

P7R9A82E4-T3

8MP Day & Night Bi-spectrum IR Bullet IP Camera

P7R
SERIES

The Bi-spectrum Bullet IP Camera combines the advantages of optical and thermal imaging to overcome lighting and adverse weather limitations, providing comprehensive visual protection. Its rugged design is engineered for harsh environments. Equipped with edge AI analytics, it effectively filters interference and precisely targets objects, ensuring highly reliable 24/7 fixed-point monitoring

8MP

ONVIF® | S T G M

- 8M megapixel CMOS image sensor
- 8MP H.265/HEVC and H.264/AVC high-performance video compression
- Simultaneous streaming of H.265 and H.264 encoded streams
- 3D noise reduction (MCTF)
- HDR function up to 120dB
- IVS / AI supported
- Motion / Tamper / Audio / Alarm / Network lost detection / Global Counter / Virtual Input / Metadata
- SMART event
- High efficiency IR LED, radiant distance up to 50m
- Day & Night (IR cut removable)
- 2-way audio supported
- Digital I/O : 1 in, 1 out
- ONVIF Profile S , T , G , M supported
- Bi-spectrum QVGA thermal & 8MP visible sensor
- IP67 rain and dust resistant
- Vandal resistant approve IK10



Video Performance	
Min. Illumination	Color : 0.04 Lux at F1.6 ; B/W : 0.008 Lux at F1.6 ; 0 Lux with IR LED ON
Lens / Night Vision (Infrared LED)	
Focal Length	4mm
Iris	F1.6
Iris Control	Fixed IRIS
Angle of View	86.6° (H) , 46° (V) , 103.4° (D)
Peak Wavelength	850nm
Beam Spread	60° , 90°
Radiant Distance	50m
Sensor	
Pick Up Element	1/2.8" CMOS image sensor
Effective Pixels	3864 (H) × 2176 (V) = 8,408,064 (Pixels)
Light Sensor	Yes
Thermal module	
Image sensor	Uncooled VOx microbolometer
Pixel Size	12um
NETD	<50mK
Focal Length	3.7mm
Aperture	F1.0
Minimum Object Distance	1.6m
Angle of View	60.0° (H) 47.8° (V)
Wavelength	8 – 14 μm
Minimum Object Distance	320 x 240
Certifications	
CE	Yes, EMI Class A
FCC	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
Input / Output	
Audio Input / Output	Audio 1 input / 1 output, Mono, 1.98 Vp-p, 2.2KΩ, Terminal Block
Audio	Two-way Audio, G.711 u-law / PCM / AAC, External Microphone Required
Alarm Input / Output	Digital 1 input (TTL, +3 – 5VDC) / 1 Output (MOS Relay contact N.O., Load.max. 40VDC, 450mW / 300mA, 450mW) , Terminal Block
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	4 (Optical x2, Thermal x2)
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	• Stream 1 (Optical): 3840x2160, 1920x1080, 1280x720 • Stream 2 (Optical): 1280x720, 640x360 • Stream 3 (Thermal): 1280x960, 640x480, 320x240 • Stream 4 (Thermal): 640x480, 320x240"

Maximum Frame Rate	Optical: 60Hz: 25 FPS @ 3840 x 2160, 30FPS @ 1920 x 1080 50Hz: 25 FPS @ 3840 x 2160, 25FPS @ 1920 x 1080 Thermal: 60Hz: 30 FPS @ 1280 × 960 50Hz: 25 FPS @ 1280 × 960
Video Functions	
Scanning System	Progressive Scan
Infrared Cut Filter	Auto / Day (Color) / Night (Mono) / Schedule
White Balance	Auto / Manual one push
Electrical Shutter	1/30(1/25)s – 1/30000s
Sense Up	Off / x2 / x4 / x8
Sense Up+	Yes
Auto Gain Control	60 dB Variable Gain
S/N Ratio	More than 50dB (AGC off)
3D Noise Reduction	Off / 1 – 32 Selectable
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, Defog, Digital Zoom (X16)
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 / ONVIF Profile M / 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
IVS Basic 1.0	Motion / Tamper
Event Triggers	Motion / Tamper / Audio / Alarm / Network lost detection / Global Counter / Virtual Input / Metadata
Event actions	FTP / SMTP / HTTP post / SD card / SAMBA / Alarm Output / Push Service / Global Counter / Virtual Input
Languages	English, Traditional Chinese, Simplified Chinese, Russian, Italian, Hungarian, Korean, French, Turkish, Arabic, Spanish, Japanese
Network	
Ethernet	10/100 Mbps Base-T, RJ-45
OSD	Position configurable text overlay for date, time, camera ID, event status
CPU, Memory	Embedded Quad-core ARM Cortex-A53 1.0GHz CPU & 2GB LPDDR4X, 8GB e.MMC memory
OS	Embedded Linux 4.14
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, ONVIF Profile M
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	10% – 90%
Power Supply	DC12V ±10% (Terminal connector) / PoE+ (IEEE 802.3at compliant)
Power Consumption	DC12V,12W / PoE+, 13W
Mechanical	
Dimension	101(W) x 90(H) x 289(D) mm
Weight	1100 g
Casing Material	Aluminum alloy
Warranty	
Warranty	3 Year(s)