

PNM-9020V

7.3Megapixel Multi-sensor 180° Panoramic Camera

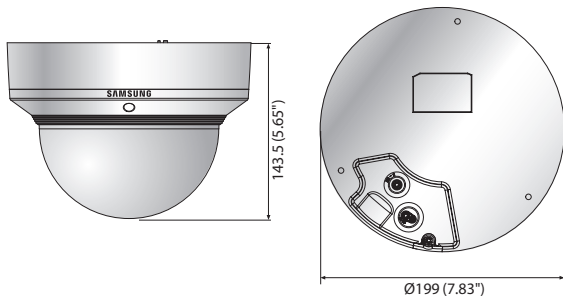


Key Features

- Max. 7.3M (4096 x 1800) resolution
- Built-in 3.6mm fixed lens
- H.265/H.264 : Max. 30fps at all resolutions
MJPEG : Max. 15fps at all resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Hand over to PTZ, Tampering, Defocus detection, Digital auto tracking, Heatmap
- SD/SDHC/SDXC (128GB) memory slot, PoE+ / 12V DC
- WiseStream supported, IP66, IK10

Dimensions

Unit : mm (inch)



Accessories (Optional)



PNM-9020V

| | |
|--|--|
| VIDEO | |
| Imaging Device | 7.3M (2M x 4) |
| Total / Effective Pixels | 5,152(H) x 1,981(V) / 4,096(H) x 1,800(V) |
| Scanning System | Progressive |
| Min. Illumination | Color : 0.3Lux |
| LENS | |
| Focal Length (Zoom Ratio) | 3.6mm fixed |
| Max. Aperture Ratio | F2.0 |
| Angular Field of View | [Total 4sensor] H : 180°, V : 84° |
| Min. Object Distance | 1.5m (4.92ft) |
| Focus Control | Manual |
| Lens / Mount Type | Fixed / Board type |
| PAN / TILT / ROTATE | |
| Pan / Tilt Range | 0° ~ 355° / 0° ~ 60° |
| OPERATIONAL | |
| Camera Title | Off / On (Displayed up to 45 characters) - W/W : English / Numeric / Special characters - Korea : English / Numeric / Special / Korean characters - China : English / Numeric / Special / Chinese characters - Common : Multi-line (Max. 6), Color (Grey / Green / Red / Blue / Black / White), Transparency, Auto scale by resolution |
| Day & Night | Auto (ICR) / Color / B/W / External / Schedule |
| Backlight Compensation | Off / BLC |
| Contrast Enhancement | SSDR (Off / On) |
| Digital Noise Reduction | SSNR III (2D+3D noise filter) (Off / On) |
| Defog | Off / Auto / Manual |
| Motion Detection | Off / On (8ea, Polygonal), Hand over |
| Privacy Masking | Off / On (16ea, Polygonal with 4 lines only) - Color : Grey / Green / Red / Blue / Black / White |
| Gain Control | Off / Low / Middle / High |
| White Balance | ATW / AWC / Manual / Indoor / Outdoor (not included Mercury & Sodium) |
| Electronic Shutter Speed | Minimum / Maximum / Anti flicker |
| Flip / Mirror | Off / On |
| Digital PTZ | Support |
| Intelligent Video Analytics | Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital auto tracking, Heat map |
| Alarm I/O | Input 1 / Output 1 |
| Alarm Triggers | Alarm Input, Motion Detection, Tampering(Scene Change), Virtual Line, Enter/Exit, Appear / Disappear, Audio Detection, Defocus Detection |
| Alarm Events | File upload via FTP, E-mail, Notification via E-mail, Local storage (SD/SDHC/SDXC) or NAS recording at event triggers, External output |
| Pixel Counter | Support (Plug-in viewer only) |
| View Composition | Plug-in : Single Panorama, Panorama +3 PTZ, Plug-in Free : 3DView |
| NETWORK | |
| Ethernet | RJ-45 (1000BASE-T), Plug-in type |
| Video Compression Format | H.265/H.264 (MPEG-4 part 10/AVC) : Main/Baseline/High, MJPEG [Panorama] 4096 x 1800, 3584 x 1576, 3072 x 1352, 2560 x 1124, 2048 x 900, Resolution 1536 x 676, 1024 x 452, 512 x 224, 720 x 576 [HalfView] 2048x1536 / 1600x1200 / 1024x768 / 800x600 |
| Max. Framerate | H.265/H.264 : Max. 30fps@all resolutions, MJPEG : Max. 15fps |
| Smart Codec/WiseStream | Manual mode (Area-based : Sea)/Support |
| Video Quality Adjustment | H.265/H.264, MJPEG : Target bitrate level control |
| Bitrate Control Method | H.265/H.264 : CBR or VBR, MJPEG : VBR |
| Streaming Capability | Multiple streaming (Up to 10 profiles) |
| Audio In | Line in, Supply voltage : 2.5V DC(4mA), Input impedance : approx. 2K Ohm |
| Audio Out | Line out (3.5mm stereo mini jack) |
| Audio Compression Format | G.711 u-law / G.726 selectable, G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps, AAC-LC : 48Kbps at 16KHz |
| Audio Communication | Bi-directional (2-way) |
| IP | IPv4, IPv6 |
| Protocol | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour |
| Security | HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication (EAP-TLS, EAP-LEAP) |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 15 users at unicast mode SD/SDHC/SDXC (up to 128GB) |
| Storage | - Motion images recorded in the SD/SDHC/SDXC memory card can be downloaded - Camera can detect automatically when the memory is connected - Memory status display (Normal / Error / Active / Formatting / Lock) NAS (Network Attached Storage), Local PC for instant recording (Plug-in viewer only) |
| Application Programming Interface | ONVIF profile S/G SUNAPI (HTTP API), SVNP, Wisenet Open Platform |
| Webpage Language | English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungary, Greek |
| Web Viewer | Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in Free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer, SSM |
| ENVIRONMENTAL | |
| Operating Temperature / Humidity | -40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -35°C (-31°F) |
| Storage Temperature / Humidity | -40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH |
| Ingress Protection / Vandal Resistance | IP66 / IK10 |
| ELECTRICAL | |
| Input Voltage / Current | PoE+ (IEEE802.3at) / 12V DC |
| Power Consumption | Max. 25.5W (PoE+, Heater On), Max 21.0W (DC12V, Heater On) |
| MECHANICAL | |
| Color / Material | Ivory / Aluminum |
| Dimensions (WxH) | Ø199.0 x 143.5mm (Ø7.83" x 5.65") |
| Weight | 2.03Kg (4.5 lb) |

* The latest product information / specification can be found at hanwha-security.com