LILIN
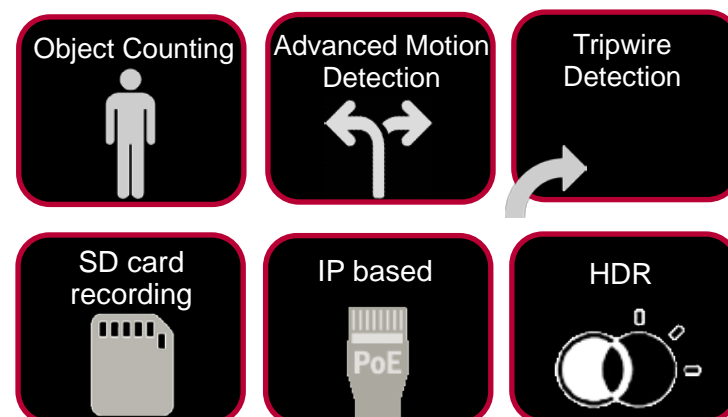
SD2222 60fps HD Microdome IP Camera

www.meritlilin.com

Object Counting	Advanced Motion Detection	Tripwire Detection
SD card recording	IP based PoE	HDR

▸ Ceiling mount & discreet design

▸ Small form factor – only in 10.5cm diameter

▸ 60 frames per second – ultra fast frame rate

▸ Motion, tamper, and audio detection

▸ Intelligent Video Surveillance analytics built-in

▸ Full HD 1080p resolution

Onvif S   Full HD 1080

Dimensions:
Ø 105mm x 39mm

Ø 105

39

Diagram of mounting holes:

124°

R 2.5

R 45.7

20°

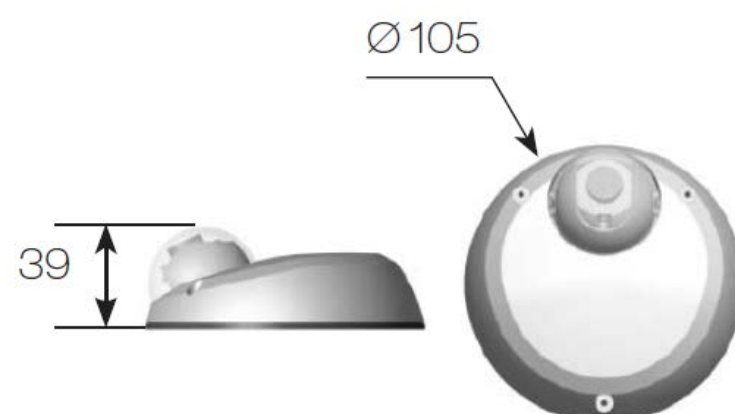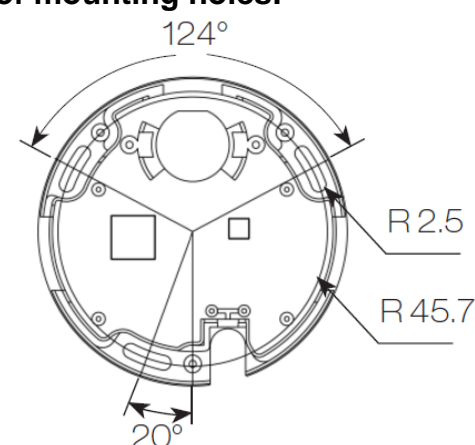**Viewing Objects to Ensure Pictures are Kept Sharp**

LILIN S series camera – SD2222 is best-in-class IP camera has an ultra fast frame rate of 60 frames per second at 1080P Full HD resolution, this results in crystal clear images. The S series cameras support high performance H.264 and Motion JPEG compression technology, and offers smooth video quality up to 60 frames per second at Full HD 1080p resolution, can be particularly beneficial when viewing moving objects to ensure pictures are kept sharp

ONVIF-conformant

Open Network Video Interface Forum (ONVIF) is a standard for physical IP based security products. SD2222 camera is ONVIF Profile S conformant

60 frames per second

60fps high frame rate ensure quick movements can be captured in more details, which is great for the most demanding surveillance requirements; i.e. railway system, freeway traffic, casino applications, and banking industry

SD Cards in Sync with NAV Software

SD2222 camera with built-in Micro SD/SDHC/SDXC card slots can provide redundant video viewing and recording. You can synchronize an SD card with LILIN VMS (Video Management Software) – Navigator (NAV)

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
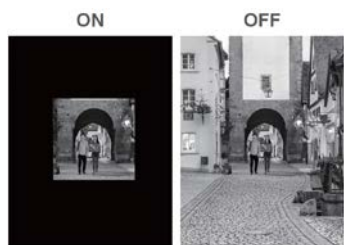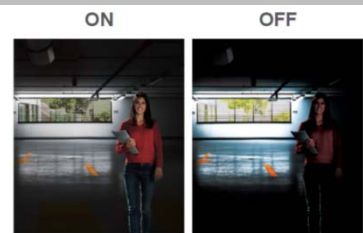

3D Noise Reduction

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

Video Security App

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

Region of Interest (ROI)

A Region of Interest (ROI) is a specified part of an image that is highlighted from a camera. This feature is great for highlighting areas such as doors or areas of access where an overall scene is still required

High Dynamic Range

An High Dynamic Range (HDR) 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. HDR can extend image visibility under high contrast lighting scenes and improve image quality

