WAVESYS
EVOKING TRUST

Product Guide

Our Technologies

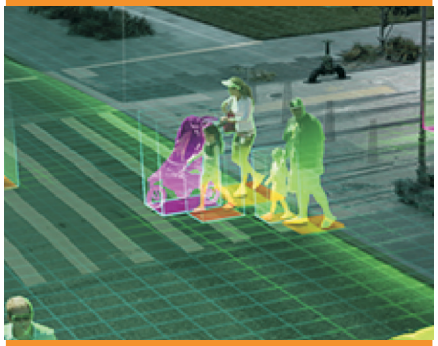
WaveStream

Reduces Storage

WaveCapture

High Dynamic Range

WaveVCA



Smart Edge Analytics

WaveIR

Smart IR

Wavesys Products Nomenclature

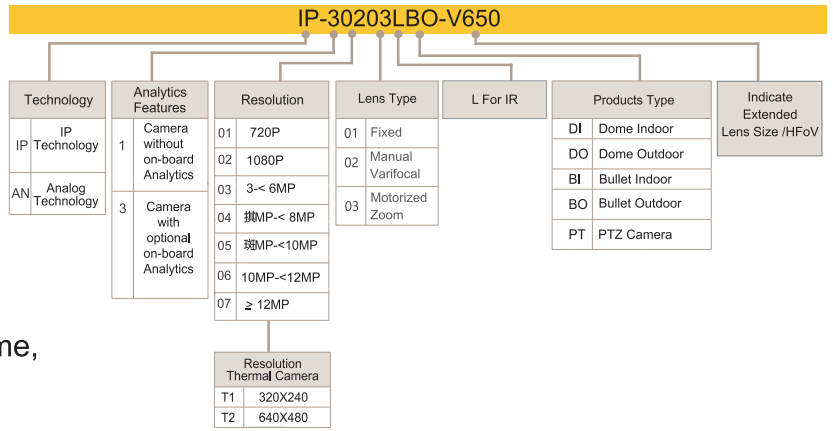
Wavesys products support special technologies as follows:-

> **WaveStream** Uses advanced algorithm-based compression to compress files that have long distance redundancies

> **WaveCapture** Uses Advanced multiframe-multiexposure based effective capturing and merging of video frames to produce real-life like videos.

> **WaveIR -** WaveIR automatically adjusts intensity of IR depending on distance of the subject.

> **WaveVCA -** WaveVCA works on IP video footage and uses our sophisticated algorithms to identify and classify object types and identify behavior in real time, providing alerts and events to our users.



Video Recording Solutions

Video Management Software

- Enterprise Grade Video management Solution
- Video Control, Operations, Management, Playback, Recording Software
- Support N number of cameras
- Supports WaveVCA, WaveSteam, WaveCapture
- Integrated client management software.
- H.265, H.264 and MJPEG video compression
- Supports Upto 4K resolution
- Support Server redundancy Support ,1:1 or N:1 .
- Support multi streaming, codec
- Supports remote monitoring
- Quick and easy installation

Video Recording Hardware

- 24,48,72,96,128 video channel support
- ONVIF Compliance, support third party devices
- Disk Load balance & Flexible storage option Upto128TB
- H.265, H.264 and MJPEG video compression
- Multi-site/Multi-server/Multi client support
- Support E-map with CMS
- Multi-view GUI & dual Monitor output
- Support multiple stream & bandwidth Monitor
- Two-way Audio
- Intelligent search ,Instant Playback & support auto backup
- Multi-Channel Playback
- Central Management System
- Failover Recording Server
- Panoramic 360-degree Camera 3D Client Side Dewarping

