

### Overview

- 1/3.2" Progressive Scan CMOS
- 4 megapixel resolution
- Day and night function with mechanical IR cut filter
- Minimum illumination 0.05 lux at F1.4
- 18x Zoom
- Built-in f4.7-84.6 mm / f1.6 megapixel iris zoom lens
- 8 FPS at 2032 x 1920 resolution
- Selectable H.264, MPEG-4 SP, MJPEG compressions with dual streaming
- Serial port for external pan & tilt scanner
- 2D+3D Digital noise reduction
- Weatherproof IP66 rated casing
- Powered by PoE Class 3 / DC 12V
- Video Insight VMS license included



### Technical Specifications

#### Camera

|                           |                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------|
| Image Sensor:             | Progressive Scan CMOS                                                                           |
| Sensor Size:              | 1/3.2" (4.5 x 3.4 mm)                                                                           |
| Day/Night                 | Yes                                                                                             |
| Min. Illumination:        | Color: 0.1 lux at F1.6 (30 IRE, 2400°K); B/W: 0 lux (IR LED on)                                 |
| Color to B/W Switch:      | ISP based, configurable                                                                         |
| Mechanical IR Cut Filter: | Yes                                                                                             |
| IR Sensitivity Range:     | 700 - 1100 nm                                                                                   |
| Electronic Shutter:       | Manual mode: 1/25 - 1/2000 sec. (50Hz); 1/15 - 1/2000 sec. (60Hz)<br>Auto mode: 1 - 1/2000 sec. |

#### Lens

|                           |                                    |
|---------------------------|------------------------------------|
| Focal Length / Aperture:  | Zoom, f4.7 - 84.6 mm / F1.6 - F2.8 |
| Zoom Ratio:               | 18x optical                        |
| Zoom Speed:               | 2.63 sec (1x to 18x)               |
| Iris:                     | DC Iris                            |
| Focus:                    | Auto focus                         |
| Mount Type:               | Board mount                        |
| Horizontal Viewing Angle: | 48.94° - 3.61°                     |

#### Video

|                                                 |                                                                                                         |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Compression:                                    | MJPEG / MPEG-4 / H.264                                                                                  |
| Maximum Frame Rate:<br>H.264 & MJPEG            | 8 FPS(2032 x 1920), 15 FPS(1920 x 1080 HD 1080p), 30 FPS(1280 x 720 HD 720p),<br>30 FPS (640 x 480 VGA) |
| Maximum Frame Rate vs. Resolution:<br>MPEG-4 SP | 8 FPS(2032 x 1920), 10 FPS(1920 x 1080 HD 1080p), 24 FPS(1280 x 720 HD 720p),<br>30 FPS (640 x 480 VGA) |
| 4 Cropped VGA Mode:<br>(All Compressions)       | 15 FPS(640 x 480 VGA)                                                                                   |

## Technical Specifications

|                             |                                                                                                                                                                              |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bit Rate Mode:              | Constant, Variable                                                                                                                                                           |
| Image Enhancement:          | SDR (Superior Dynamic Range); White balance: automatic, hold and manual; Brightness; Contrast; Automatic gain control; 2D+3D Digital noise reduction; Flickerless; Defogging |
| Privacy Mask:               | 4 configurable regions                                                                                                                                                       |
| Text Overlay:               | User defined text on video                                                                                                                                                   |
| Image Orientation:          | Image flip and mirror                                                                                                                                                        |
| <b>Audio</b>                |                                                                                                                                                                              |
| Compression:                | 8 kHz. Mono, PCM, 16 bit encoding                                                                                                                                            |
| Audio In:                   | 3.5mm Phone Jack                                                                                                                                                             |
| Audio Out:                  | TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1x, Qos (SIP, SRTP, IPv6 optional)                                                         |
| <b>Network</b>              |                                                                                                                                                                              |
| Protocol & Service:         | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D                                                |
| Ethernet Port:              | 1, Ethernet (10/100 Base-T), RJ-45 connector                                                                                                                                 |
| Security:                   | IP adress filtering; HTTPS encryption; Password protected user levels; IEEE 802.1X network access control                                                                    |
| <b>Alarm</b>                |                                                                                                                                                                              |
| Alarm Trigger:              | Video motion detection 3 regions in single view mode, External device through digital input                                                                                  |
| <b>Interface</b>            |                                                                                                                                                                              |
| Digital Input:              | 2, terminal block                                                                                                                                                            |
| Digital Output:             | 2, terminal block                                                                                                                                                            |
| Local Storage:              | MicroSD / MicroSDHC memory card slot (card not included)<br>DC 12V / 11.52 W (IR on)                                                                                         |
| <b>General</b>              |                                                                                                                                                                              |
| Power Source / Consumption: | PoE Class 3 (IEEE802.3af) / 9.12 W (IR on)                                                                                                                                   |
| Environmental Casing:       | Weatherproof (IP66 rated)                                                                                                                                                    |
| Operating Temperature:      | Max. 5.5W (ICR on: Max8.5W)                                                                                                                                                  |
| Operating Humidity:         | 10% ~ 85% RH                                                                                                                                                                 |
| Dimensions:                 | 4.50" x 5.10" x 7.70"                                                                                                                                                        |
| Weight:                     | 2.98 lb.                                                                                                                                                                     |