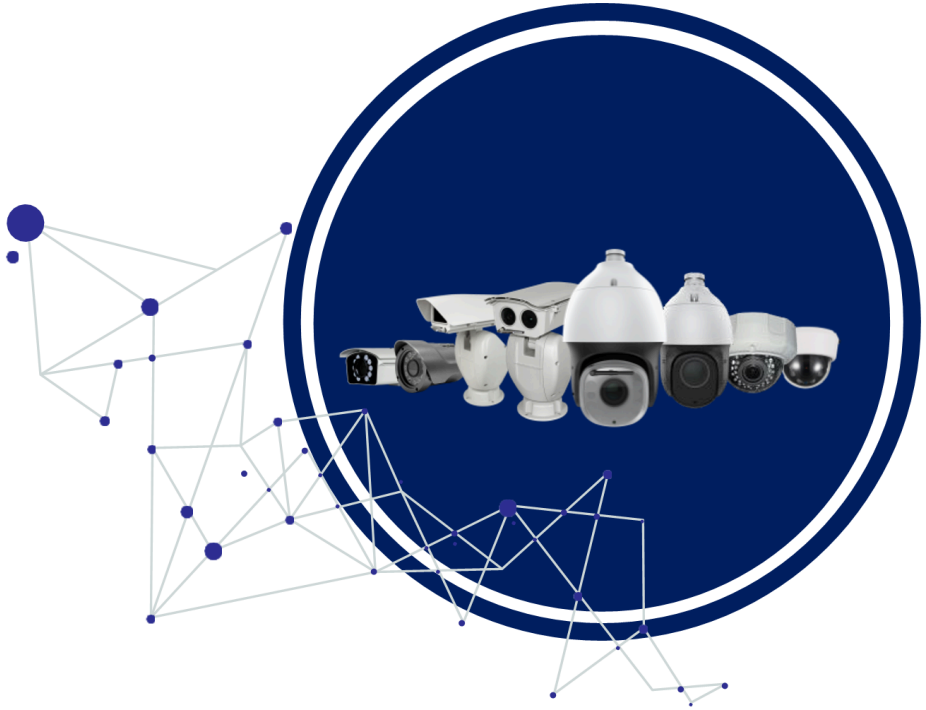
CTEC

HANKOOK CTEC Co., Ltd.

Security Camera Product Catalog

SECURITY & AI SOLUTION PARTNER



한국씨텍(주)

About.

Company	HANKOOK CTEC(Co., Ltd.) / www.ctec.co.kr
CEO	Jae-gyu, Park
Establishment date	February 1999
Mail	hkct@ctec.co.kr
Headquarters	404, 53, Gasan digital 2-ro, Geumcheon-gu, Seoul, Republic of Korea
Factory	403~407, 53, Gasan digital 2-ro, Geumcheon-gu, Seoul, Republic of Korea
Main Business Areas	Surveilance camera manufacturing, AI video analysis solution, OEM, ODM

Business fields.

- Government Offices
- Schools
- Ports
- Airports
- Industrial Safety
- Fire Monitoring
- Urban Safety
- Defense

History.

1999
-Company Founded

2004
-Factory Registered

2008
-Direct Production Certificate Issued

2009
-Corporate Research Institute Founded

2010
-Headquarters Relocated



2011
-Video Object Extraction Device Method Patent Registered

2013
-Hi-Seoul Brand Company Designated
-ISO 9001 Certification Acquired
-CCTV InfraredLEDControl Patent Registered

2015
-Ministry of Trade Minister Commendation Award

2016
-SME Technology Innovation Prime Minister Commendation Award

2018
-Deep Learning-based Video Analysis Device and Video Analysis Method Patent Registered

2019
-TTA Public Institution IP Camera Security Certification Certification Acquired
-Government Procurement(MAS) KSC 6200 Certification

2020
-Deep Learning based Image Fusion Device and Method Patent Registered(Deep View)
-Excellent Invention Priority Purchase Program Company Selected

2021
-Visible Light and Infrared Fusion S/W GSGrade 1Grade Designated
-Large-Medium-Small Win-Win Cooperation Product 'AI based Positioning Camera'
-Disaster Safety Product Certification Acquired

2022
-EPC Performance Certification Acquired
-Quality Certification Acquired
-Public Procurement Service Innovation Product Designated
-Minister of Science and ICT Commendation
-Public Procurement Service Excellent Product 'Deep Learning based Infrared and Visible Light Image Fusion System'

2023
-Sound Wave and Image using Sinkhole Prevention System and Method Patent Registered
-Bullet Camera Camera Design Patent Registered
-Patent registration for video surveillance deveice and method for optical zoom acquisition using crop zoom

2024
-DEEP ZOOM trademark application
-Dome Camera design patent registered-Parking Guidance Camera design patent registered
-Acquired Disaster Safety Product Certification 'Selective Object Monitoring CCTV by Visible & IR Image Matching'
- Developed Intelligent Low-Light Image Enhancement S/W

2025
-Thermal (IR) camera lineup
'SL-640CT+19mm' / 'CG640IP+20mm' / 'SL-640C'(20-100mm, 30-150mm, 25-225mm)'

Company Certification.



