





### **PNM-9000QB**

2MP x 4CH Remote Head Camera











#### **Key Features**

- 2MP x 4CH
- HDMI Single/Quad view support
- WDR 120dB, WiseStreamII
- Defocus detection, directional detection, motion detection etc
- Max 30fps@2MP
- H.265, H.264, MJPEG

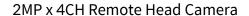
#### **Compatible Devices**



SBL-100D



### PNM-9000QB





#### **Specifications**

Video				
Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240			
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps			
Video Out	HDMI(1920x1080, Single/Quad view)			
Lens				
Optional Lens	SLA-T1080FA, SLA-T2480A, SLA-T2480VA, SLA-T4680A, SLA-T4680VA			
Operational				
Camera Title	Displayed up to 85 characters			
Day & Night	Auto(Electrical)			
Backlight Compensation	BLC, HLC, WDR, SSDR			
Wide Dynamic Range	120dB			
Digital Noise Reduction	SSNR V			
Digital Image Stabilization	Support			
Defog	Support			
Motion Detection	8ea, 8point Polygonal zones			
Privacy Masking	32ea, 4point Quadrangle zones - Color: Gray/Green/Red/Blue/Black/White - Mosaic			
Gain Control	Off / Max gain / Manual			
White Balance	ATW / NarrowATW / AWC / Manual / Indoor / Outdoor			
LDC	Support			
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2~1/12,000sec)			
Video Rotation	Flip, Mirror			
Analytics	Analytics events - Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line			
Alarm I/O	Input 2ea / Output 2ea			
Alarm Triggers	Analytics, Network disconnect, Alarm input			
Alarm Events	When alarm trigger occurred - File upload(image): e-mail/FTP - Notification: e-mail - Recording: SD/SDHC/SDXC or NAS recording at event triggers - Alarm output			
Audio In	Selectable(mic in/line in)			
	Line out			

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Ethernet Metal shielded RJ-45(10/100/1000BASE-T) H.265/H.264: Main/Baseline/High, MJPEG Video Compression

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Audio Compression	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
Smart Codec	Manual (5ea area), WiseStream II
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 12 profiles)
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, UPnP, Bonjour, LLDP
Security	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate(Hanwha private Root CA)
Application Programming Interface	ONVIF Profile S/T SUNAPI(HTTP API)
General	
General Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Webpage Language	Polish, Turkish, Dutch, Hungarian, Greek
Webpage Language Edge Storage	Polish, Turkish, Dutch, Hungarian, Greek  Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)
Webpage Language  Edge Storage  Memory	Polish, Turkish, Dutch, Hungarian, Greek  Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)
Webpage Language  Edge Storage  Memory  Environmental & Electrical	Polish, Turkish, Dutch, Hungarian, Greek  Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)  4GB RAM, 512MB Flash
Webpage Language  Edge Storage  Memory  Environmental & Electrical  Operating Temperature / Humidity	Polish, Turkish, Dutch, Hungarian, Greek  Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)  4GB RAM, 512MB Flash  -10°C~+45°C(14°F~+113°F) / 0~95% RH(Non-condensing)
Webpage Language  Edge Storage  Memory  Environmental & Electrical  Operating Temperature / Humidity  Storage Temperature / Humidity	Polish, Turkish, Dutch, Hungarian, Greek  Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)  4GB RAM, 512MB Flash  -10°C~+45°C(14°F~+113°F) / 0~95% RH(Non-condensing)  -50°C~+60°C(-58°F~+140°F) / 0~90% RH
Webpage Language  Edge Storage Memory  Environmental & Electrical Operating Temperature / Humidity Storage Temperature / Humidity Input Voltage	Polish, Turkish, Dutch, Hungarian, Greek  Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)  4GB RAM, 512MB Flash  -10°C~+45°C(14°F~+113°F) / 0~95% RH(Non-condensing)  -50°C~+60°C(-58°F~+140°F) / 0~90% RH  PoE+(IEEE802.3at type2, Class4), 12VDC  PoE: Max 22.00W, Typical 16.70W
Webpage Language  Edge Storage  Memory  Environmental & Electrical  Operating Temperature / Humidity  Storage Temperature / Humidity  Input Voltage  Power Consumption	Polish, Turkish, Dutch, Hungarian, Greek  Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)  4GB RAM, 512MB Flash  -10°C~+45°C(14°F~+113°F) / 0~95% RH(Non-condensing)  -50°C~+60°C(-58°F~+140°F) / 0~90% RH  PoE+(IEEE802.3at type2, Class4), 12VDC  PoE: Max 22.00W, Typical 16.70W
Webpage Language  Edge Storage  Memory  Environmental & Electrical  Operating Temperature / Humidity  Storage Temperature / Humidity  Input Voltage  Power Consumption  Mechanical	Polish, Turkish, Dutch, Hungarian, Greek  Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)  4GB RAM, 512MB Flash  -10°C~+45°C(14°F~+113°F) / 0~95% RH(Non-condensing)  -50°C~+60°C(-58°F~+140°F) / 0~90% RH  PoE+(IEEE802.3at type2, Class4), 12VDC  PoE: Max 22.00W, Typical 16.70W DC: Max 19.00W, Typical 14.00W