Wavesys IP Network Cameras

Wavesys Model	IP-30203LBO-V650	IP-10201LDI	IP-10202LDO	IP-30301LDO	IP-30503LBO	IP-30203LPT
PICTURE						
Image Sensor	1/2.8 2.1M CMOS	1/2.9 2.2M CMOS	1/2.9 2.2M CMOS	1/2.8" 5.14MP CMOS	1/1.8" 8.5M CMOS	1/2.8 2.4M CMOS
Total Pixel	1945(H) X 1109(V)	2001(H) X 1121(V)	2001(H) X 1121(V)	2592(H) X 1944(V)	3952(H) x 2320(V)	1952(H) X 1236(V)
Lens Type	Two motor MFZ 6~50mm(F1.6)	3.6mm(F2.0)	Manual Varifocal 2.8~12mm(F1.4)	Fixed	Two motor MFZ, 3.6~10mm(F1.5)	30X Optical Zoom ,4.3 ~ 129mm (F1.6 ~ F4.7)
Iris Type	P-IRIS	Auto	Auto	Auto Exposure	P-IRIS	P-IRIS
Min. Illumination	"Color : 0.02Lux BW : 0Lux with IR "	"Color : 0.03Lux BW : 0Lux with IR "	"Color : 0.03Lux BW : 0Lux with IR "	"Color : 0.1Lux BW : 0Lux with IR "	"Color : 0.09Lux BW : 0Lux with IR "	"Color : 0.05Lux BW : 0Lux with IR "
IR Distance	120ft	60ft	75ft	80ft	120ft	200ft
Shutter Speed	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(1/2,1/3, 1/5,1/6,1/7.5,1/10)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(2X, 3X, 5X, 6X, 7.5X, 10X)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(2X, 3X, 5X, 6X, 7.5X, 10X)	Auto / Manual (1/30 ~ 1/32000), Anti-Flicker, Slow Shutter (1/2,1/3,1/5,1/6,1/7,1/10)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(2X, 3X, 5X, 6X, 7.5X, 10X)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(½, 1/3,1/5,1/6,1/7.5,1/10)
WDR	WaveCapture True WDR 120dB	DWDR	DWDR	WaveCapture True WDR 120dB	WaveCapture True WDR 120dB	WaveCapture True WDR 120dB
Privacy Mask	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone
Image Processing	Exposure, White balance, Sharpness	Exposure, White balance	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness
Video Compression	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	H.264, H.265, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG
Support Resolution	1080p/720p/VGA/D1/CIF	1080p/720p(Main), CIF(Sub)	1080p/720p(Main), CIF(Sub)	2592X1944/1440P/1080P /720P/VGA/D1/CIF	QFHD/1080p/720p/VGA/D1/CIF	1080p/720p/VGA/D1/CIF
Edge Storage	128GB	No	No	Micro SD, Micro SDHC, Micro SDXC	128GB	128GB
Housing & Environmental Rating	IP66 & IK10	IP66 & IK10	IP66 & IK10	IP67 & IK10	IP66 & IK10	IP66 & IK10
Audio Input & Output	Yes	Yes	Yes	Yes	Yes	Yes
Others	WaveStream, WaveCapture, WaveVCA, WaveIR	N/A	N/A	WaveStream, WAveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	360° endless,'-5° to 90°, auto flip 180° WaveStream, WaveCapture, WaveVCA, WaveIR

Disclaimer:- Product specifications and casing are subject to change without any prior notice.

