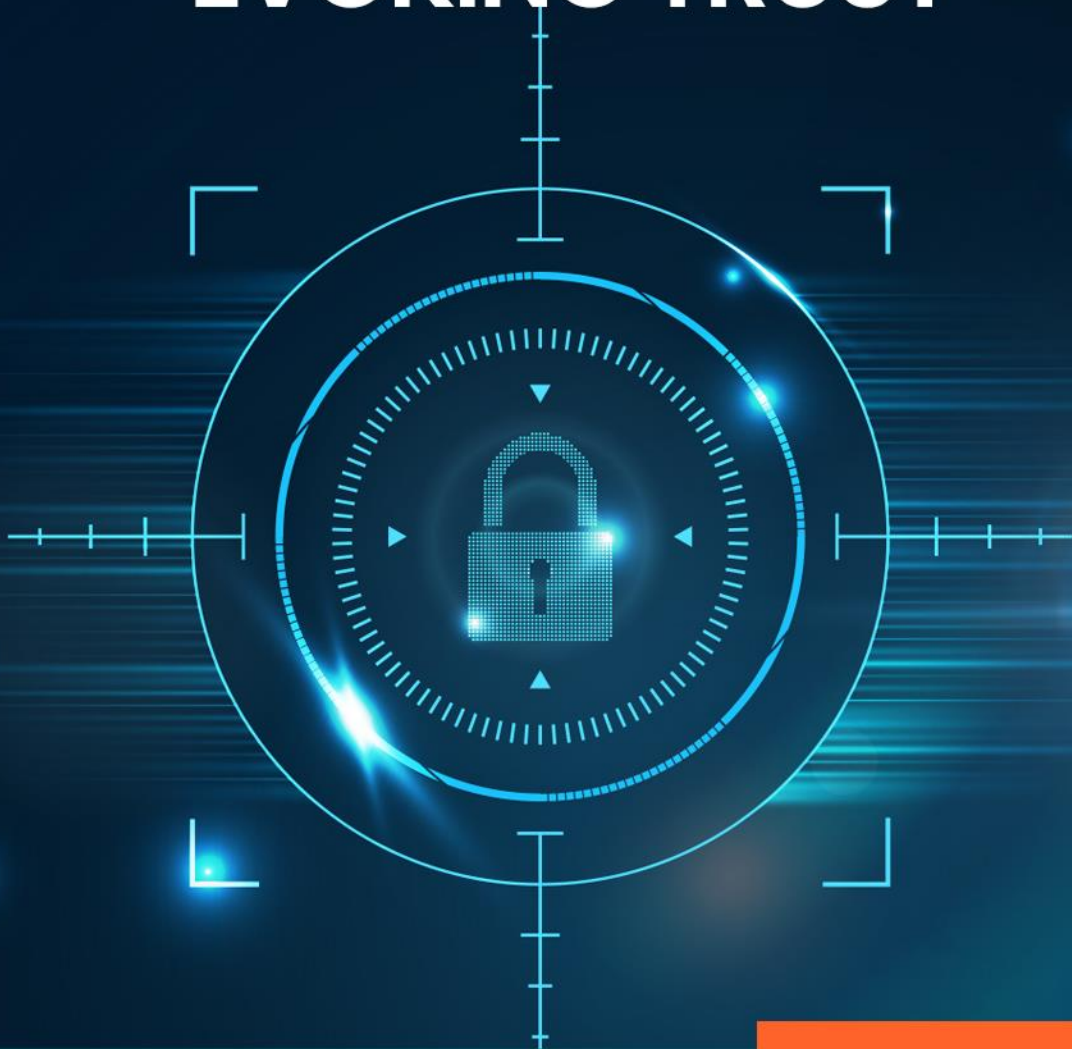




EVOKING TRUST



**Multi Layered Deep Learning
Ai Analytics at Edge
IP- 50 Camera Series**



BISPECTRAL IR THERMAL Ai BULLET CAMERA

IP-50301LTB

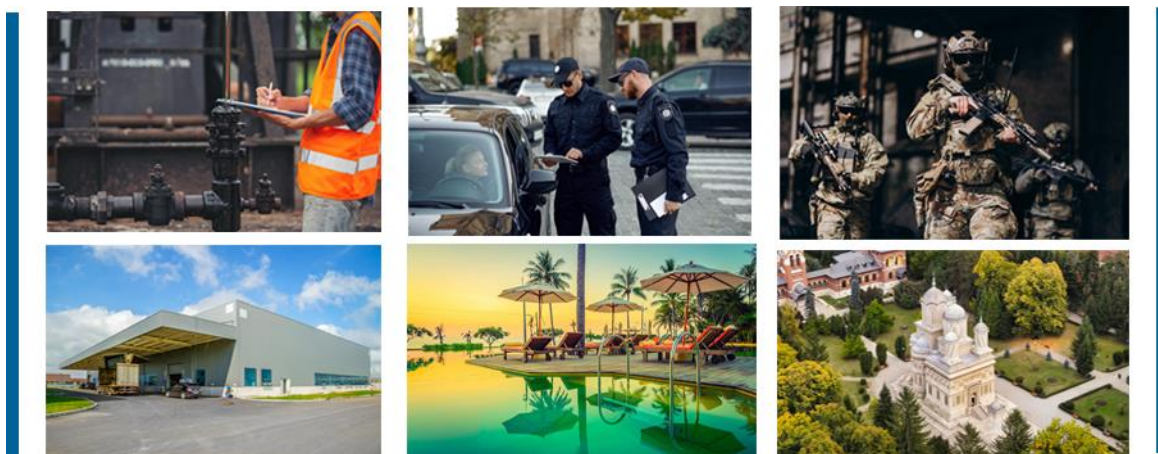


About the Camera : IP 50 Series cameras are Artificial Intelligence powered latest camera series by Wavesys. It is built on advanced system-on-chip technology from California based company Ambarella and Sony Starvis Sensors. The IP 50 series cameras are integrated with Wavesys Open Platform Enterprise 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.

