

	QND-6012R	QND-6022R	QND-6032R
VIDEO			
Imaging Device	1/2.8" 2 MP CMOS		
Effective Pixels	1920(H) x 1080(V)		
Min. Illumination	Color : 0.1Lux (F2.0, 1/30sec) BW : 0Lux (IR LED on)	Color : 0.1Lux (F1.6, 1/30sec) BW : 0Lux (IR LED on)	Color : 0.1Lux (F2.0, 1/30sec) BW : 0Lux (IR LED on)
Video Out	CVBS : 1.0 Vp-p / 75Ω composite, 720 x 480 for installation		
LENS			
Focal Length (Zoom Ratio)	2.8mm fixed focal	4mm fixed focal	6mm fixed focal
Max. Aperture Ratio	F2.0	F1.6	F2.0
Angular Field of View	H : 113.74° V : 61.5° D : 134.45°	H : 87.6° V : 46.4° D : 104.5°	H : 52.8° V : 30.3° D : 60.4°
Focus Control	Fixed		
PAN / TILT / ROTATE			
Pan / Tilt / Rotate Range	0°~350° / 0°~67° / 0°~355°		
OPERATIONAL			
IR Viewable Length	20m (65.62ft)		
Camera Title	Displayed up to 85 characters		
Day & Night	Auto (ICR)		
Backlight Compensation	BLC, WDR, SSSDR		
Wide Dynamic Range	120dB		
Digital Noise Reduction	SSNR		
Motion Detection	4ea, polygonal zones		
Privacy Masking	6ea, rectangular zones		
Gain Control	Support		
White Balance	ATW / AWC / Manual / Indoor / Outdoor		
LDC	Support		
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)		
Video Rotation	Flip, Mirror, Hallway view (90°/270°)		
Analytics	Defocus detection, Directional / Virtual Line detection, Motion detection, Enter/Exit, Tampering		
Alarm I/O	Input 1ea / Output 1ea		
Alarm Triggers	Analytics, Network disconnect, Alarm input		
Alarm events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output		
Audio In	Built-in mic		
NETWORK			
Ethernet	RJ-45 (10/100BASE-T)		
Video Compression	H.265/H.264 : Main/High, MJPEG		
Resolution	1920 x 1080, 1280 x 960, 1280 x 720, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360		
Max. Framerate	H.265/H.264 : Maximum 30fps MJPEG : Maximum 15fps		
Smart Codec	Manual (5ea area), WiseStream II		
Video Quality Adjustment	H.264/H.265 : Target bitrate level control MJPEG : Quality Level control		
Bitrate Control	H.264/H.265 : CBR or VBR / MJPEG : VBR		
Streaming	Unicast (6 users) / Multicast Multiple streaming (Up to 3 profiles)		
Audio Compression	G.711 u-law / G.726 Selectable G.726 (ADPCM) 8KHz, G.711 8KHz G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps		

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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)		
Edge Storage	Micro SD/SDHC/SDXC 1 slot maximum 128GB		
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform		
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek		
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.12, 10.13, 10.14 Recommended Browser : Google Chrome Supported Browser : MS Explorer 11, MS Edge, Mozilla Firefox (Windows 64 bit only), Apple Safari (Mac OS X only)		
Memory	512MB RAM, 256MB Flash		
ENVIRONMENTAL			
Operating Temperature / Humidity	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH		
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH		
ELECTRICAL			
Input Voltage	PoE (IEEE802.3af, Class3), 12VDC		
Power Consumption	PoE : Maximum 7.4W, typical 6W 12VDC : Maximum 6.4W, typical 5.1W		
MECHANICAL			
Color / Material	White / Plastic		
RAL Code	RAL9003		
Product dimensions / weight	Ø110.0 x 86.0mm (Ø4.33 x 3.39"), 255g (0.562 lb)		

* The latest product information / specification can be found at hanwhasecurity.com

* Design and specifications are subject to change without notice.

* Wisenet is the proprietary brand of **Hanwha Techwin**.