

PTZ series | Outdoor PTZ Camera

## IRS1304 / 1308

## 30X Day/Night 2-megapixel HD Infrared PTZ Camera

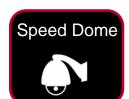
www.meritlilin.com







The IRS1304 / IRS1308 are infrared PTZ options with built-in IR LEDs that are able to see in almost complete darkness, providing clear, detailed video clarity at night-time for round-the-clock video surveillance. IR security PTZ - IRS1304 / IRS1308 see at night with IR distance of 150M. The IRS1304 / IRS1308 are indoor/outdoor fitted 30X Day & Night 2MP HD PTZ Dome IR Camera that in compliance with LILIN's already established PTZ series of cameras. The camera can be powered through AC24V / AC100~240V. The high-speed domes are capable of streaming HD video at up to 30 FPS. Featuring LILIN's Wide Dynamic Range (WDR) feature, the IRS1304 / IRS1308 capture highlights and shadows simultaneously, eliminating pixilation and smear. The IP66-rated housing is designed to help the camera body withstand rain and dust and ensures operation under a multitude of harsh weather conditions. Combine this with digital noise reduction technology and adaptive tone reproduction and the contrast of images in bright or dark areas is dramatically improved. Capable of making 360° continuous rotations, users can accurately position the camera to identify specific targets

















- Outdoor PTZ camera
- 30X optical zoom
- ▶ IP66 rain and dust resistant
- 150-metre infrared night vision
- 1080p resolution
- Wide Dynamic Range
- H.264 and Motion JPEG multi-profile video streaming

**Mounting Options** BTS03G Wall Mount PIH-520LB Wall Mount PIH-520L Wall Mount PIH-520G Swan Neck







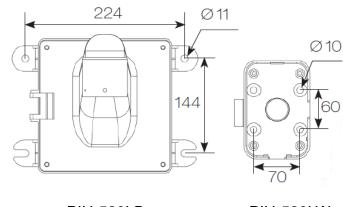


**Dimensions: (unit: mm)** 

Body: Ø 228 (D) x 347 mm (H)



## Diagram of mounting holes (unit: mm):



PIH-520LB

PIH-520LW

#### **PTZ Control Function**

Pan-Tilt-Zoom (PTZ) cameras are able to perform remote directional and zoom control. Capable of making 360° continuous rotations and 120° tilt angle, the cameras field of view can be quickly zoomed and repositioned as needed to identify specific targets



## **Video Security App**

Available on Android and iOS – **LILINViewer** app provides security alarm push notification, real-time live viewing, and remote video playback



## **SD Cards in Sync with NAV Software**

IRS1304 / 1308 camera with built-in Micro SD/SDHC card slots can provide redundant video viewing and







recording. You can synchronise an SD card with LILIN VMS (Video Management Software) – Navigator (NAV)

#### Wind and Rain Standards

Meet international IP66 standards for dust and moisture resistant allowing you to install cameras in environments subject to wind and rain



## **ONVIF-compliant**

Open Network Video Interface Forum (ONVIF) is a standard for physical IP based security products. IRS1304 / 1308 PTZ camera is ONVIF Profile S conformant



## **Alarm Detection**

Alarm Detection is designed to provide the electronic detection of intruders





## **Noise Reduction**

Remove noise from a signal. Suppressing noise in an image in low light conditions and able to retain quality videos at the same time



## **30X Optical Zoom**

Remote pan/tilt/zoom operations with 30X optical lens makes it possible to zoom in on distant object with absolute clarity





## Day and Night Operations via Removal of the IR-cut filter

IRS1304 / 1308 camera was designed using a mechanical IR cut filter for increased IR sensitivity resulting in improved night time



images. The removable IR-cut filter allows day and night operations even in the low lux condition providing outstanding vision

#### **Motion Detection**

Detect motion and capture the event. Motion in the selected area will provoke an alert



### **Two-way Audio Support**

With 2-way audio communication, you can project your voice through the camera's speaker instead of hearing what's going on (1-way audio)



## Wide Dynamic Range (WDR)

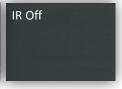
Wide Dynamic Range (WDR) displays details of both the brightest and darkest areas. WDR can extend image visibility under high contrast lighting scenes and improve image quality



