

Video

|                   |                                                                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Imaging Device    | 1/2.8" 2MP CMOS                                                                                                             |
| Effective Pixels  | 1945(H)x1109(V)                                                                                                             |
| Min. Illumination | Color: 0.03Lux(F1.6, 1/30sec)<br>BW: 0Lux(IR LED on)                                                                        |
| Video Out         | CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation<br>USB: Micro USB type B, 1280x720 for installation |

Lens

|                           |                                                                               |
|---------------------------|-------------------------------------------------------------------------------|
| Focal Length (Zoom Ratio) | 5.2~62.4mm(12x)                                                               |
| Max. Aperture Ratio       | F1.6(Wide) ~ F3.0(Tele)                                                       |
| Angular Field of View     | H: 54.6°(Wide)~5.3°(Tele) / V: 32.2°(Wide)~3°(Tele) / D: 61.4°(Wide)~6°(Tele) |
| Min. Object Distance      | 2.1m(6.89ft)                                                                  |
| Focus Control             | Oneshot AF                                                                    |
| Lens Type                 | DC auto iris                                                                  |

Pan / Tilt / Rotate

|                           |                            |
|---------------------------|----------------------------|
| Pan / Tilt / Rotate Range | 0°~354° / 0°~75° / 0°~355° |
|---------------------------|----------------------------|

Operational

|                             |                                                                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IR Viewable Length          | 70m(229.66ft)                                                                                                                                                                                                             |
| Camera Title                | Displayed up to 85 characters                                                                                                                                                                                             |
| Day & Night                 | Auto(ICR)                                                                                                                                                                                                                 |
| Backlight Compensation      | BLC, HLC, WDR, SSDR                                                                                                                                                                                                       |
| Wide Dynamic Range          | 150dB                                                                                                                                                                                                                     |
| Digital Noise Reduction     | SSNR V                                                                                                                                                                                                                    |
| Digital Image Stabilization | Support(built-in gyro sensor)                                                                                                                                                                                             |
| Defog                       | Support                                                                                                                                                                                                                   |
| Motion Detection            | 8ea, 8point polygonal zones                                                                                                                                                                                               |
| Privacy Masking             | 32ea, polygonal zones<br>- Color: Grey/Green/Red/Blue/Black/White<br>- Mosaic                                                                                                                                             |
| Gain Control                | Low / Middle / High                                                                                                                                                                                                       |
| White Balance               | ATW / AWC / Manual / Indoor / Outdoor                                                                                                                                                                                     |
| LDC                         | Support                                                                                                                                                                                                                   |
| Electronic Shutter Speed    | Minimum / Maximum / Anti flicker (2~1/12,000sec)                                                                                                                                                                          |
| Video Rotation              | Flip, Mirror, Hallway view(90°/270°)                                                                                                                                                                                      |
| Analytics                   | Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Digital auto tracking, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Sound classification |
| Alarm I/O                   | Input 1ea / Output 1ea                                                                                                                                                                                                    |
| Alarm Triggers              | Analytics, Network disconnect, Alarm input                                                                                                                                                                                |
| Alarm Events                | File upload via FTP and e-mail<br>Notification via e-mail<br>SD/SDHC/SDXC or NAS recording at event triggers<br>Alarm output<br>Handover                                                                                  |
| Audio In                    | Selectable(mic in/line in),<br>Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm                                                                                                                                       |
| Audio Out                   | Line out, Max.output level: 1Vrms                                                                                                                                                                                         |

Network

|                                   |                                                                                                                                                                                                                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet                          | RJ-45(10/100BASE-T)                                                                                                                                                                                               |
| Video Compression                 | H.265/H.264: Main/Baseline/High, MJPEG                                                                                                                                                                            |
| Resolution                        | 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240                                                                                                 |
| Max. Framerate                    | H.265/H.264: Max. 60fps/50fps(60Hz/50Hz)<br>MJPEG: Max. 60fps/50fps(60Hz/50Hz)                                                                                                                                    |
| Smart Codec                       | Manual(Sea area), WiseStream II                                                                                                                                                                                   |
| Bitrate Control                   | H.264/H.265: CBR or VBR<br>MJPEG: VBR                                                                                                                                                                             |
| Streaming                         | Unicast(20 users) / Multicast<br>Multiple streaming(Up to 10 profiles)                                                                                                                                            |
| Audio Compression                 | G.711 u-law /G.726 Selectable<br>G.726(ADPCM) 8KHz, G.711 8KHz<br>G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps<br>AAC-LC: 48Kbps at 16KHz                                                                                |
| Protocol                          | IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour                              |
| Security                          | HTTPS(SSL) Login Authentication<br>Digest Login Authentication<br>IP Address Filtering<br>User access Log<br>802.1X Authentication(EAP-TLS, EAP-LEAP)                                                             |
| Edge Storage                      | Micro SD/SDHC/SDXC 2slot 512GB                                                                                                                                                                                    |
| Application Programming Interface | ONVIF Profile S/G<br>SUNAPI(HTTP API)<br>Wisenet open platform                                                                                                                                                    |
| Web Viewer                        | Supported OS: Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12<br>Recommended Browser: Google Chrome<br>Supported Browser: MS Explore11, MS Edge, Mozilla Firefox(Window 64bit only), Apple Safari(Mac OS X only) |
| Memory                            | 1024MB RAM, 512MB Flash                                                                                                                                                                                           |

Electrical

|                   |                                                       |
|-------------------|-------------------------------------------------------|
| Input Voltage     | PoE(IEEE802.3af, Class3), 24VAC, 12VDC                |
| Power Consumption | PoE: Max 12.95W<br>12VDC: Max 11.5W<br>24VAC: Max 14W |

Mechanical

|                             |                                          |
|-----------------------------|------------------------------------------|
| Color / Material            | Silver / Stainless(SUS316L)              |
| Product dimensions / weight | Ø162x134.5mm(Ø6.38x5.3") / 2.7kg(5.95lb) |