Certificate of
The excellent product



Certificate of Good
Software(1st grade)



Certificate of Mutual
Cooperation Product



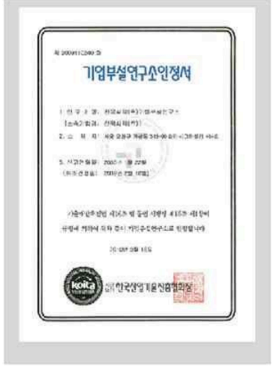
Certificate of Disaster
safety product



[EPC] Excellent Pro
duct Certifiaction



ISO 9001



Laboratory



Direct production
confirmation certifiacte



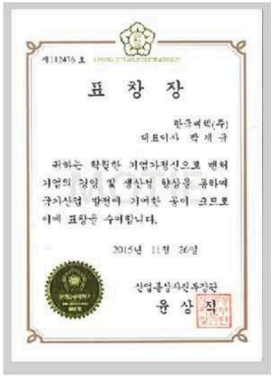
TTA Security
Certification



Hi-Seoul Business
Certification



Prime Minister's
Certificate of
Commendation



Minister of Trade, Industry
and Energy's Certificate of
Commendation



Minister of Science and
ICT's Commendation

Applied Technologies.

DeepView

Deep Learning-based Visible and Infrared Image Registration

The system receives visible (color) and infrared (monochrome) video inputs from the camera. Using deep learning algorithms, it selectively identifies objects to extract them in color while keeping the background in monochrome. Finally, the system registers and fuses these two images to display them as a single, integrated output.

System features

01 The registered images feature sharp object outlines and a distinct contrast between color and monochrome, ensuring superior visual clarity.

02 The system accurately classifies specific objects, such as people and vehicles, and highlights them in color for intuitive identification.

03 By highlighting selected objects, the system enables operators to achieve rapid situational awareness and identification when monitoring multiple camera feeds simultaneously.

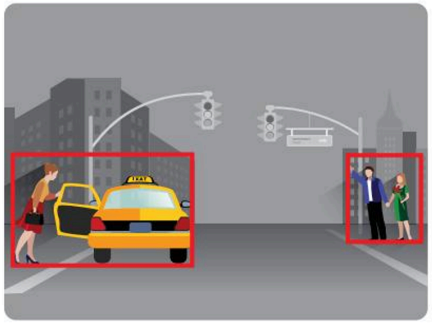
04 Image fusion is processed specifically for monitoring purposes, ensuring the full integrity and preservation of the original recorded data.



Night



Original footage captured in color at night

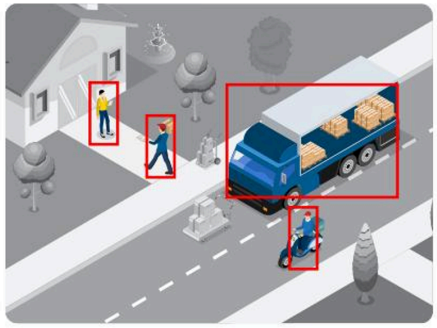


Moving objects (people/vehicles) are identified and displayed in color, while the background is processed in monochrome to register and fuse the two images

Day



Original footage captured in color during the day.



Moving objects (people/vehicles) are identified and displayed in color, while the background is processed in monochrome to register and fuse the two images.