## **IR Infrared Night Vision**

Infrared PTZ options with built-in LEDs that are able to see in almost complete darkness, providing clear, detailed video clarity at





night-time for round-the-clock video surveillance

## **Back Light Compensation**

Back Light Compensation
(BLC) adjusts the exposure
of the entire image to
properly expose the subject
in the foreground. No matter





if the main object is moving toward left, right, upper, lower, or any location in the screen, BLC provides perfect exposure for an object in front of strong back light

# Technical Specifications

## 30X Day/Night 2-megapixel HD Infrared PTZ Camera

Video performance				
	Model#		IRS1304	IRS1308
	Low Light Mode	Colour	0.4 Lux [F1.4, 1/30(1/25)Se	ec, 50%, AGC On]
	Low Light Mode	Mono	0.03 Lux [F1.4, 1/30(1/25)S	Sec, 50%, AGC On]
		IR On	0 Lux	
	Wide Dynamic Ra	inge	Off / On	

Power		
Model#	IRS1304	IRS1308
Power consumption	67W	
Power supply	AC24V±10%	AC100~240V

Night vision (infrared LED)		
	Distance	150m
	Peak wavelength	850nm
	Beam spread	Automatically adjusted, Depending on the zoom ratio

Sensor	
Sensor type	1/3 Type CMOS Sensor
Effective pixels	1,944 (H) x 1,092 (V) = 2,122,848 (pixels)
Total number of pixels	1,956 (H) x 1,266 (V) = 2,476,296 (pixels)

Certifications	
CE	Yes
FCC	Yes
IP Rating	IP66 waterproof

Lens	
Zoom ratio	30X optical zoom
Focal length	4.4mm (Wide) ~ 132mm (Tele)
Minimum aperture ratio	F1.4 (Wide) ~ F4.6 (Tele)
Minimum object distance	10 mm (Wide), 1.5M (Tele)
Iris range	Auto / Manual
Angle field of view	63.4°~2.3°(H), 37.3°~1.3°(V) [1080p Mode]

Pan & Tilt	
Panning range	360° Endless
Pan / Tilt mode	Manual , Auto , Manual Position , Sequential Position
Panning speed	Pan Manual Speed: 0.15° - 120°/s, Pan Preset Speed: 1° ~ 255°/s
Tilting range	-5°∼+90°
Tilting speed	Tilt Manual Speed: 0.15° – 120°/s, Tilt Preset Speed: 1° ~255°/s

Environmental	
Ambient operating temperature	-40°C ~50°C (-40°F ~122°F)

PC requirement	
CPU	Intel Pentium 4 1.8GHz or above
OS	Windows 2000 , Windows XP , Windows Vista, Windows 7, Windows 8, Windows 8.1
RAM	1GB or above, Independent Display Card
Web browser	Microsoft® Internet Explorer® 6.0 and later

Mechanical		
	Dimensions (D x H)	Ø 228mm x 347 mm
	Weight	4700g approx.

Fan	
Fan activation	On: 35°ℂ , Off: 25°ℂ
Input / output	
Alarm input / output	6 Input (TTL DC5V), 1 Output (0.5A AC120V,1A AC24V)
Video output	CVBS 1.0 Vp-p / 75 Ω BNC

