



**Creativity Progress & Excellence**  
Network Product



## Feature Guide for Series II & III *iMEGAPRO*:

### Sense Up Plus:

Manufacturers have traditionally utilised frame integration technology to improve the low light performance in CCTV cameras. Whilst effective at producing a low light image, 'motion blur' is a common problem in areas with movement. Sense Up Plus utilises intelligent image signal processing with a highly sensitive CMOS sensor, AGC control and 3D noise reduction to provide the ultimate low light image without any 'motion blur' or noise.

### Colour



### Colour Sense Up Plus



HD Clarity



### Quadruple Streaming:

Within the main profile four individual streams are available; two H.264 streams; one at 1080p resolution the other at 480p and two JPEG streams; 480p and CIF resolution respectively. Each can be set up to a maximum 30 FPS. The advantages are that each client can request a stream from the camera to suit its needs, for example the recording device could use the 1080p H.264 stream at 30 FPS, whilst mobile devices might connect to the JPEG CIF stream to save bandwidth and increase transmission speed.

### Region of Interest (ROI):

A ROI is a designated area within each camera view. This can then be delivered to the recording device as an individual stream. For example; a shop counter (overall image) is streamed at 2 FPS whilst the ROI is zoomed into the till and streamed at 15 FPS giving faster updates of this sensitive area. E Tour: Digitally zoom and move around the camera image. Preset positions can be stored and a tour can then move around those preset positions as though it were a mechanical pan and tilt camera.

### Weighted Mode:

Each stream has the option to be set to weighted mode. When enabled the stream will transmit at 1 FPS regardless of the programmed FPS. Upon an alarm the frame rate will increase to its programmed values. This optimises both hard drive recording space and bandwidth usage but still maintains continuous surveillance recording.

### IR Illumination:

Already a leader in infrared integration, our expertise in this field has been applied to create the largest ranges of IR integrated IP cameras. IR LED illumination can be achieved for distances up to 60 Meters.

### ONVIF:

LILIN were the first company in the world to produce a range of ONVIF compatible products. This enables our range of cameras to work with many Video Management Software solutions including, Milestone, Genetec, Axxon, Nuuo and GeoVision to name but a few.

### Alarms can be activated using a number of modes:

#### Motion Detection:

Detects motion within a selected zone

#### Face Detection:

Detects a human face within a selected zone

#### Tamper Detection:

Detects changes in the camera image, such as spray painting, focus drift or the camera field of view moving

#### Audio Detection:

Activates an alarm if sound is detected (audio models only)

### Other Features:

#### Privacy Masking:

8 privacy zones to block out parts of the video, ideal for applications such as chip and pin terminals

#### Power over Ethernet (PoE):

Enabling one cable solution for both power and video/data

#### Graphic User Interface (GUI):

*iMEGAPRO* II & III use the same user interface as LILINs 720p and 1.3 Megapixel IP camera range. This familiar and user friendly interface ensures smooth integration and quick configuration

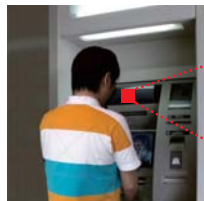
### Motion Detection



Recording



### Face Detection



Detecting



Face

### Tampering Detection



Alarm



Alarm



# IPR7424ESX / IPR7428ESX

Day & Night 1080P HD Vari-Focal  
IR IP Camera

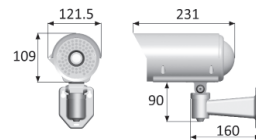


## Features

- Full HD 2 megapixel CMOS image sensor
- True H.264 AVC/MPEG-4 part 10 real-time video compression
- H.264 and Motion JPEG multi-profile video streaming
- 3D noise reduction (MCTF)
- 2D WDR function
- Digital PTZ supported
- Face / Tampering / Audio / Motion detection alarm function
- Cable managed housing and bracket
- High efficiency IR LED, radiant distance up to 35m
- Day & Night (IR cut removable)
- 2-way audio supported
- Digital I/O : 1 in, 1 out
- Onvif supported
- Support Sense Up Plus and Quadruple Streaming technologies



**Dimensions** Body : 121.5mm(W) x 109mm(H) x 231mm(D)



Bracket : 160mm(L)  
(Unit:mm)