Item / Model		 **XV-8400IRD(4036HC)** 4MP 36x STARVIS IR PTZ Camera (Wiper) Wiper PTZ	 **XV-8400IRD(2055NC)** 2MP 55x STARVIS IR PTZ Camera (Wiper) Wiper PTZ	 **XV-8400IRD(2036HC)** 2MP 36x STARVIS IR PTZ Camera (Wiper) Wiper PTZ	 **XV-8400IRD(2036HS)** 2MP 36x STARVIS IR PTZ Camera (Wiper) Wiper PTZ	 **XV-8200IRD(2030)** 2MP 30x IR Mini PTZ Camera Mini PTZ
Camera	**Image Sensor**	1/1.8" CMOS Sensor, 4MP	1/2.8" CMOS Sensor, 5.7MP	1/1.9" CMOS Sensor, 2MP	1/1.9" CMOS Sensor, 2MP	1/2.8" CMOS Sensor, 2MP
	Zoom	36x optical, 32x digital	55x optical, 32x digital	36x optical, 32x digital	36x optical, 32x digital	30x optical, 32x digital
	Min. Illumination	Normal: 0.02Lux(Color), 0.005Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux	Normal: 0.002Lux(Color), 0.0002Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux	Normal: 0.037Lux(Color), 0.002Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux	Normal: 0.037Lux(Color), 0.002Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux	Normal: 0.00125Lux(Color), 0.0002Lux(B/W) IR On: 0 Lux
	Day / Night	Auto / Manual				
Lens	**Focal Length**	6 ~ 216mm	4.25 ~ 234mm	6 ~ 216mm	6 ~ 216mm	4.6 ~ 136mm
	Field of View	H : 48.64° (wide) ~ 1.85° (tele)	H : 62.13° (wide) ~ 1.29° (tele)	H : 58.44° (wide) ~ 2.1° (tele)	H : 58.44° (wide) ~ 2.1° (tele)	H : 65.4° (wide) ~ 2.2° (tele)
	Aperture	F1.5 (wide) ~ F4.8 (tele)	F1.6 (wide) ~ F4.95 (tele)	F1.5 (wide) ~ F4.8 (tele)	F1.5 (wide) ~ F4.8 (tele)	F1.63 (wide) ~ F4.85 (tele)
	Focus	Auto / Manual				
Camera Features	**IR Distance**	Up to 400m	Up to 400m	Up to 400m	Up to 400m	Up to 200m
	Smart IR	Supported				
	White Light	Built-in, 50m	Built-in, 50m	Built-in, 50m	Built-in, 50m	–
	Speaker	Built-in (4W)	Built-in (4W)	Built-in (4W)	Built-in (4W)	–
	Wiper	Built-in	Built-in	Supported	Supported	–
	Defog	Supported				
	Image Stabilization	Supported				
	Backlight Comp.	Supported				
	White Balance	Auto / Manual / Indoor / Outdoor / One-push				
	Noise Reduction	Supported				
	Electronic Shutter	1/25 ~ 1/30,000sec	1/1 ~ 1/100,000sec	1/25 ~ 1/30,000sec	1/25 ~ 1/30,000sec	1/25 ~ 1/30,000sec
Video / Audio	**Output Resolution**	2560 x 1440	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	Video Compression	H.265 / H.264 / MJPEG				
	Frame Rate	30fps	30fps(Max60fps)	60fps	60fps	60fps
	Video Streams	3				
	Audio Compression	G.711U				
Pan / Tilt	**Pan Range**	360°				
	Pan Speed	0.01° ~ 240°/S (PS Max)				
	Tilt Range	-16° ~ 196°				
	Tilt Speed	0.01° ~ 180°/S (PS Max)				
	Presets	255				
	PTZ Functions	Tour, Auto Park, Power-on Action	Tour, Auto Park, Power-on Action	Tour, Auto Park, Power-on Action	Tour, Auto Park, Power-on Action	–
	ROI	Zone setting & encoding supported	Zone setting & encoding supported	Zone setting & encoding supported	Zone setting & encoding supported	–
	Direction / Text OSD	Supported (font, color, size, special characters)				
Network	**Ethernet**	RJ-45 (10/100BASE-T)				
	ONVIF	Supported				
Interface	**Audio I/O**	1 In / 1 Out				
	Alarm I/O	4 In / 2 Out	4 In / 2 Out	4 In / 2 Out	4 In / 2 Out	1 In / 1 Out
General	**Operating Temp.**	Operate(-30°C~60°C) Storage(-40°C~70°C)				
	Power Supply	AC24V 3A / PoE++	AC24V 3A / PoE++	AC24V 3A / PoE++	AC24V 3A / PoE++	DC12V 5A / PoE+
	Power Consumption	Max. 43W	Max. 43W	Max. 43W	Max. 43W	Max. 21W
	Surge Protection	TVS 6000V, Surge 4000V				
	Certifications	KC, IP67	KC, IP67	KC, IP67	KC, IP67, KOLAS: weather / salt-spray / operating temp., Disaster Safety Product Certification	KC, IP66, SDoC
	Dimensions	222(Ø) x 372(H)mm	222(Ø) x 372(H)mm	222(Ø) x 372(H)mm	222(Ø) x 372(H)mm	161(Ø) x 276(H)mm
	Weight	Approx. 5.5kg	Approx. 5.5kg	Approx. 5.5kg	Approx. 5.5kg	Approx. 3kg

Merged row = identical spec for all models · "–" = N/A · Specifications are subject to change without notice.