Wavesys IP Network Cameras

Wavesys Model	IP-30303LDO	IP-30303LBO	IP-30303LBO-V650	IP-30201LDI	IP-30203LDO	IP-30203LBO
PICTURE						
Image Sensor	1/2.8" 5.14MP CMOS	1/2.8" 5.14MP CMOS	1/2.8" 5.14MP CMOS	1/2.8 2.1MP CMOS	1/2.8 2.1MP CMOS	1/2.8 2.1MP CMOS
Total Pixel	2592(H) X 1944(V)	2592(H) X 1944(V)	2592(H) X 1944(V)	1945(H) X 1109 (V)	1945(H) X 1109(V)	1945(H) X 1109(V)
Lens Type	Two motor MFZ, 2.7~13.5mm(F1.4)	Two motor MFZ ,2.7~13.5mm(F1.4)	Two motor MFZ ,6~50mm(F1.6)	2.8mm(F2.0), 4.0mm(F2.6), 6.0mm(F2.0) 8.0mm	Two motor MFZ 2.8~12mm(F1.4)	Two motor MFZ 2.8~12mm(F1.4)
Iris Type	P-IRIS	P-IRIS	P-IRIS	Auto	P-IRIS	P-IRIS
Min. Illumination	"Color : 0.08Lux BW : 0Lux with IR "	"Color : 0.08Lux BW : 0Lux with IR "	"Color : 0.08Lux BW : 0Lux with IR "	"Color : 0.03Lux BW : 0Lux with IR "	"Color : 0.02Lux BW : 0Lux with IR "	"Color : 0.02Lux BW : 0Lux with IR "
IR Distance	80ft	120ft	120ft	60ft	80ft	120ft
Shutter Speed	Auto / Manual (1/15 ~ 1/60000), Slow Shutter(off, 2x~8x)	Auto / Manual (1/15 ~ 1/60000), Slow Shutter(off, 2x~8x)	Auto / Manual (1/15 ~ 1/60000), Slow Shutter(off, 2x~8x)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(1/2,1/3, 1/5,1/6,1/7.5,1/10)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(1/2,1/3, 1/5,1/6,1/7.5,1/10)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(1/2,1/3, 1/5,1/6,1/7.5,1/10)
WDR	WaveCapture True WDR 120dB	WaveCapture True WDR 120dB	WaveCapture True WDR 120dB	WaveCapture True WDR 120dB	WaveCapture True WDR 120dB	WaveCapture True WDR 120dB
Privacy Mask	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone
Image Processing	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness
Video Compression	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG
Support Resolution	2592x1944/1440p/1080p/720p /VGA/D1/CIF	2592x1944/1440p/1080p/720p /VGA/D1/CIF	2592x1944/1440p/1080p/720p /VGA/D1/CIF	2592x1944/1440p/1080p/720p /VGA/D1/CIF	2592x1944/1440p/1080p/720p /VGA/D1/CIF	2592x1944/1440p/1080p/720p /VGA/D1/CIF
Edge Storage	128GB	128GB	128GB	128GB	128GB	128GB
Housing & Environmental Rating	IP66 & IK10	IP66 & IK10	IP66 & IK10	IP66 & IK10	IP66 & IK10	IP66 & IK10
Audio Input & Output	Yes	Yes	Yes	No	Yes	Yes
Others	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR

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Wavesys IP Network Cameras

Wavesys Model	IP-30501LDO	IP-30503LDO	IP-30303LDO-2	IP-30303LDO-4	IP-30201LBO	IP-30301LBO
PICTURE						
Image Sensor	1/2.8 8.29M CMOS	1/2.8" 8.29MCMOS	1/2.8" 5.14MP CMOS X 2	1/2.8" 5.14MP CMOS X 2	1/2.8" 2.1MP CMOS	1/2.8 5.14MP CMOS
Total Pixel	3840 X 2160	3840 X 2160	2592(H) X 1944(V)	2592(H) X 1944(V)	1920 x 1080	2592(H) X 1944(V)
Lens Type	Fixed, 2.8/4/6 mm	Two motor MFZ ,2.7~13.5mm(F1.4)	Two motor MFZ ,2.7~13.5mm(F1.4)	Two motor MFZ ,2.7~13.5mm(F1.4)	Fixed, 4 mm, F2.6	Fixed, 4 mm, F2.6
Iris Type	Auto Exposure	P-IRIS	P-IRIS	Auto Exposure	Auto Exposure	Auto Exposure
Min. Illumination	"Color : 0.18Lux BW : 0Lux with IR "	"Color : 0.09Lux BW : 0Lux with IR "	"Color : 0.08Lux BW : 0.0Lux with IR "	Color: 0.13Lux BW : 0.0 05Lux with IR	"Color : 0.03Lux BW : 0Lux with IR "	"Color : 0.1Lux BW : 0Lux with IR "
IR Distance	80ft	80ft	80ft	80ft	120ft	120ft
Shutter Speed	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(1/2,1/3, 1/5,1/6,1/7.5,1/10)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(2X, 3X, 5X, 6X, 7.5X, 10X)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(2X, 3X, 5X, 6X, 7.5X, 10X)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(2X, 3X, 5X, 6X, 7.5X, 10X)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(2X, 3X, 5X, 6X, 7.5X, 10X)	Auto / Manual (1/15 ~ 1/32000), Anti-Flicker, Slow Shutter(½, 1/3,1/5,1/6,1/7.5,1/10)
WDR	WaveCapture - True WDR 120dB	WaveCapture - True WDR 120dB	WaveCapture - True WDR 120dB	WaveCapture - True WDR 120dB	WaveCapture - True WDR 120dB	WaveCapture - True WDR 120dB
Privacy Mask	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone	16 Programmable Zone
Image Processing	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness	Exposure, White balance, Sharpness
Video Compression	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG	WaveStream H.265, H.264, MJPEG
Support Resolution	2592X1944/1440P/1080P/ 720P/VGA/D1/CIF	2592X1944/1440P/1080P/ 720P/VGA/D1/CIF	2592X1944/1440P/1080P/ 720P/VGA/D1/CIF	2592X1944/1440P/ 1080P/720P/VGA/D1/CIF	2592X1944/1440P/ 1080P/720P/VGA/D1/CIF	2592X1944/1440P/ 1080P/720P/VGA/D1/CIF
Edge Storage	Micro SD, Micro SDHC, Micro SDXC	Micro SD, Micro SDHC, Micro SDXC	2Slot, Micro SD, Micro SDHC, Micro SDXC	4Slot, Micro SD, Micro SDHC, Micro SDXC	Micro SD, Micro SDHC, Micro SDXC	Micro SD, Micro SDHC, Micro SDXC
Housing & Environmental Rating	IP67 & IK10	IP67 & IK10	IP67 & IK10	IP67 & IK10	IP67	IP67
Audio Input & Output	Yes	Yes	Yes	Yes	Yes	Yes
Others	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	WaveStream, WaveCapture, WaveVCA, WaveIR	360° endless,'-5° to 90°, auto flip 180° WaveStream, WaveCapture, WaveVCA, WaveIR

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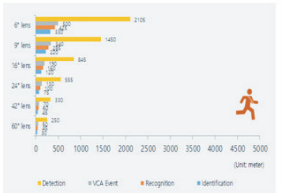
Wavesys IP Network Cameras

