

Pro series | Mini Dome Camera

# IPD2220

## 1080P HD Microdome IP Camera

www.meritlilin.com



As with all Pro series cameras, 1080P HD Dome IP Camera IPD2220 incorporates Sense up+, a unique technology that successfully delivers stunning video in low-light conditions. Utilizing intelligent image signal processing, AGC control, and 3D Noise Reduction, this model successfully delivers the ultimate low-light image without motion blur. The IPD2220 is capable of producing four independent video streams, different streams can be set for different applications, depending on the individual user requirements.

<p>SD card recording</p>	<p>H.264</p>	<p>Back Light Compensation</p>
<p>Easy to install</p>	<p>IP based PoE</p>	<p>WDR</p>

- ▶ Microdome IP camera
- ▶ Wide Dynamic Range
- ▶ Back light compensation
- ▶ Compact design and discreet low-profile look
- ▶ 1080p video resolution
- ▶ Easy to install

Dimensions (unit in mm): Ø 105 x 39

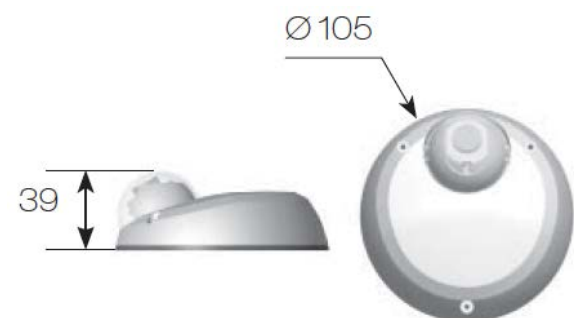
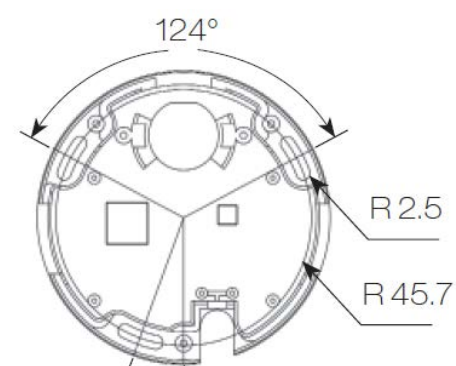


Diagram of mounting holes (unit in mm):



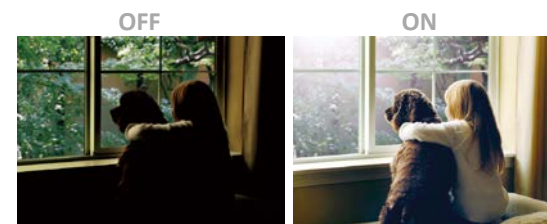
## Wide Dynamic Range

An Wide Dynamic Range image is made by taking 3 frames of the same scene and each at different shutter speeds to display details of both the darkest and brightest areas. WDR can extend image visibility under high contrast lighting scenes and improve image quality



## 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



## Sense Up+

Deliver outstanding video outputs in poor light conditions without experiencing motion blur. You can see video clearly even during nighttime without sufficient lighting support



## Face Detection

Automatically detects a human face



## 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

IPD2220 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)



## ONVIF-compliant

Open Network Video Interface Forum (ONVIF) is a standard for physical IP based security products. IPD2220 camera is ONVIF Profile S conformant



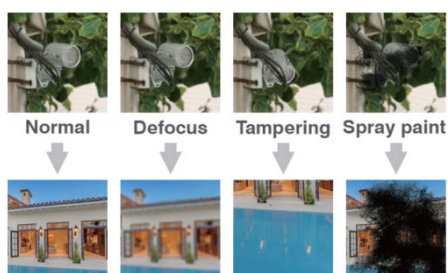
## Motion Detection

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



## Tamper Detection

Automatically detects camera sabotage or failure. Detects any attempts to tamper with the camera – partially or completely blocking its lens or field of view



## Audio Detection

With Audio Detection technology, an alarm is triggered based on ambient sound conditions as the threshold