Item / Model		 **XV-580IRPT(2036HC)** 2MP 36x Positioning Camera (Wiper) Dual	 **XV-580IRPT(2090HC)** 2MP 90x Positioning Camera (Wiper) Dual	 **XV-580IRPT** 4MP 36x Positioning Camera (Wiper) Dual	 **XV-580QY36** 4MP 36x Positioning Camera (Wiper) Dual	 **XV-580QW40** 4MP 40x Positioning Camera (Wiper) Dual	 **XV-570IRPT** 4MP 36x Positioning Camera (Wiper) Single
Camera	**Image Sensor**	1/1.9" CMOS Sensor, 2MP	1/1.8" CMOS Sensor, 8.42MP	1/1.8" CMOS Sensor, 4.17MP	1/1.8" CMOS Sensor, 4.17MP	1/1.8" CMOS Sensor, 4.17MP	1/1.8" CMOS Sensor, 4MP
	Zoom	36x optical, 32x digital	90x optical, 4x digital	36x optical, 32x digital	36x optical, 32x digital	40x optical, 32x digital	36x optical, 32x digital
	Min. Illumination	Normal: 0.037Lux(Color), 0.002Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux	Normal: 0.01Lux(Color), 0.001Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux	Normal: 0.02Lux(Color), 0.005Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux	0.02Lux(Color), 0.005Lux(B/W) IR On: 0 Lux	0.001Lux(Color), 0.0001Lux(B/W) IR On: 0 Lux	Normal: 0.02Lux(Color), 0.005Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux
	Day / Night	Auto / Manual					
Lens	**Focal Length**	6 ~ 216mm	6 ~ 540mm (compound focus)	6 ~ 216mm	6 ~ 216mm	6.5 ~ 260mm	6 ~ 216mm
	Field of View	H : 58.44° (wide) ~ 2.10° (tele)	H : 65.24° (wide) ~ 0.82° (tele)	H : 48.64° (wide) ~ 1.85° (tele)	H : 48.64° (wide) ~ 1.85° (tele)	H : 61.14° (wide) ~ 1.64° (tele)	H : 48.64° (wide) ~ 1.85° (tele)
	Aperture	F1.5 (wide) ~ F4.8 (tele)	F1.4 ~ F4.8	F1.5 (wide) ~ F4.8 (tele)	F1.5 (wide) ~ F4.8 (tele)	F1.5 (wide) ~ F5.3 (tele)	F1.5 (wide) ~ F4.8 (tele)
	Focus	Auto / Manual					
Camera Features	**IR Distance**	800m	1km	800m	800m	1km	Optional (300m)
	Smart IR	Supported, synced with zoom	Supported, synced with zoom	Supported, synced with zoom	Supported, synced with zoom	Supported, synced with zoom	Supported
	White Light	–	–	–	–	–	Optional
	Fan, Heater, Wiper	Built-in					
	Defog	Supported	Optical filter (NIR)	Supported	Supported	Optical filter (NIR)	Supported
	Image Stabilization	Supported					
	Backlight Comp.	Supported					
	Noise Reduction	Supported	Supported	Supported	2D-NR, 3D-NR	2D-NR, 3D-NR	Supported
	White Balance	Auto / Manual / Indoor / Outdoor / One-push					
	Electronic Shutter	1/25 ~ 1/30,000sec	1/1 ~ 1/30,000sec	1/25 ~ 1/30,000sec	1/25 ~ 1/30,000sec	1/1 ~ 1/40,000sec	1/25 ~ 1/30,000sec
	AI / Analytics	–	–	–	Object detection (person / vehicle / bicycle, etc.), face detection Intrusion, line crossing, object counting, object tracking, tampering, motion, abnormal event detection	–	–