Wavesys Model	IP-2T001BO- T35	IP-2T101BO- T56	IP-3T101PT-T12/18/25/37/50	IP-3T201PT-T12/18/25/37/50
PICTURE				
Image Sensor	12 µm uncooled Sun - Safe Vanadium Oxide Microbolometer	12 µm uncooled Sun - Safe Vanadium Oxide Microbolometer	17 µm uncooled Vox microbolometer	17 µm uncooled Vox microbolometer
Total Pixel	200 X 150	320 X 240	320X240	640x480
Lens (FoV)	35°	56°	6°, 9°, 16°,24°, 42°	18°, 25°, 37°
Sensitivity (NETD)	65mk(Tyoical), Less than 100mk(max) @ 25°C	65mk(Tyoical), Less than 100mk(max) @ 25°C	< 50 mK at f/1.0	< 50 mK at f/1.0
Video Compression	H.265, H.264 , MJPEG	H.265, H.264 , MJPEG	H.264 Baseline, Main, High profile(MPEG-4 Part 10/ AVC), MJPEG(Motion JPEG)	H.264 Baseline, Main, High profile(MPEG-4 Part 10/ AVC), MJPEG(Motion JPEG)
Video Streaming	Dual Stream Configurable H.265/H.264 and MJPEG	Dual Stream Configurable H.265/H.264 and MJPEG	Dual Stream Configurable H.265/H.264 and MJPEG	Dual Stream Configurable H.265/H.264 and MJPEG
Bandthwidth Control	Controllable frame rate, bandwidth(VBR/CBR) MJPEG: Controllable frame rate, JPEG quality	Controllable frame rate, bandwidth(VBR/CBR) MJPEG: Controllable frame rate, JPEG quality	Controllable frame rate, bandwidth(VBR/CBR) MJPEG: Controllable frame rate, JPEG quality	Controllable frame rate, bandwidth(VBR/CBR) MJPEG: Controllable frame rate, JPEG quality
Frame Rate	Max. 9fps in all resolution	Max. 9fps in all resolution	Configurable up to 30 FPS or 9 FPS*	Configurable up to 30 FPS or 9 FPS*
WaveVCA	Yes	Yes	Yes	Yes
Alram Input/Output	1x Alarm In, 2x Alarm Out, RS-485	1x Alarm In, 2x Alarm Out, RS-485	Yes	Yes
Privacy Masking	4 configurable regions	4 configurable regions	4 configurable regions	4 configurable regions
Audio Input & Output and Edge Storage	Micro SD slot (SD/ SDHC/SDXC) 1/1	Micro SD slot (SD/ SDHC/SDXC) 1/1	Yes and 128GB	Yes and 128GB
Power Source	12VDC, PoE(IEEE 802.3af)	12VDC, PoE(IEEE 802.3af)	DC 12V, AC 24V, PoE / 10W@12VDC	DC 12V, AC 24V, PoE / 10W@12VDC
Housing & Environmental Rating	IP66	IP66	IP66 & IK10	IP66 & IK10
Others	WaveStream, WVCA	WaveStream, WVCA	Pan Range: 360° / Endless Rotation Tilt range: -10°~90° / Auto Flip Manual Pan/Tilt SpeedMin 0.2° / Max 120°Preset Pan/Tilt Speed Min .0.2° / Max 120° Preset Control 255 preset points	Pan Range: 360° / Endless Rotation Tilt range: -10°~90° / Auto Flip Manual Pan/Tilt SpeedMin 0.2° / Max 120°Preset Pan/Tilt Speed Min .0.2° / Max 120° Preset Control 255 preset points

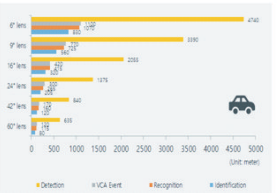
IP-3T101BO-T06/T09/T16/T24/T42/T60

Lens	Object	Detection	VCA Event	Recognition	Identification
6°	Person	2105	500	425	330
	Vehicle	4740	1100	1070	830
9°	Person	1450	340	285	220
	Vehicle	3390	770	725	560
16°	Person	845	190	160	120
	Vehicle	2055	420	415	320
24°	Person	555	130	100	75
	Vehicle	1375	300	265	205
42°	Person	330	70	60	45
	Vehicle	840	170	160	120
60°	Person	250	50	45	30
	Vehicle	635	120	115	80

Person



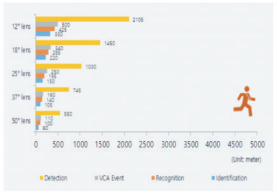
Vehicle



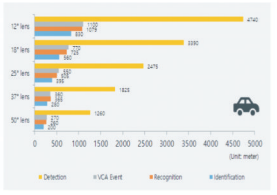
IP-3T201BO-T12/18/25/37/50

Lens	Object	Detection	VCA Event	Recognition	Identification
12°	Person	2105	500	425	330
	Vehicle	4740	1100	1070	830
18°	Person	1450	340	285	220
	Vehicle	3390	770	725	560
25°	Person	1030	250	195	150
	Vehicle	2475	550	505	395
37°	Person	745	160	140	105
	Vehicle	1825	360	365	280
50°	Person	550	110	100	60
	Vehicle	1260	270	260	200

Person



Vehicle



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Distributed By:-

Wavesys stands for evoking trust. We offer secured IT led security solutions thus creating a safer secured environment. As the technology markets leader, Wavesys has continually launched cutting edge technology into its products which include innovations like WaveStream, WaveVCA and WaveIR. We have global partnerships with other leading technology partners. Our own presence is across Americas though our direct office, in EMEA region through our office at UK and at Asia though our direct office in India. Our customer success stories are a testimony to our deep industry knowledge in Smart Cities, Datacenters, Healthcare, Education, Transportation, Banking and Hospitality.