#### **Compatible lenses**

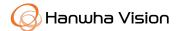
		P	P		•
 Video	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Imaging Device Resolution	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Effective Pixels  Min. Illumination	Color: 0.06Lux(F2.5, 1/30sec)	Color: 0.045Lux(F2.0, 1/30sec)	Color: 0.06Lux(F2.5, 1/30sec)	Color: 0.045Lux(F2.0, 1/30sec)	Color: 0.03Lux(F1.6, 1/30sec)
Max. Framerate NETD Pixel Size Video Out Video Transmission Distance	-,	, ,	,,,,,,	,,,,,,	1,3333,
Lens	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Focal Length (Zoom Ratio)  Max. Aperture Ratio	4.6mm fixed focal F2.5	2.4mm fixed focal F2.0	4.6mm fixed focal F2.5	2.4mm fixed focal F2.0	1.6mm fixed focal F1.6
Angular Field of View Lens Type Mount Type	H: 73°, V: 39°, D: 85°  RJ12 connected with	H: 138°, V: 73°, D: 165° RJ12 connected with	H: 73°, V: 39°, D: 85° RJ12 connected with	H: 138-, V: 73-, D: 165- RJ12 connected with	RJ12 connected with
Focus Control Min. Object Distance Optional Lens	main unit fixed	main unit fixed	main unit fixed	main unit fixed	main unit fixed
Pan / Tilt / Rotate	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Pan Range Pan Speed Tilt Range Tilt Speed Rotate Range Sequence Preset Accuracy					
Operational	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Camera Title Direction Indicator Day & Night Backlight Compensation Wide Dynamic Range Digital Noise Reduction Digital Image Stabilization					
Defog Motion Detection Privacy Masking					
Gain Control White Balance LDC					
Electronic Shutter Speed Digital PTZ Video Rotation					
Analytics Business Intelligence Serial Interface					
Alarm I/O Alarm Triggers Alarm Events					
Audio Streaming Audio In Audio Out					
IR Viewable Length IR Illuminator (Optional)					

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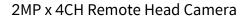


IR Radiation angle					
IR LED					
IR Wavelength IR Operation					
Water Removal					
Auto Tracking Coaxial Protocol					
Color Palettes					
Mechanical	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Color / Material	W30xH27.9xD45mm,			Black / Plastic, Metal	
Product dimensions / weight	321g	Ø24xL49.8mm, 318g	Ø24xL49.8mm, 310g		Ø35xL68.9mm, 430g
RAL Code				W30xH27.9xD45mm,	
Product Dimensions / Weight  Compatible Conduit hole / Gangbox  Hanging Mount (Dome)  Skin Cover  Skin Cover (Dome)  Weather Cap (Dome)				328g	
Power Module Backbox					
Radiometry	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Temperature Detect Range Temperature Accuracy Temperature Detection Additional					
Network	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Ethernet Video Compression Audio Compression Smart Codec Video Quality Adjustment Bitrate Control Streaming Protocol					
SIP support (VoIP, Peer-to-peer, SIP/PBX integration) Security Application Programming Interface					
	CLA T4/00\/A	CLA TO 400A	CLA T4/00A	CLA TO 400\/A	CLA T4000FA
General Webpage Language Web Viewer Edge Storage Memory	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Environmental & Electrical Operating Temperature / Humidity Storage Temperature / Humidity Certification Input Voltage Power Consumption	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Certifications & Standards	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA
Network EMC Safety Environment Video					
DORI (EN62676-4 standard)  Detect (25PPM/ 8PPF)  Observe (63PPM/ 19PPF)  Recognize (125PPM/ 38PPF)  Identify (250PPM/ 76PPF)	SLA-T4680VA	SLA-T2480A	SLA-T4680A	SLA-T2480VA	SLA-T1080FA

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### PNM-9000QB





CAD Unit mm [inch]