	Motion Detection Zones	–	–	–	–	4 zones	–
	Privacy Masks	–	–	–	–	8 zones	–
Video / Audio	**Output Resolution**	1920 x 1080	1920 x 1080	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440
	Video Compression	H.265 / H.264 / MJPEG					
	Frame Rate	60fps	30fps(Max60fps)	30fps	30fps	30fps	30fps
	Video Streams	3	3	3	4	4	3
	Audio Compression	G.711U	G.711U	G.711U	G.711-ulaw, 8KHz, 16bit, Mono	G.711, G.726	G.711U
Pan / Tilt	**Pan Range**	360°					
	Pan Speed	0.01° ~ 100°/S (PT Only)	0.01° ~ 100°/S (PT Only)	0.01° ~ 100°/S (PT Only)	0.01° ~ 100°/S (PT Only)	0.01° ~ 100°/S (PT Only)	0.01° ~ 60°/S (PT Only)
	Tilt Range	-88° ~ 38°					
	Tilt Speed	0.01° ~ 40°/S (PT Only)	0.01° ~ 40°/S (PT Only)	0.01° ~ 40°/S (PT Only)	0.01° ~ 40°/S (PT Only)	0.01° ~ 40°/S (PT Only)	0.01° ~ 30°/S (PT Only)
	Presets	256					
	ROI	Zone setting & encoding supported					
	Direction / Text OSD	Supported (font, color, size, special characters)	Supported (font, color, size, special characters)	Supported (font, color, size, special characters)	Supported (font, color, size, special characters)	–	Supported (font, color, size, special characters)
Network	**Ethernet**	10/100 Base-T, RJ45					
	ONVIF	Supported	Supported	Supported	Profile S, T, SDK(API)	Profile S, T	Supported
Interface	**Audio I/O**	1 In / 1 Out					
	Alarm I/O	1 In / 1 Out					
General	**Operating Temp.**	Operate(-30°C~60°C) Storage(-40°C~70°C)					
	Power Supply	AC/DC24V 5A	AC/DC24V 5A	AC/DC24V 5A	AC/DC24V 5A	AC/DC24V 5A	AC24V 3A (6A with IR illuminator)
	Power Consumption	Max. 75W	Max. 75W	Max. 75W	Max. 75W	Max. 75W	Max. 55W (91W with IR illuminator)
	Wind Resistance	–	–	–	–	–	50m/s (fixed)
	Certifications	KC, external cable (flame-retardant, durability, salt-spray, weather) Housing pan-tilt (HPT): IP66, salt-spray	KC, external cable (flame-retardant, durability, salt-spray, weather) Housing pan-tilt (HPT): IP66, salt-spray	KC, external cable (flame-retardant, durability, salt-spray, weather) Housing pan-tilt (HPT): IP66, salt-spray	Housing: KOLAS IP66, weather, salt-spray, operating temp. test Cable (flame-retardant, durability, salt-spray, weather)	Housing: KOLAS IP66, weather, salt-spray, operating temp. test Cable (flame-retardant, durability, salt-spray, weather)	KC, IP66, IK10, wind resistance test, package drop test Cable CSGV-102 (KOLAS: flame-retardant, durability, salt-spray, weather)
	Dimensions	250(W) x 360(D) x 472(H)mm	250(W) x 360(D) x 472(H)mm	250(W) x 360(D) x 472(H)mm	250(W) x 360(D) x 472(H)mm	250(W) x 360(D) x 472(H)mm	223(W) x 496(D) x 478(H)mm
	Weight	Approx. 15kg	Approx. 15kg	Approx. 15kg	Approx. 15kg	Approx. 15kg	Approx. 22kg