Video resolution (H x V)			
Streaming	Video stream	ing	
128/bps to 5Mbps   Frame rate and bit rate controllable on-the-fly   Video resolution (H x V)   Video resolution (H x V)   1920 x 1080   1920 x 1080 x 1080   1920 x 1080 x 108	Video compre	ession	H.264, Motion JPEG
128/bps to 5Mbps   Frame rate and bit rate controllable on-the-fly   Video resolution (H x V)   Video resolution (H x V)   1920 x 1080   1920 x 1080 x 1080   1920 x 1080 x 108	Streaming		RTP/HTTP RTP/TCP RTP/UDP Multicast
Video resolution (H x V)         1980 p HD           120 h HD         1920 x 1080           720 h HD         1280 x 720           D1         720 x 480           CIF         352 x 240           Multiple         Profile #1         1,264 up to 30 FPS @ 1920 x 1080 , MJPEG : up to 30 FPS @ 325 x 240           Profile #2         1,264 up to 30 FPS @ 1280 x 720 , MJPEG : up to 30 FPS @ 32 x 240           Profile #3         1,264 up to 30 FPS @ 1920 x 1080 , MJPEG :	Bitrate		128Kbps to 5Mbps Frame rate and bit rate controllable on-the-fly
1920 x 1080   1920 x 1080   1280 x 720   1280 x 1080   1280 x 1080 x 1080   1280 x 1080 x	Video resoluti	ion (H x V)	VERT OBIT COT Supported
T20 x 480	1080p HD		1920 x 1080
CIF   352 x 240   H.264 : up to 30 FPS @ 1920 x 1080 , MJPEG : up to 30 FPS @ 720 x 480   Profile #1   F.264 : up to 30 FPS @ 1280 x 720 , MJPEG : up to 30 FPS @ 525 x 240   Profile #2   H.264 : up to 30 FPS @ 1280 x 720 , MJPEG : up to 30 FPS @ 525 x 240   Profile #3   H.264 : up to 30 FPS @ 1220 x 1080 , MJPEG : up to 30 FPS @ 525 x 240   Profile #4   H.264 : up to 30 FPS @ 720 x 480 , MJPEG : up to 15 FPS @ 1920 x 1080 , MJPEG : up to 15 FPS @ 1920 x 1080 , MJPEG : up to 15 FPS @ 1920 x 1080   MJPEG : up to 15 FPS @ 19	720p HD		1280 x 720
Multiple	D1		720 x 480
Profile #1	CIF		
Profile #2	Multiple	Profile #1	
Profile #3	Profile	Profile #2	H.264 : up to 30 FPS @ 1280 x 720 , MJPEG : up to 30 FPS @
Video functions Day/Night (IR-cut filter) Day/Night (IR-cut filter) Scanning system Progressive scan Auto (Normal / Sodium / Mercury) / Manual (Red/Blue) Auto (Manual, 1/1(1/0.75)sec – 1/30,000sec. Shutter speed Shutter speed Auto (Manual, 1/1(1/0.75)sec – 1/30,000sec. Off / Auto (256X) Digital effect Off / Mirror / Filip Sharpness Auto / Manual (Red/Blue) Auto (Manual, 1/1(1/0.75)sec – 1/30,000sec. Off / Mirror / Filip Sharpness Auto / Manual Exposure mode Auto (Normal) Back light compensation Off / On (9 Steps) / HLC (9 Steps) Back light compensation Off / On (9 Steps) / HLC (9 Steps) Back light compensation Off / On (Steps) / HLC (9 Steps) Back light compensation Off / On (Steps) / HLC (9 Steps) Back light compensation Off / On (Steps) / HLC (9 Steps) Back light compensation Off / On (Steps) / HLC (9 Steps) Back light compensation Off / On (Steps) / HLC (9 Steps) Back light compensation Off / On (Steps) / HLC (9 Steps) Back light compensation Off / On (Steps) / HLC (9 Steps) Off / On (Steps) / HLC (9 Steps) Back light compensation Off / On (Steps) / HLC (9 Steps) Off /		Profile #3	H.264 : up to 30 FPS @ 1920 x 1080 , MJPEG : up to 30 FPS
Video functions         Colour (Day), Monochrome (Night), Auto           Day/Night (IR-cut filter)         Colour (Day), Monochrome (Night), Auto           Scanning system         Auto (Normal / Sodium / Mercury) / Manual (Red/Blue)           Muther balance         Auto (Normal / Sodium / Mercury) / Manual (Red/Blue)           Shutter speed         Auto (Manual / Int (10.75)sec − 1/30,000sec.           Slow shutter         Off / Auto (268X)           Digital effect         Off / Mirror / Flip           Sharpness         Auto / Manual           Exposure mode         Auto / Manual           Enhance intensity         Off / On (9 Steps) / HLC (9 Steps)           Back light compensation         Off / On (up to 16 areas)           Off / On (up to 16 areas)         Off / On (up to 16 areas)           Auto mode         Off / On (scan / SEQ / Tour / Patrol )           Pan, tilt, zoom in / out, absolute position, and video-click-m-move           Schedule setting         Off / Auto Mode / Preset position           Digital image stabilization         Off / On           Auto file application         Integrated to LILIN mobile app (LILINViewer)           Defog         Off / 1/2 / 3 / Auto           Do ray         Yes           Integration         Integrated to LILIN mobile app (LILINViewer)           Wideo management		Profile #4	H.264 : up to 30 FPS @ 720 x 480 , MJPEG : up to 15 FPS @