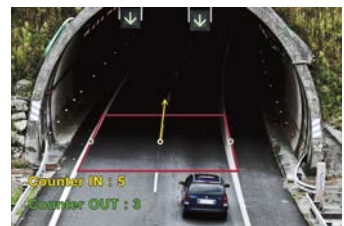## Face Detection

Automatically detects a human face

Tripwire Detection

Tripwire Detection can be used where physical security is impractical or even impossible; i.e. railway tracks. An alarm can be enabled in either directions across the tripwire. Line Crossing that an object crossing a line drawn anywhere in the scene can be detected, and also Zone Intrusion that any arbitrary shape zone can be set to monitor intrusion

Advanced Motion Detection

Detect motion and capture the events. Motion in the selected area will provoke an alert. Time of motion in given direction can be detected by simply drawing an arrow on the video

Object Counting

Object Counting is able to accurately to input images containing similar objects. Intelligent Object Counting technology includes People Counting feature – people enter or exit an area over time can be counted, as well as Vehicle Counting feature – to detect and track vehicle in real-time

Audio Detection

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

Privacy Masking

Privacy Masking is a feature used to protect personal privacy by concealing private areas in the camera's field of view. Doorways and house windows for example are not subject to surveillance

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

IP filter	Yes
RTSP Authentication	On / Off

60fps HD Microdome IP Camera

Video performance

Model#	SD2222E2	SD2222E4
Low Light Mode (Colour)	0.07 lux at F1.6	
2D WDR	Off / Auto / x2 / x3/ x4 (by normal mode)	
High Dynamic Range	Up to 120 dB by HDR mode, 2 shutter line interleave	

Power

Power consumption	DC12V, 6W / PoE, 6.8W
PoE	IEEE802.3af
Power supply	DC24V ±10%
	Power over Ethernet (IEEE 802.3af compliant)

Sensor

Sensor type	1/2.86-inch MOS
Total sensor pixels	1952 x 1266

Certifications

CE	EN 55022: 2010 Class A
	IEC 61000-3-2: 2005+A1: 2008+A2: 2009
	IEC 61000-3-3: 2013
FCC	Part 15: Subpart B Class A
	CISPR 22: 2008 Class A

Lens

Model#		SD2222E2	SD2222E4
Focal length		2.8mm	4mm
Iris		F1.8	F1.6
Angle of View	H	110°	84.8°
	V	62°	45.2°
	D	130°	100.5°

Environmental

Operating temperature	-25℃ to 50℃ (-13℉ to 122℉)

PC requirement

OS	Windows 2000, Windows XP, Windows Vista, Windows 7, Windows 8
CPU	Intel Core 2 Duo E6400 2.13GHz or above
RAM	2GB or above, Independent Display Card

Mechanical

Dimensions	Ø 105mm x 39mm
Weight	310g approx.

Video streaming

Video compression	H.264 (main & high profile); M-JPEG
Streaming	RTP / HTTP, RTP / TCP, RTP / UPP, Multicast Multiple configurable streams in H.264 and M-JPEG, configurable frame rate and bandwidth
Bitrate	128Kbps to 12Mbps Frame rate and bitrate controllable on-the-fly VBR / CBR / GOP supported

Video resolution (H x V)

1080p HD		1920 x 1080
720p HD		1280 x 720
D1		720 x 480
CIF		352 x 240
Multiple profile	Profile #1	Dual-stream mode, H.264 : up to 60 FPS @ 1920 x 1080, Motion JPEG : up to 30 FPS @ 720 x 480
	Profile #2	HDR mode, H.264 : up to 30 FPS @ 1920 x 1080 , Motion JPEG : up to 30 FPS @ 720 x 480

Video functions

Scanning system	Progressive scan
Adjustable picture setting	Contrast, Brightness, Saturation
White balance	Auto / Tungsten / Indoor / Fluorescents1 / Fluorescents2 / Outdoor1 / Outdoor2
Shutter	1/30(25)s to 1/30000s
Back light compensation	On / Off
3D noise reduction	Off / 1 to 32 selectable
Privacy masking	Four independent areas
Sense Up	Off / 1 frame / 2 frames
Sense Up+	Yes
Auto gain control	54 dB variable gain
Other functions	Sharpness, Image flip, Image mirror, Defog, Hue
D/N quality setting	Yes

Integration

Mobile application	Integrated to LILIN mobile app (LILINViewer) iPhone, iPad, Android support
Video management	ONVIF Profile S LILIN NAV 1.0 Third party VMS through LILIN HTTP API
SD card recording	Support Micro SD/SDHC/SDXC card for circular recording (card is not included)
Web browser	Microsoft® Internet Explorer® 6.0 and later
Firmware	Firmware upgrade via HTTP
Detection features	Motion detection, Tamper detection, Zone Entering, Direction detection, Zone crossing
Alarm functions	Tampering / audio / motion detection
Alarm event	FTP,SMTP, HTTP post, SD card, SAMBA
Alarm weighted mode	Yes

Network

Ethernet	10/100/1000Mbps Base-T, RT-45
Connectivity	ONVIF Profile S
Users	8 simultaneous users
ePTZ & digital zoom	Yes, ROI (Region of Interest) is supported
OSD	Text overlay for date, time and camera name
CPU, Memory	Embedded SoC, 1.2GHz Dual ARM Cortex-A9 & 600MHz ARM11, 1GB DDR3,256MB flash memory
Video display	LILIN Universal ActiveX & LILIN Java Applet
OS	Embedded Linux 3.8.0
One-way audio	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

Network security

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