Merged row = identical spec for all models · "–" = N/A · Specifications are subject to change without notice.

Item / Model		 **XV-280BY** 1/1.8" 8MP 3x IR Bullet Camera Bullet	 **CT-B5005C** 1/2.8" 5MP 5x IR Bullet Camera Bullet	 **XV-251U** 1/2.8" 2MP 4x IR Bullet Camera Bullet	 **XV-230UAI** 1/2" 2MP 3x IR Bullet Fire Detection Camera Bullet	 **XV-220U** 1/2.8" 2MP 4x IR Bullet Camera Bullet	 **XV-220U(M3611HF)** 1/2" 2MP 3x IR Bullet Camera Bullet	 **XV-280DY** 1/1.8" 8MP 3x IR Vandal Dome Camera Dome	 **XV-250D** 1/2.8" 5MP 5x IR Vandal Dome Camera Dome	 **XV-220D** 1/2.8" 2.16MP 4x IR Dome Camera Dome	 **XV-310IR** 2MP 36x IR Housing Camera (Wiper) Housing	 **XV-310IR(5021NF)** 5MP IR Housing Camera (Wiper) Housing
Camera	**Image Sensor**	1/1.8" CMOS Sensor, 8.4MP	1/2.8" CMOS Sensor, 5.69MP	1/2.8" CMOS Sensor, 2MP	1/2" CMOS Sensor, 2.17MP	1/2.8" CMOS Sensor, 2MP	1/2" CMOS Sensor, 2MP	1/1.8" CMOS Sensor, 8.4MP	1/2.8" CMOS Sensor, 5.69MP	1/2.8" CMOS Sensor, 2.16MP	1/1.9" CMOS Sensor	1/2.8" CMOS Sensor, 5.69MP
	Zoom	3x motorized, digital zoom (0 ~ 6300)	5x motorized, 16x digital	4x motorized, 8x digital	3x motorized, 10x digital	4x motorized, 16x digital	3x motorized, 16x digital	3x motorized, digital zoom (0 ~ 6300)	5x motorized, 16x digital	4x motorized, 16x digital	36x optical, 32x digital	16x digital
	Min. Illumination	Color: 0.02 Lux (max) B/W (IR on): 0 Lux	Color: 0.02 Lux (0.0001 Lux with low-light S/W) B/W (IR on): 0 Lux	Color: 0.02 Lux (0.0001 Lux with low-light S/W) B/W (IR on): 0 Lux	Color: 0.01 Lux (0.0001 Lux with low-light S/W) B/W (IR on): 0 Lux	Color: 0.02 Lux (0.0001 Lux with low-light S/W) B/W (IR on): 0 Lux	Color: 0.02 Lux (0.0001 Lux with low-light S/W) B/W (IR on): 0 Lux	Color: 0.02 Lux (max) B/W (IR on): 0 Lux	Color: 0.02 Lux (0.0001 Lux with low-light S/W) B/W (IR on): 0 Lux	Color: 0.02 Lux (0.0001 Lux with low-light S/W) B/W (IR on): 0 Lux	Normal: 0.037Lux(Color), 0.002Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux	Normal: 0.02Lux(Color), 0.002Lux(B/W) Low-light enh.: 0.0001Lux(Color), 0.00001Lux(B/W) IR On: 0 Lux
Lens	**Focal Length**	3.6 ~ 11mm	2.7 ~ 13.5mm	2.8 ~ 12mm	3.6 ~ 11mm	2.8 ~ 12mm	3.6 ~ 11mm	3.6 ~ 11mm	2.7 ~ 13.5mm	2.8 ~ 12mm	6 ~ 216mm	2.12mm
	Field of View	128.1°~51.4°(D) 110.3°~45.6°(H) 55.5°~24°(V)	114.84°~34.5°(D) 108.10°~30.30°(H) 73.00°~17.60°(V)	109.28°~38.10°(D) 101.70°~35.50°(H) 69.28°~19.22°(V)	110.05°~37.99°(D) 102.50°~33.40°(H) 70.05°~19.16°(V)	109.28°~36.64°(D) 101.70°~32.20°(H) 69.28°~18.44°(V)	113.98°~53.79°(D) 106.60°~47.70°(H) 74.08°~27.93°(V)	128.1°~51.4°(D) 110.3°~45.6°(H) 55.5°~24°(V)	114.84°~34.5°(D) 108.10°~30.30°(H) 73.00°~17.60°(V)	109.28°~36.64°(D) 101.70°~32.20°(H) 69.28°~18.44°(V)	H : 58.44° (wide) ~ 2.1° (tele)	166.3°(D) 144.0°(H) 82.5°(V)
	Aperture	F1.5	F1.3	F1.6	F1.5	F1.5	F1.5	F1.5	F1.3	F1.5	F1.5 (wide) ~ F4.8 (tele)	F1.2
	Lens Type	Motorized varifocal	–	–	–	–	–	Motorized varifocal	–	–	AF optical zoom lens	Fixed wide-angle lens
IR LED	**IR Distance**	80m	80m	80m	70m	Up to 50m	Up to 50m	30m	30m	Up to 30m	Up to 100m	100m
	White Light Distance	–	30m	30m	50m (warm white)	–	–	–	10m	–	–	–
	IR Wavelength	850nm										
	Wiper / Fan & Heater	–	–	–	–	–	–	–	–	–	Optional / Built-in	Supported / Built-in
Camera Features	**Defog**	Supported	Supported	Supported	WDR, HLC, BLC	Supported	Supported	Supported	Supported	Supported	Supported	Supported
