	1080p/30 + DI(704x480 or 704x576) p30 with H.264, H.265 + MJPEG
Max Resolution	1920 x 1080
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
AUDIO	
Audio Streaming	Two Way
Audio Compression	G.711
Audio Input	1[1.0 Vrms, 3K ohm]
Audio Output	1
EVENT	
Event Trigger	Motion alarm , Temperature critical ,Network disconnection,
Pre-Post Recording	Pre: 1-5 sec Post: 1-240 sec
Event Notification	FTP, E-mail, SD card , Alarm out
Smart Edge Analytics	WaveVCA: Intelligence built-in Cameras Analytics
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	HTTPS(SSL), IP filtering, 802.1x, Digest Authentication
Plug In	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 8.9W, PoE Max 10.3W
Operating Conditions	Humidity 10 ~ 90% RH (non-condensing) [DC12V / PoE] -40°C ~ 50°C (-40°F ~ 122°F)
Approval	FCC, CE, IK10 , UL, BIS, ROHS
Weight	0.9 kg
Dimensions(W x H)	247.2 mm x 96.7 mm
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



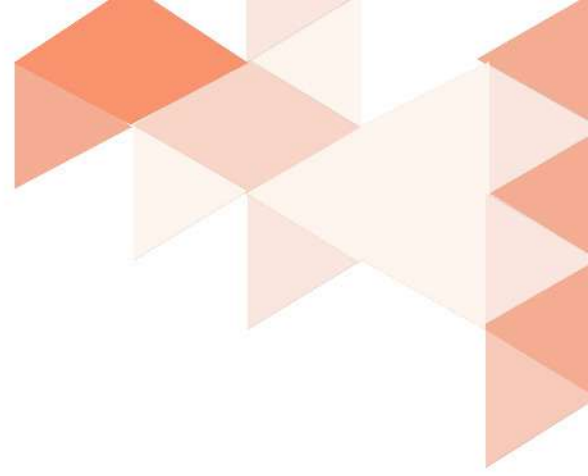
Logical Rules



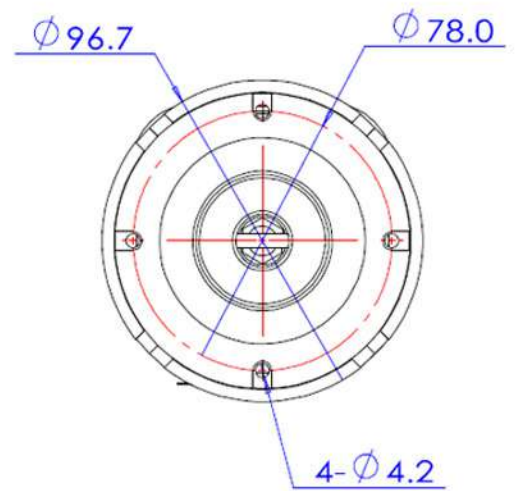
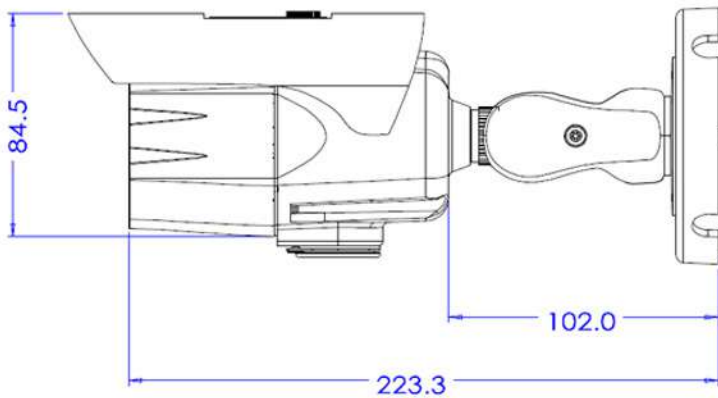
Abandoned Object Filter



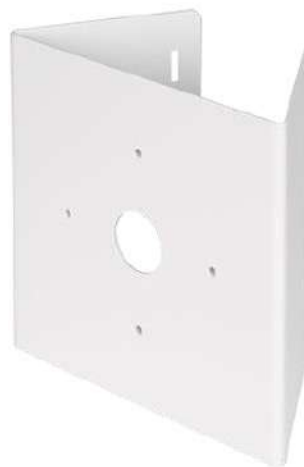
Counting Lines



DIMENSIONS



ACCESSORIES



W-BP07