DayNight (IR-out filter)  Colour (Day), Monochrome (Night), Auto  Progressive scan  White balance  Auto (Normal / Sodtium / Mercury) / Manual (Red/Blue)  Shutter speed Auto / Manual , 1/1(1/0.75)sec - 1/30,000sec.  Shutter speed Auto / Manual , 1/1(1/0.75)sec - 1/30,000sec.  Off / Mirror / Flip  Sharpness Auto / To - 16  Exposure mode Auto / Manual  Enhance intensity Off / On (9 Steps) / HLC (9 Steps)  Back light compensation Off / On (9 Steps) / HLC (9 Steps)  Back light compensation Off / On (up to 16 areas)  Auto mode Off / On (up to 16 areas)  Auto mode Off / On (up to 16 areas)  Auto mode Off / On (up to 16 areas)  Off / On (up to 16 areas)  Auto mode Off / On (up to 16 areas)  Off / Auto Mode / Preset position  Digital image stabilization Off / On  Auto gain control O - 45 dB(16 steps)  Defog Off / 1 / 2 / 3 / Auto  Dr quality setting Yes  Integration  Integrated to LILIN mobile app (LILINViewer)  iphone, iPad, Android support  ONVIF Profile S  LILIN CM3 3,6 / NAV 1.0  Third party VMS through LILIN HTTP API  SUpport Micro SD/SDHC card for circular recording (built-in Mic So Lard)  Support Micro SD/SDHC card for circular recording (built-in Mic So Lard)  Support Micro SD/SDHC card for circular recording (built-in Mic So Lard)  Firmware upgrade via HTTP  Firmware available to download at meritillin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm functions  Alarm event  Alarm weighted mode  Support Network  Ethernet  10Mbps / 100Mbps , RJ-45  ONVIF Profile S  8 simultaneous users  Yes, via Web interface  Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded SoC ARM11, 528MFz, 256MB DDR2, 256MB flash mem	Video function	ns	1920 X 1000
White balance Auto (Normal / Sodium / Mercury) / Manual (Red/Blue) Shutter speed Auto / Manual . 1/1(1/0.75)sec - 1/30,000sec. Off / Auto (256X) Off / Mirror / Flip Sharpness Auto / 1~16 Exposure mode Auto / Manual Exposure mode Auto / Manual Digital noise reduction Off / On (9 Steps) / HLC (9 Steps) Off / On (9 Steps) / HLC (9 Steps) Off / On (Level: 1~3) Privacy mask Off / On (Level: 1~3)  Privacy mask Off / On (San / SEQ / Tour / Patrol ) Pan , tilt , zoom in / out , absolute position, and video-click-n-move Schedule setting Off / On Off / On	Day/Night (IR	R-cut filter)	
Shutter speed Auto / Manual, 1/1(1/0.75)sec - 1/30,000sec. Off / Marror / Filip Sharpness Auto / 1 ~ 16 Exposure mode Auto / Manual Enhance intensity Off / On (9 Steps) / HLC (9 Steps) Back light compensation Off / On (9 Steps) / HLC (9 Steps)  Privacy mask Off / On (up to 16 areas) Off / On (up to 16 a			
Digital effect  Off / Mirror / Flip Sharpness Auto / 1~16 Auto / Manual Enhance intensity Off / On (9 Steps) / HLC (9 Steps) Back light compensation Off / On (9 Steps) / HLC (9 Steps) Off / On (9 Steps) / HLC (9 Steps)  Privacy mask Off / On (up to 16 areas) Off / On (Scan / SEQ / Tour / Patrol ) Pan , tilt , zoom in / out , absolute position, and video-click-n-move Schedule setting Off / Auto Mode / Preset position Digital image stabilization Off / On Auto gain control Off / Stan / Stan / Auto Off / On Auto gain control Off / On Off / On Off / Auto Mode / Preset position Off / On Off / Auto Mode / Preset gosition Off / On Of	Shutter speed		Auto / Manual, 1/1(1/0.75)sec - 1/30,000sec.
Exposure mode Enhance intensity Back light compensation Off / On (9 Steps) / HLC (9 Steps)  Off / On (9 Steps) / Net of 1 Steps / HLC (9 Steps) / Net of 1 Steps / HLC (9 Steps)  Off / On (9 Steps) / HLC (9 Steps) / Net of 1 Steps / HLC (9 Steps) / Net of 1 Steps / HLC (9 Steps) / Net of 1 Steps / HLC (9 Steps) / Net of 1 Steps / HLC (9 Steps) / Net of 1 Steps / HLC (9 Steps)	Digital effect		
Enhance intensity	Sharpness	-1-	
Back light compensation  Off / On (Level: 1~3)  Off / On (up to 16 areas)  Off / On (Scan / SEQ / Tour / Patrol )  Pan , tilt , zoom in / out , absolute position, and video-click-n-move  Schedule setting  Off / On (Scan / SEQ / Tour / Patrol )  Pan , tilt , zoom in / out , absolute position, and video-click-n-move  Schedule setting  Off / Auto Mode / Preset position  Off / On  Auto gain control  O ~ 45 dB(16 steps)  Defog  Off / 1/2 / 3 / Auto  Digital image stabilization  Off / On  Auto gain control  O ~ 45 dB(16 steps)  Defog  Off / 1/2 / 3 / Auto  Div quality setting  Integrated to LILIN mobile app (LILINViewer)  iPhone, iPad, Android support  ONVIF Profile S  LILIN CMX 3.6 / NAV 1.0  Third party VMS through LILIN HTTP API  Support Micro SD/SDHC card for circular recording (built-in Mic SD card)  Firmware  Firmware upgrade via HTTP  Firmware available to download at meritlilin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm functions  Alarm event  Alarm weighted mode  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  Users  8 simultaneous users  PTZ preset scheduling  OSD  Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, OHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SMMP  IP filter  Yes			