	Backlight Comp.	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC	–	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC
	Noise Reduction	2D-NR, 3D-NR										
	Electronic Shutter	Max 1/30 ~ 1/30,000sec	Max 1/2 ~ 1/100,000sec	Max 1/30 ~ 1/30,000sec	Max 1/30 ~ 1/30,000sec	1/60 ~ 1/135,000sec	1/60 ~ 1/135,000sec	Max 1/30 ~ 1/30,000sec	Max 1/2 ~ 1/100,000sec	Max 1/60 ~ 1/135,000sec	1/25 ~ 1/30,000sec	1/2 ~ 1/100,000sec
	View Mode	Mirror, Flip	Mirror, Flip	Mirror, Flip	Mirror, Flip	Mirror, Flip	Mirror, Flip	Mirror, Flip	Mirror, Flip	Mirror, Flip	–	–
	Privacy / Motion Zones	8 zones / 4 zones	8 zones / 4 zones	8 zones / 4 zones	8 / –	8 / up to 4 zones	8 / up to 4 zones	8 zones / 4 zones	8 zones / 4 zones	8 zones / 4 zones	Supported / –	8 zones / 4 zones
	AI / Analytics	Object detection (person / vehicle / bicycle, etc.), face detection Intrusion, line crossing, object counting, object tracking, tampering, motion, abnormal event detection	Person, face, dog & cat detection, line cross	–	AI fire detection: flame, smoke High-sensitivity sensors: 3EA (flame)	Events: audio detection, tampering, alarm	Analytics: Line Cross / Field Intrusion / Appear / Disappear Events: audio detection, tampering, alarm	Object detection (person / vehicle / bicycle, etc.), face detection Intrusion, line crossing, object counting, object tracking, tampering, motion, abnormal event detection	Person, face, dog & cat detection, line cross	–	–	–
Video / Audio	**Output Resolution**	3840 x 2160	2592 x 1944	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	3840 x 2160	2592 x 1944	1920 x 1080	1920 x 1080	2592 x 1944
	Frame Rate	30fps@8M(3840x2160)	30fps	30fps	30fps	30fps	30fps	30fps@8M(3840x2160)	30fps	30fps	60fps	30fps
	Video Streams	4	3	3	3	3	3	4	3	3	3	3
Network	**Ethernet**	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45	RJ-45 (10/100BASE-T)	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45
	Bitrate Control	CBR, VBR, CVBR	CBR, VBR	CBR, VBR	CBR, VBR	CBR, VBR	CBR, VBR	CBR, VBR, CVBR	CBR, VBR	CBR, VBR	CBR, VBR	CBR, VBR
	API / Integration	ONVIF Profile S, T, SDK(API)	ONVIF, SDK(API)	ONVIF, SDK(API)	ONVIF, SDK (API)	ONVIF, SDK (API)	ONVIF, SDK (API)	ONVIF Profile S, T, SDK(API)	ONVIF, SDK(API)	ONVIF	ONVIF, SDK	ONVIF, SDK(API)
Interface	**Audio I/O**	1 In / 1 Out										
	Alarm I/O	1 In / 1 Out										
General	**Operating Temp.**	Operate(-30°C~60°C) Storage(-40°C~70°C)										
	Power Supply	DC12V, PoE	DC12V, PoE	DC12V, PoE	DC12V, PoE	DC12V, PoE	DC12V, PoE	DC12V, PoE	DC12V, PoE	DC12V, PoE	AC24V 2A	AC24V 2A
	Power Consumption	Max. 12W	Max. 12W	Max. 12W	Max. 12W	Max. 12W	Max. 12W	Max. 12W	Max. 12W	Max. 12W	Max. 39W	Max. 39W
	Certifications	KC, Security Function Verification, SDoC	KC, IP67, SDoC	KC, IP67, SDoC	KC, IP67, SDoC	KC, IP66, SDoC	KC, IP66	KC, Security Function Verification, SDoC	KC, IP66, SDoC	KC, SDoC	KC, IP66	KC, IP66
	Dimensions	108.4(Ø) x 323.6(D)mm	108.4(Ø) x 323.6(D)mm	108.4(Ø) x 323.6(D)mm	108.4(W) x 106(H) x 370(D)mm	84.5(Ø) x 285(D)mm	84.5(Ø) x 285(D)mm	137.7(Ø) x 101(H)mm	137.7(Ø) x 101(H)mm	125(Ø) x 96(H)mm	190(W) x 445(D) x 175(131)(H)mm	190(W) x 445(D) x 175(131)(H)mm
	Weight	Approx. 1.5kg	Approx. 1.5kg	Approx. 1.5kg	Approx. 1.6kg	Approx. 1.5kg	Approx. 1.5kg	Approx. 680g	Approx. 680g	Approx. 600g	Approx. 4.5kg	Approx. 4.5kg