## 1080P HD Microdome IP Camera

### Video performance & power

Model#	IPD2220ES2	IPD2220ES4.3
Low Light Mode (Colour)	0.4 Lux at F1.8	0.2 Lux at F1.6
Power consumption	DC12V, 4.5W / PoE, 5W	
Power supply	DC12V ±10% / PoE (IEEE 802.3af compliant)	

### Lens

Model#	IPD2220ES2	IPD2220ES4.3
Focal length	2.8mm	4mm
Iris	F1.8	F1.6
Angle of view	H	114°
	V	64°
	D	134°

### Sensor

Sensor type	1/2.7" CMOS image sensor
Effective pixels	1920 (H) x 1080 (V) = 2,073,600 (pixel)

### Certifications

CE	Yes
FCC	Yes

### PC requirement

CPU	Intel Pentium 4 1.8GHz or above
OS	Windows 2000 , Windows XP , Windows Vista, Windows 7, Windows 8
RAM	1GB or above ,Independent Display Card
Web browser	Microsoft® Internet Explorer® 6 and later

### Mechanical

Dimensions	Ø105 x 39mm
Weight	250g approx.

### Video streaming

Video compression	H.264 , Motion JPEG
Streaming	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast
Bitrate	128Kbps~8Mbps Frame rate and bit rate controllable on-the-fly VBR / CBR / GOP supported
IP filter	Yes
RTSP Authentication	On / Off

### Network security

User accounts	10 user accounts available
Access	Multiple user access levels with password protection
Encryption	Base 64 HTTP encryption

### Main functions

Sense up	Off / 1 frame / 2 frames / 3 frames / 7 frames
Sense up +	Yes
3D Noise Reduction	Off / 1~32 selectable
Alarm function	Face / tampering / audio / motion detection Image upload over FTP and E-mail by face / tampering / audio / motion detection
SD card recording	Support Micro SD/SDHC card for circular recording (card is not included)
ePTZ & digital zoom	Yes, ROI is supported

### Video resolution (H x V)

1080P	1920 x 1080	
720P	1280 x 720	
D1	720 x 480	
CIF	352 X 240	
Multiple profile	Profile #1	H.264 : up to 30 FPS @ 1920 x 1080, MJPEG : up to 30 FPS @ 720 x 480
	Profile #2	H.264 : up to 30 FPS @ 1280 x 720, MJPEG : up to 30 FPS @ 352 x 240
	Profile #3	H.264 : up to 30 FPS @ 1920 x 1080, MJPEG : up to 30 FPS @ 1280 x 720
	Profile #4	H.264 : up to 30 FPS @ 720 x 480, MJPEG : up to 15 FPS @ 1920 x 1080

### Video functions

Scanning system	Progressive scan
White balance	Auto / tungsten / indoor / fluorescents1 / fluorescents2 / outdoor1 / outdoor2
Electronic shutter	1/30(1/25)s~1/8000s
Back light compensation	Off / On
Privacy masking	Off / on (4 zones)
Image effects	Brightness, Contrast, Hue, Saturation, Sharpness, Mirror, Flip
2D WDR	Off / Auto / x2 / x3 / x4
D/N quality setting	Yes

### Integration

Mobile application	Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support
Video management	ONVIF Profile S LILIN CMX3.6 NAV 1.0 Third party VMS through LILIN HTTP API
Firmware	Firmware upgrade via HTTP Firmware available to download at <a href="http://meritililn.com">meritililn.com</a>

### Network

CPU, Memory	Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory
OSD	Text overly for date, time , and camera name
Users	8 simultaneous users
Video display	LILIN Universal ActiveX & LILIN Java Applet
Connectivity	ONVIF Profile S
Ethernet	10Mbps / 100Mbps Base-T, RJ-45
OS	Embedded Linux 2.6.32
1-way audio supported	G.711 / PCM
Protocols	IPv4, IPv6, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S, SNMP, SIP, Bonjour
Multi IP address	Yes

### Environmental

Operating temperature	-25°C~+50°C (-13°F~122°F)
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Alarm event	FTP,SMTP, HTTP post, SD card, SAMBA
Alarm weighted mode	Yes