Privacy mask  Off / On (up to 16 areas)  Auto mode  Off / On (Scan / SEQ / Tour / Patrol )  Pan , tilt , zoom in / out , absolute position, and video-click-n-move  Schedule setting  Off / Auto Mode / Preset position  Digital image stabilization  Off / On  Auto gain control  Defog  Off / 1 / 2 / 3 / Auto  D/N quality setting  Integration  Mobile application  Integrated to LILIN mobile app (LILINViewer)  iPhone, iPad, Android support  ONVIF Profile S  LILIN CMX 3.6 / NAV 1.0  Third party VMS through LILIN HTTP API  Support Micro SD/SDHC card for circular recording (built-in Mic SD card)  Firmware upgrade via HTTP  Firmware available to download at meritiliin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm event  Alarm weighted mode  Support  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  Users  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  OSD  Text overlay for date, time, and camera name  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  G.711  IPV4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, OHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Back light cor	mpensation	
Auto mode  Off / On ( Scan / SEQ / Tour / Patrol )  Web PTZ control  Web PTZ control  Pan , tilt , zoom in / out , absolute position, and video-click-n-move  Schedule setting  Off / Auto Mode / Preset position  Digital image stabilization  Off / On  Auto gain control  Defog  Off / 1 / 2 / 3 / Auto  DrN quality setting  Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support  ONVIF Profile S  LILIN CMX 3.6 / NAV 1.0 Third party VMS through LILIN HTTP API  SD card recording  SD card)  Support Micro SD/SDHC card for circular recording (built-in Mic SD card)  Firmware  Firmware available to download at meritillin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm event  Alarm weighted mode  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  Users  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  CPU, Memory  Embedded Soc ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal Active X & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Digital noise r	reduction	Off / On (Level: 1~3)
Pan , tilt , zoom in / out , absolute position, and video-click-n-move  Schedule setting  Off / Auto Mode / Preset position  Off / Auto Mode / Preset position  Off / On  Auto gain control  0 ~ 45 dB(16 steps)  Defog  Off / 1 / 2 / 3 / Auto  D/N quality setting  Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support  ONVIF Profile S  LILIN CMX 3.6 / NAV 1.0  Third party VMS through LILIN HTTP API  SD card recording  Support Micro SD/SDHC card for circular recording (built-in Micro SD card)  Firmware upgrade via HTTP  Firmware available to download at meritillin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm functions  Alarm event  FTP,SMTP, HTTP post, SD card, SAMBA  Support  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  CPU, Memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPDE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Privacy mask	<u> </u>	Off / On (up to 16 areas)
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Auto gain control  O ~ 45 dB(16 steps)  Off / 1 / 2 / 3 / Auto  Defog  Off / 1 / 2 / 3 / Auto  Nobile application  Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support  ONVIF Profile S LILIN CMX 3.6 / NAV 1.0 Third party VMS through LILIN HTTP API  SD card recording  SD card with support Micro SD/SDHC card for circular recording (built-in Micro SD/SDHC card for circular recording (built-in Micro SD card)  Firmware upgrade via HTTP Firmware available to download at meritlilin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm event Alarm weighted mode  Support  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  OS  Embedded Linux 2.6.32  2-way audio  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPDE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Schedule sett	ting	Off / Auto Mode / Preset position
