

## **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

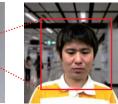


Recording

# -



Face Detection



Face

Detecting

.

#### Tampering Detection





Alarm



## IPR722S



#### Day & Night 1080P HD IR IP Camera



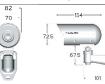


| IP CAMERA SERIES        |                     |   |   |       |  |
|-------------------------|---------------------|---|---|-------|--|
|                         | Day                 | & N   | light 1080P HD IR IP Ca   | imera |  |
| Model                   |                     | IPR722S4.3  | IPR722S6  |       |  |
|                         | Focal Length        |   | 4.3mm   | 6mm   |  |
|                         | Iris                |   | F1.6  | F1.8  |  |
| Lens                    | Angle of View       | Н   | 70°   | 49.3° |  |
|                         |                     | V   | 51°   | 35.9° |  |
|                         |                     | D   | 89°   | 64.5° |  |
| Pick Up Element         |                     |   | 1/2.7" CMOS image sensor  |       |  |
| Effective Pixels        |                     |   | 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       |                     | 0.15 Lux at F1.6<br>(Low Light Mode) /<br>0 Lux with IR           | 0.18 Lux at F1.8<br>(Low Light Mode) /<br>0 Lux with IR                           |       |  |
| White Balance           |                     |   | Auto / Tungsten / Indoor / Fluorescents1 /<br>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 +              |                     |   | Yes   |       |  |
| Auto Gain Control       |                     |   | 36 dB Variable Gain   |       |  |
| 3D Noise Reduction      |                     |   | Off / 1 ~ 32 Selectable   |       |  |
| 2D WDR                  |                     |   | Off / On  |       |  |
| Privacy Masking         |                     | Off / On (4 zones)  |   |       |  |
| Image Effects           |                     | Brightness, Contrast, Hue, Saturation, Sharpness,<br>Mirror, Flip |   |       |  |
| IP Rating               |                     |   | IP66  |       |  |
| Window                  |                     |   | Ø65 Heat Resistant Glass  |       |  |
|                         | Peak<br>Wavelength  |   | 850nm   |       |  |
| Infrared<br>LED         | Beam Spread         |   | 30°   |       |  |
|                         | Radiant<br>Distance |   | 21M   |       |  |
| Operating Temperature   |                     | -35°C ~ +50°C (-31°F ~ 122°F)                                     |   |       |  |
| Dimension               |                     |   | Body : 82mm(W) x 72.5mm(H) x 154mm(D) /<br>Bracket : 101mm(L)                     |       |  |
| Weight                  |                     |   | 600g  |       |  |
| Power Supply            |                     |   | DC12V ±10%  |       |  |
| Power Consumption       |                     |   | 10W   |       |  |

#### **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 / Motion detection alarm function
- High efficiency IR LED, radiant distance up to 21m
- Day & Night (IR cut removable)
- ONVIF supported
- Support Sense Up + and Quadruple Streaming technologies

#### **Dimensions** Body: 82mm(W) x 72.5mm(H) x 154mm(D)



Bracket: 101mm(L) (Unit:mm)

|                      | 7          | . 101 ]   |  |  |
|----------------------|------------|---|--|--|
|                      |            | NETWORK   |  |  |
| Video Compression    |            | H.264 , Motion JPEG   |  |  |
| Resolution           |            | 1080P(1920 x 1080), 720P(1280 x 720),<br>D1(720 x 480), CIF(352 x 240)                              |  |  |
| Multiple<br>profile  | Profile #1 | H.264 : up to 30 fps @ 1920 x 1080 ,<br>MJPEG : up to 30 fps @ 720 x 480                            |  |  |
|                      | Profile #2 | H.264 : up to 30 fps @ 1280 x 720 ,<br>MJPEG : up to 30 fps @ 352 x 240                             |  |  |
|                      | Profile #3 | H.264 : up to 30 fps @ 1920 x 1080 ,<br>MJPEG : up to 30 fps @ 1280 x 720                           |  |  |
|                      | Profile #4 | H.264 : up to 30 fps @ 720 x 480 ,<br>MJPEG : up to 15 fps @ 1920 x 1080                            |  |  |
| Video Streaming      |            | RTP/HTTP, RTP/TCP, RTP/UDP  |  |  |
|                      |            | 128Kbps ~ 5Mbps   |  |  |
| Video Bitrate        |            | Frame rate and bit rate controllable on-the-fly   |  |  |
|                      |            | VBR / CBR / GOP supported   |  |  |
| Security             |            | Base64 HTTP encryption  |  |  |
|                      |            | Multiple user access levels with password protection  |  |  |
|                      |            | 10 user accounts available  |  |  |
| Users                |            | 8 simultaneous users  |  |  |
| ePTZ & Digital Zoom  |            | Yes, ROI is supported   |  |  |
| OSD                  |            | Text overlay for date, time, and camera name  |  |  |
| Alarm Functions      |            | Image upload over FTP and E-mail by face / tampering<br>/ motion detection                          |  |  |
| CPU, Memory          |            | Embedded SoC ARM11, 528MHz, 256MB DDR2,<br>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,<br>Windows 7  |  |  |
| PC Require           | ment       | 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,<br>DHCP, PPPOE, DNS, RTSP, RTCP, Telnet, ONVIF |  |  |
| Mobile Phone and PDA |            | iPhone, iPad, and Android support   |  |  |
| System Integration   |            | ONVIF & LILIN HTTP API  |  |  |
| CMX                  |            | CMX HD 3.6 support  |  |  |
| Video Display        |            | LILIN Universal ActiveX & LILIN Java Applet   |  |  |
| OS                   |            | Embedded Linux 2.6.32   |  |  |