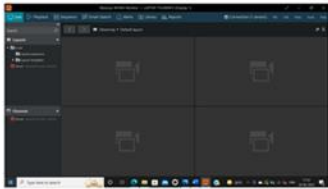
Key Features

- 30fps at 5MP & Array Size - 320 x 240 at 9fps
- WaveStream: Smart Compression Technology based on bit rate Control, ROI
- Sony Starvis CMOS & Uncooled Sun-Safe Vanadium Oxide Microbolometer
- Power over Ethernet (IEEE 802.3af)
- H.265, H.264 and MJPEG compression
- WaveVCA*: Intelligence built-in Camera Analytics
- IP67 and IK10 Environmental Housing
- 4 mm fixed lens
- Deep Learning Object Tracker/People Tracker
- 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	
Model	IIP-50301LTB
Image Sensor	-Visible : SONY STARVIS IMX335, 1/2.8" 5.14M CMOS - Thermal : Uncooled Sun-Safe Vanadium Oxide Microbolometer
Effective Pixels	Visible: 2592(H) x 1944(V) Thermal: Array Size - 320 x 240
Scanning System	Progressive scanning
AGC Control	Auto
IRIS Type	Auto IRIS
Minimum Illumination	Color: 0.1Lux / B/W : 0 Lux (IR LED On)
Lens	- Thermal : 4.0mm - Visible : TBD(Similar to Thermal's FoV)
Angle of View	- Thermal : H:56°, V:42° - Visible : TBD(Similar to Thermal's FoV)
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 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 LED	2 x High Power LED
IR Working Distance	Up to 30m, depend upon object size
VIDEO	
Video Compression	H.265, H.264, MJPEG
Profile	H.264 : MP / HP H.265 : MP
Multiple Profile Streaming Performance	Visible: 2592x1944/30 + 480p/30 with H.264, H265 + MJPEG Thermal: 320X240/9 with H.264, H265 + MJPEG
Max Resolution	-Visible: 2592 x 1944 Thermal : 320 X 240 (Upscaling : Up to 640 X 480)
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 / Corridor Mode
AUDIO	
Audio Streaming	Two way
Audio Compression	G.711 AAC
Audio input / output	01-Jan
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 802.3af)
Power Consumption	DC12V Max 10.2W, PoE Max 12.5W
Operating Conditions	Humidity 10 ~ 90% RH (non-condensing) [DC12V / PoE] -30°C ~ 50°C (-22°F ~ 122°F)
Approvals	FCC, CE, IP66,,UL
NDA	Compliant
Weight	-
Dimensions (D x H)	-
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 an object

Tamper Detection Supported as standard

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



Forensic Search



DL Object tracker



DL People Tracker



Pose Detection

Optional features

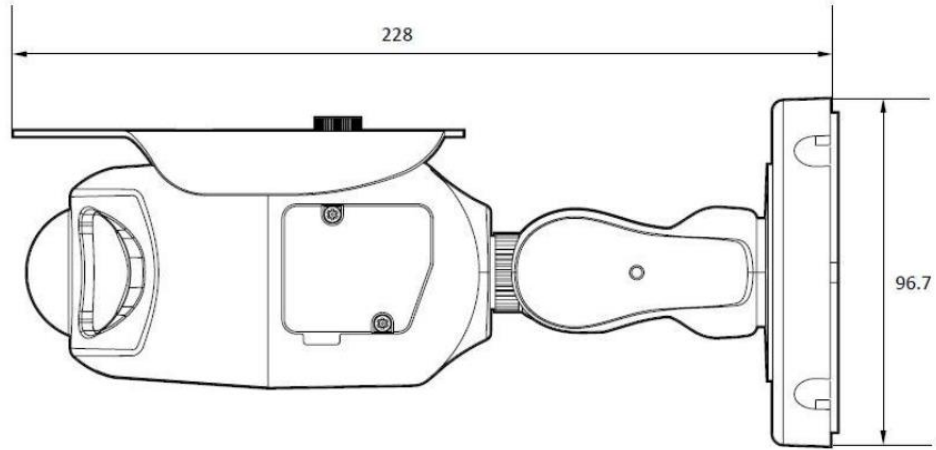
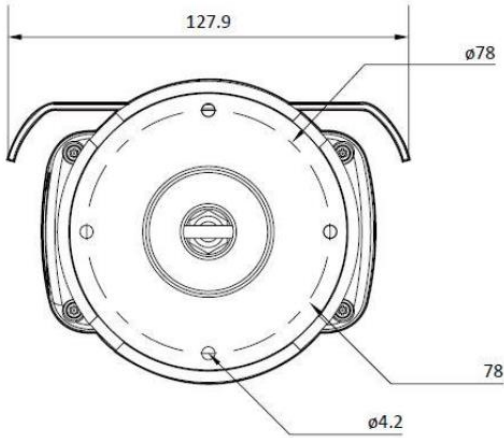
Forensic Search Works with age, sentiment, gender, and ethnicity estimation



Forensic Search



Dimensions



ACCESSORIES



BP01



BCO01



BJC07