Defog Off / 1 / 2 / 3 / Auto D/N quality setting Yes  Integration  Mobile application   Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support  ONVIF Profile S LILIN CMX 3.6 / NAV 1.0 Third party VMS through LILIN HTTP API  SUpport Micro SD/SDHC card for circular recording (built-in Mic SD card)  Firmware upgrade via HTTP Firmware available to download at meritilin.com  Image upload over FTP and E-mail by alarm / motion detection Alarm event FTP,SMTP, HTTP post, SD card, SAMBA Alarm weighted mode Support  Network  Ethernet 10Mbps / 100Mbps , RJ-45  Connectivity ONVIF Profile S  Users 8 simultaneous users  PTZ preset scheduling Yes, via Web interface Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display LILIN Universal ActiveX & LILIN Java Applet  OS Embedded Linux 2.6.32  2-way audio G.711  Protocols IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter Yes	Digital image	stabilization	Off / On
Integration  Mobile application  Mobile application  Mobile application  Integrated to LILIN mobile app (LILINViewer) iPhone, IPad, Android support  ONVIF Profile S  LILIN CMX 3.6 / NAV 1.0  Third party VMS through LILIN HTTP API  SD card recording  Support Micro SD/SDHC card for circular recording (built-in Micro SD card)  Firmware  Firmware upgrade via HTTP  Firmware available to download at meritiliin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm functions  Alarm event  FTP,SMTP, HTTP post, SD card, SAMBA  Support  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  OSD  Text overlay for date, time, and camera name  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPDE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Auto gain cor	ntrol	0 ~ 45 dB(16 steps)
Integration  Mobile application  Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support  ONVIF Profile S LILIN CMX 3.6 / NAV 1.0 Third party VMS through LILIN HTTP API  SD card recording  SD card with support Micro SD/SDHC card for circular recording (built-in Micro SD/SDHC) c	Defog		Off / 1 / 2 / 3 / Auto
Mobile application  Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support  ONVIF Profile S  LILIN CMX 3.6 / NAV 1.0 Third party VMS through LILIN HTTP API  SD card recording  SD card Micro SD/SDHC card for circular recording (built-in Mic SD card)  Firmware  Firmware upgrade via HTTP Firmware available to download at meritlilin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm event Alarm weighted mode  Support  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  OSD  Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  CS  2-way audio  Filter  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	D/N quality setting		Yes
iPhone, iPad, Android support  Video management  Divideo management  Video management  Divideo management  Video management  Divideo management  LILIN CMX 3.6 / NAV 1.0 Third party VMS through LILIN HTTP API  Support Micro SD/SDHC card for circular recording (built-in Mic SD card)  Firmware  Firmware upgrade via HTTP Firmware available to download at meritiliin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm event FTP,SMTP, HTTP post, SD card, SAMBA  Support  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  Users 8 simultaneous users  PTZ preset scheduling Yes, via Web interface  Text overlay for date, time, and camera name  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  CS  Embedded Linux 2.6.32  2-way audio  Frotocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Integration		
Video management  ONVIF Profile S LILIN CMX 3.6 / NAV 1.0 Third party VMS through LILIN HTTP API SD card recording  Support Micro SD/SDHC card for circular recording (built-in Mic SD card) Firmware Firmware upgrade via HTTP Firmware available to download at meritilin.com Image upload over FTP and E-mail by alarm / motion detection Alarm event Alarm event FTP,SMTP, HTTP post, SD card, SAMBA Support  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity ONVIF Profile S Users 8 simultaneous users  PTZ preset scheduling Yes, via Web interface Text overlay for date, time, and camera name  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display LILIN Universal ActiveX & LILIN Java Applet  CS Embedded Linux 2.6.32  2-way audio  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Mobile application		
