LILIN

V1 Series | IP Bullet Camera

V1R9452E2

5MP | AI | 120db HDR

35m LED | Waterproof | Vandalproof

AI Spec	
Recognized objects	Support detection of the following types of human postures: standing, running, squatting, moving forward, crawling, climbing, hatted, under umbrella, etc
	Support the following types of vehicle recognition: bicycle, car, motorbike, bus, truck
Results Display	Support conditional display results according to specified objects
Behavior Detection	**Prohibited Zone** : Support triggering an event when specified object(s) enters restricted area
	Zone with Dwell : Support triggering an event when specified object(s) enters restricted area and stays for a predefined duration of time
	Tripwire / Traffic Flow: Support triggering an event when specified object(s) crosses the designed line in a predefined direction
	AI Missing Object Detection : Support triggering an event when specified object(s) has been missing from the set detection zone for a predefined duration of time
	All Object Detection (AND): Support triggering an event when all of the specified objects show up within the set detection zone at the same time (based on AND rule)
	Lack of any Object Detection (NAND): Support triggering an event when any of the specified objects is not present within the set detection zone (based on NAND rule)
Recognition Speed	Support object recognition speed up to 4 frames per second
Number of Detectable Objects	Can detect up to 18 objects per frame
Video Resolution	Support up to 5M (2880 x 1612) resolution for image capture, 720P resolution is used for recognition
Object Filtering	**Object Type:** Support recognizing specified object, instead of processing all types of objects. **Object Size:** Support 0~100% adjustable size of object (compared to frame) for classification **Object Confidence Level:** Support 0~100% adjustable confidence level of object
Event Trigger	Support setting trigger by specific behaviors of specified objects Support setting 8 Cold Zones to minimize false alarms and improve the accuracy
Detection Time	After an event is triggered by specified object, the next detection will be carried out according to the set detection time (2~30 seconds)
Minimum Recognition Resolution	Support recognition of specified object with more than 200 x 200 pixels
Detection Zone / Line	Support setting 4 detection zones (about the size of camera FoV) or lines which are influenced by independent filter condition (object size, confidence, dwell, classification and behavior) and to trigger independent events (output)
Polygon Detection	Support detection zone which is a polygon that can be freely dragged and that the shape can be modified by 6 draggable anchor points Support detection line which is a line attached to a polygon that the shape can be modified by 4 draggable anchor points. Also, direction of the line can be set by dragging the 4 anchor points or clicking the "Enable direction button"
Pixel Count	Support displaying the pixel count of selected object(s) on the web UI
Alarm Output	Digital Output: Support triggering digital output of camera Smart Event: Support triggering up to 4 virtual inputs of camera HTTP POST: Support displaying an alarm on LILIN IP LED Panel / Support displaying an alarm on specific channel of LILIN Navigator VMS / Support triggering digital outputs for LILIN I/O Box / Support triggering digital outputs for LILIN NVR / Support triggering HTTP POST to integrate with third-party devices / Support triggering a PTZ camera to go to a preset
Heartbeat Checking	Support checking the camera AI operation status and pushing notifications every 1~30 minutes
Recording System Integration	Support event search to playback or snapshot on LILIN Navigator VMS and NVR

Video Performance

Min. Illumination	Color: 0.16 Lux at F2.2 ; B/W: 0.02 Lux at F2.2 ; 0 Lux with IR LED ON

Lens / Night Vision (Infrared LED)

Focal Length	2.8mm
Iris	F2.2
Iris Control	Fixed IRIS
Angle of View	108.9 (H) , 59.6 (V) , 130.4 (D)
Peak Wavelength	850nm
Radiant Distance	35M

Sensor

Pick Up Element	1/2.7" CMOS image sensor
Effective Pixels	2880 (H) × 1620(V) = 4,665,600 (Pixels)
Light Sensor	Yes

Certifications

CE	Yes, EMI Class A
FCC	Yes, EMI Class A
UKCA	Yes, EMI Class A
IP Rating	IP67
Vandal Resistant Rating	IK10 (Casing)

PC Requirements

CPU	Intel® Core™ i7 or higher grade
OS	Windows 7 or above
RAM	8GB or above, Dedicated Graphics Card
Web Browser	Microsoft® Internet Explorer® 9 or above, Microsoft® Edge (IE mode)