IP CAMERA SERIES				
Day & Night 1080P HD Vari-Focal IR IP Camera				
Model	IPR7424ESX3.6	IPR7428ESX3.6	IPR7424ESX2.4	IPR7428ESX2.4
Lens	Focal Length	3.3 ~ 12 mm		9 ~ 22 mm
	Iris	F1.4		F1.4
	Angle of View	H	79.3° ~ 29.8°	29.5° ~ 12.4°
		V	59.4° ~ 22.4°	22° ~ 9.3°
	D	99° ~ 37.3°	36.9° ~ 15.5°	
Pick Up Element	1/2.7" CMOS image sensor			
Effective Pixel	1920 (H) x 1080 (V) = 2,073,600 (pixel)			
Chip Size	5.856mm (H) x 3.276mm (V)			
Scanning System	Progressive Scan			
Infrared Cut Filter	Auto / Schedule / Day (Color) / Night (Mono)			
Min. Illumination	Color : 0.4 Lux at F1.4, Mono : 0.1 Lux at F1.4 / 0 Lux with IR			
White Balance	Auto / Tungsten / Indoor / Fluorescents1 / Fluorescents2 / Outdoor1 / Outdoor2			
Back Light Compensation	Off / On			
Electronic Shutter	1/30(25)s ~ 1/8000s			
Sense Up	Off / 1 Frame / 2 Frames / 3 Frames / 7 Frames			
Sense Up Plus	Yes			
Auto Gain Control	36 dB Variable Gain			
3D Noise Reduction	Off / Low / Middle / High			
2D WDR	Off / On			
Privacy Masking	Off / On (4 zones)			
Image Effects	Brightness, Contrast, Hue, Saturation, Sharpness, Mirror, Flip			
Live Video Output	CVBS 1.0Vp-p, 75 ohm			
IP Rating	IP66			
Window	Ø92 Heat Resistant Glass			
Infrared LED	Peak Wavelength	850nm		
	Beam Spread	30°		
	Radiant Distance	35M		
Operating Temperature	-10°C ~ +50°C (14°F ~ 122°F)			
Dimension	Body : 121.5mm(W) x 109mm(H) x 231mm(D) , Bracket : 160mm(L)			
Weight	1700g			
Power Supply	AC24V (±10%)	AC100~240V (±10%)	AC24V (±10%)	AC100~240V (±10%)
	PoE+ (IEEE 802.3at compliant)			
Power Consumption	14W ( PoE+, 16W )			

NETWORK		
Video Compression	H.264 , Motion JPEG	
Resolution	1080P(1920 x 1080), 720P(1280 x 720), D1(720 x 480), CIF(352 x 240)	
Multiple profile	Profile #1	H.264 1920x1080 @30fps, H.264 720x480 @30fps, JPEG 720x480 @25fps, JPEG 352x240 @25fps
	Profile #2	H.264 1280x720 @30fps, H.264 720x480 @30fps, JPEG 352x240 @25fps
	Profile #3	H.264 1920x1080 @30fps, H.264 720x480 @30fps, JPEG 1280x720 @25fps
	Profile #4	H.264 1920x1080 @30fps, H.264 720x480 @30fps, JPEG 720x480 @25fps
Video Streaming	RTP/HTTP, RTP/TCP, RTP/UDP	
Video Bitrate	128Kbps ~ 5Mbps Frame rate and bit rate controllable on-the-fly VBR / CBR / GOP supported	
Security	Base64 HTTP encryption Multiple user access levels with password protection	
Users	10 user accounts available 8 simultaneous users	
ePTZ & Digital Zoom	Yes, ROI is supported	
OSD	Text overlay for date, time, and camera name	
Alarm Function	Alarm / motion / tampering / face detection triggering recording into SD card Image upload over FTP and E-mail by face / tampering / audio / motion detection	
CPU, Memory	Embedded SoC ARM11, 528MHz, 256MB DDR2, 256MB flash memory	
Maintenance	Firmware update via HTTP Firmware available at web site	
Network Interface	10Mbps / 100Mbps Base-T, RJ-45 OS : Windows 2000, Windows XP, Windows Vista, Windows 7	
PC Requirement	Browser : Windows Internet Explorer 6, 7, 8 CPU : Intel Pentium 4 1.8GHz or above RAM : 1GB or above, Independent Display Card	
Network Protocols	IP, TCP, UDP, HTTP, SMTP, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, Onvif	
Mobile Phone and PDA	iPhone, iPad, and Android support	
System Integration	Onvif & LILIN HTTP API Support CMX HD 3.6	
Video Display	LILIN Universal ActiveX & LILIN Java Applet	
OS	Embedded Linux 2.6.32	
Two-way Audio	G.711	
SD Card Recording	Support SD/SDHC card for circular recording (card is not included)	
Alarm Input / Output	Digital 1 input (TTL, +3 ~ 5V) / 1 Output (N.O.)	