Support Micro SD/SDHC card for circular recording (built-in Mic SD card)  Firmware Firmware upgrade via HTTP Firmware available to download at meritilin.com  Image upload over FTP and E-mail by alarm / motion detection  Alarm functions  Alarm event Alarm event FTP,SMTP, HTTP post, SD card, SAMBA  Alarm weighted mode  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity ONVIF Profile S  8 simultaneous users  PTZ preset scheduling Yes, via Web interface OSD Text overlay for date, time, and camera name  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display LILIN Universal ActiveX & LILIN Java Applet  SEMBED Embedded Linux 2.6.32  2-way audio G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter Yes	Video manag	ement	ONVIF Profile S LILIN CMX 3.6 / NAV 1.0
Firmware Firmware upgrade via HTTP Firmware available to download at meritlilin.com  Alarm functions  Alarm event Alarm event Alarm weighted mode  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  Users  8 simultaneous users  PTZ preset scheduling  7 yes, via Web interface  Text overlay for date, time, and camera name  CPU, Memory  Finded Soc ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  Frotocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	SD card rocci	rding	Support Micro SD/SDHC card for circular recording (built-in Mic
Alarm functions  Alarm event Alarm event Alarm weighted mode  Network  Ethernet  Connectivity  Users  By alarm yeighted mode  Support  10Mbps / 100Mbps , RJ-45  Connectivity  ONVIF Profile S  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  Text overlay for date, time, and camera name  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes		rung	SD card) Firmware upgrade via HTTP
Alarm event Alarm event Alarm weighted mode Support  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity ONVIF Profile S  8 simultaneous users  PTZ preset scheduling Yes, via Web interface OSD Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display LILIN Universal ActiveX & LILIN Java Applet  OS Embedded Linux 2.6.32  2-way audio Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter Yes			
Alarm weighted mode  Network  Ethernet  10Mbps / 100Mbps , RJ-45  Connectivity  Users  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  OSD  Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  OS  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Alarm functions		
Connectivity  ONVIF Profile S  Users  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  Text overlay for date, time, and camera name  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  CS  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Alarm weighted mode		
Connectivity  ONVIF Profile S  8 simultaneous users  PTZ preset scheduling  Yes, via Web interface  Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Network		
Users  8 simultaneous users  Yes, via Web interface  Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Ethernet		10Mbps / 100Mbps , RJ-45
PTZ preset scheduling OSD Text overlay for date, time, and camera name  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio G.711  Protocols IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter Yes	Connectivity		ONVIF Profile S
Text overlay for date, time, and camera name  CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Users		8 simultaneous users
CPU, Memory  Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory  Video display  LILIN Universal ActiveX & LILIN Java Applet  OS  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	PTZ preset scheduling		· · · · · · · · · · · · · · · · · · ·
Video display  LILIN Universal ActiveX & LILIN Java Applet  CS  Embedded Linux 2.6.32  2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	OSD		
OS Embedded Linux 2.6.32  2-way audio G.711  Protocols IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter Yes			memory
2-way audio  G.711  Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  IP filter  Yes	Video display		
Protocols  IPv4/IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  Yes	OS		Embedded Linux 2.6.32
ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP, IGMP, SNMP  Yes	2-way audio		
IP filter Yes	Protocols		ARP, DHCP, PPPoE, DNS, Telnet, RTSP, RTCP, Onvif, ICMP,
	IP filter	4:4:	Yes

Main functions	
Control function	Pan and Tilt / Zoom and Focus / Iris and ICR / 128 Preset Position / Home Position
Digital zoom ratio	12X
Zoom speed	Slow / MID. / Fast Selectable[ Fast : Approx. 3.5 Sec ( Tele to Wide ) in Manual Mode ]
Focus speed	Slow / MID. / Fast Selectable [ Fast : Approx. 3.5 Sec ( Far to Near ) in Manual Mode ]
Focus	Auto / Manual

10 users accounts available

Base 64 HTTP encryption

Multiple user access levels with password protection

Yes

Network security User accounts

Multi IP address

Access Encryption