Video Streaming

Video Compression	H.265/HEVC main profile, H.264 main and high profile , Motion JPEG
Video Streaming	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast streams in H.265 and H.264 and Motion JPEG, configurable frame rate and bandwidth
Number of Streams	3
Video Bitrate	128Kbps – 12Mbps; Frame rate and bit rate controllable on-the-fly; VBR / CBR / GOP supported, Fixed bitrate

Network Security

Encryption	Base64 HTTP encryption, HTTPS encryption
Authentication	Digest HTTP authentication, RTSP authentication, DDNS via HTTPS
Address Filter	Yes
Access	Multiple user access levels with password protection
User accounts	10 user accounts available
Multi IP Address	Yes

Video Resolutions (H x V)

Resolution	5MP(2880 x 1616), 4MP(2304 × 1728), 3.1MP(2048 × 1536), 3MP(2304 × 1296), 2MP(1920 × 1080), 1.3MP(1280 × 960), 1MP(1280 × 720), D1(720 × 480, 720 × 576), VGA(640 × 480), CIF(352 × 240)
Maximum Frame Rate	Normal mode: 60Hz: 30 FPS @ 2880 x 1616 50Hz: 25 FPS @ 2880 x 1616 HDR mode: 60Hz: 30 FPS @ 2880 x 1616 50Hz: 25 FPS @ 2880 x 1616

Video Functions

Scanning System	Progressive Scan
Infrared Cut Filter	Auto / Day (Color) / Night (Mono) / Schedule
White Balance	Auto / Manual
Electrical Shutter	1/30(1/25)s – 1/30000s
Sense Up	Off / x2 / x4 / x8 / x16
Sense Up+	Yes
Auto Gain Control	48 dB Variable Gain
S/N Ratio	More than 50dB (AGC off)
3D Noise Reduction	Off / 1 – 32 Selectable
2D WDR	Off / Auto / x2 / x3 / x4
High Dynamic Range	Up to 120dB (by HDR mode, 2 shutter line interleave)

Privacy Masking	Off / On (4 zones)
Image Effects	Brightness, Contrast, Hue, Saturation, Sharpness, Mirror, Flip, Rotation, Defog
Auto Focus	Support
EV (Exposure Value)	Adjustable

Integration

Mobile Application	Integrated to LILIN mobile app (LILIN Pro) iPhone, iPad, Android support
Video Management	ONVIF Profile S / ONVIF Profile T / ONVIF Profile G / IVS events, LILIN Navigator Enterprise 5.0 support, Third party VMS through LILIN HTTP API
SD Card Recording	Support (128GB) Micro SD/SDHC/SDXC card for circular recording (card is not included)
Maintenance	Firmware update via HTTP and IP Scan; Firmware available at website
Event Triggers	Motion / Tamper / Network lost detection / Global Counter / Virtual Input / Metadata
Event actions	FTP / SMTP / HTTP post / SD card / SAMBA / Push Service / Global Counter / Virtual Input
Languages	English, Traditional Chinese, Simplified Chinese, Russian, Italian, Hungarian, Korean, French, Turkish, Arabic, Spanish, Japanese

Network

Ethernet	10BASE-T/100BASE-TX, RJ-45
OSD	Position configurable text overlay for date, time, camera ID, event status
CPU, Memory	Embedded Single core ARM Cortex-A9 960MHz CPU & (DDR 512MB / Flash 128MB)
OS	Embedded Linux 4.19
Network Protocols	IPv4, TCP, UDP, HTTP, HTTPS, QoS, NTP, DDNS, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, SMTP, Multicast, ONVIF Profile S, ONVIF Profile T,ONVIF Profile G
Max number of online users	10 simultaneous users
Video Display	LILIN Universal ActiveX & HTML5
Log	Event & operation log & IVS event log
Schedule	Support holiday list
Network Storage	NAS (Support SAMBA/CIFS)

Power and Environment

Starting Temperature	-10° C – +50° C (-14° F – 122° F)
Operating Temperature	-30° C – +50° C (-22° F – 122° F)
Storage Temperature	-25° C – +60° C (-13° F – 140° F)
Humidity	0% – 90% RH
Power Supply	PoE (IEEE 802.3af compliant)
Power Consumption	POE, 6.9W

Mechanical

Dimension	70(W) x 70(H) x 193(D) mm
Weight	370g
Casing Material	Aluminum alloy

Warranty

Warranty	2 Year(s)