Item / Model		 **XV-Z4036HC** 4MP 36x IP Zoom Camera High Zoom	 **XV-Z2050HC** 2MP 50x IP Zoom Camera High Zoom	 **XV-Z4850HC** 2MP 57x IP Zoom Camera High Zoom	 **XV-Z2090HC** 2MP 90x IP Zoom Camera High Zoom	 **XV-Z81200HY** 8MP 60x IP Zoom Camera (Korea NIS Security Cert.) High Zoom	 **XV-Z41200SDI** 2MP 60x HD-SDI Zoom Camera High Zoom
Camera	**Image Sensor**	1/1.8" CMOS Sensor, 6.48MP	1/1.8" CMOS Sensor, 4.17MP	1/1.8" CMOS Sensor, 4.17MP	1/1.8" CMOS Sensor, 8.42MP	1/1.8" CMOS Sensor, 8MP	1/1.8" CMOS Sensor, 4.17MP
	Zoom	36x optical, 32x digital	50x optical, 4x digital	57x optical, 4x digital	90x optical, 4x digital	60x optical, 4x digital	60x optical, 4x digital
	Min. Illumination	Color: 0.02 Lux (0.0001 Lux with AI low-light S/W) B/W (IR on): 0 Lux	Color: 0.05 Lux, B/W: 0.005 Lux	Color: 0.05 Lux, B/W: 0.005 Lux	Color: 0.01 Lux, B/W: 0.005 Lux, IR on: 0 Lux	Color: 0.01 Lux, B/W: 0.001 Lux	Color: 0.05 Lux, B/W: 0.005 Lux
Lens	**Focal Length**	6 ~ 216mm	6 ~ 300mm (compound focus)	15 ~ 850mm (compound focus)	6 ~ 540mm (compound focus)	20 ~ 1200mm (Wide–Tele < 7 sec)	20 ~ 1200mm (compound focus)
	Field of View	54.8° ~ 2.12°(D) 48.64° ~ 1.85°(H) 28.52° ~ 1.04°(V)	73.47°~1.71°(D) 66.02°~1.49°(H) 40.34°~0.84°(V)	33.22°~0.60°(D) 29.12°~0.53°(H) 16.71°~0.30°(V)	72.58°~0.94°(D) 65.24°~0.82°(H) 39.60°~0.46°(V)	24.8°~0.42°(D) 21.7°~0.37°(H) 12.3°~0.2°(V)	25.20°~0.43°(D) 22.10°~0.37°(H) 12.60°~0.21°(V)
	Aperture	F1.5 ~ F4.8	F1.4 ~ F4.5	F2.8 ~ F6.5	F1.4 ~ F4.8	F2.9 ~ F11.3	F2.9 ~ F11.3
	Lens Type	AF optical zoom lens	AF optical zoom lens	AF optical zoom lens	AF optical zoom lens	–	AF optical zoom lens
Camera Features	**Defog**	Supported	Optical filter (NIR)	Optical filter (NIR)	Optical filter (NIR)	Optical filter (NIR) + Digital	Optical filter (NIR) + Digital
	Stabilization	Supported	EIS	EIS, OIS (optical)	DIS(EIS)	EIS, OIS (optical)	EIS, OIS (optical)
	Backlight / WDR	Supported	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC	WDR, HLC, BLC
	Heat Haze Reduction	–	HHR	HHR	HHR	HHR(Heat Haze Reduction)	HHR(Heat Haze Reduction)
	White Balance	Auto / Manual / Indoor / Outdoor / One-push	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	–
	Noise Reduction	2D-NR / 3D-NR	2D-NR / 3D-NR	2D-NR / 3D-NR	2D-NR / 3D-NR	2D-NR / 3D-NR / AI-NR	2D-NR / 3D-NR / AI-NR
	Electronic Shutter	1/30(25) ~ 1/30,000sec	1/3 ~ 1/30,000sec	1/1 ~ 1/30,000sec	1/1 ~ 1/30,000sec	1/1 ~ 1/30,000sec	1/1 ~ 1/30,000sec
	Events	Supported, motion detection	Supported, motion detection	Supported, motion detection	Supported, motion detection	Supported, motion detection	–
Video / Audio	**Output Resolution**	2560 x 1440	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	Frame Rate	30fps	Operator 30fps	Operator 30fps	Operator 30fps (Max Temporary 60fps)	30fps	30fps
	Video Streams	3	3	3	3	4	–
Network / Interface	**Ethernet / Video Out**	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45	10/100 Base-T, RJ45	Video out: BNC Control: serial (UART, RS-485)
	ONVIF	Supported	Supported	Supported	Supported	Supported	–
	Audio I/O	1 In / 1 Out	1 In / 1 Out	1 In / 1 Out	1 In / 1 Out	1 In / 1 Out	–
	Alarm I/O	1 In / 1 Out	1 In / 1 Out	1 In / 1 Out	1 In / 1 Out	1 In / 1 Out	–
General	**Operating Temp.**	Operator: -10°C ~ 60°C Storage: -20°C ~ 70°C	Operator: -10°C ~ 60°C Storage: -20°C ~ 70°C	Operator: -10°C ~ 60°C Storage: -20°C ~ 70°C	Operator: -10°C ~ 60°C Storage: -20°C ~ 70°C	Operator: 0°C ~ 50°C Storage: -20°C ~ 60°C	Operator: -10°C ~ 50°C Storage: -20°C ~ 60°C
	Power Supply	DC12V					
	Power Consumption	9W	Static: 7W(Max : 9W)	Static: 7W(Max : 12W)	Static: 7W(Max : 9W)	Static: 8W(Max : 14W)	Static: 8W(Max : 14W)
	Certifications	KC	KC	KC	KC	Korea NIS security certification supported	–
	Dimensions	Camera Lens: 55.6(W) x 64(H) x 124(L)mm IP Camera Module: 65(W) x 55(H) x 40(L)mm	Camera Lens: 72.2(W) x 77.3(H) x 175.84(L)mm IP Camera Module: 65(W) x 55(H) x 40(L)mm	Camera Lens: 109(W) x 109(H) x 320(L)mm IP Camera Module: 65(W) x 55(H) x 40(L)mm	Camera Lens: 72.2(W) x 77.3(H) x 175.84(L)mm IP Camera Module: 65(W) x 55(H) x 40(L)mm	Zoom Lens: 125(W) x 125(H) x 400(L)mm IP Camera Module: 65(W) x 55(H) x 40(L)mm	Zoom Lens: 125(W) x 125(H) x 400(L)mm HD-SDI & Control Board: 65(W) x 55(H) x 40(L)mm
	Weight	Approx. 450g	Approx. 950g	Approx. 3.5kg	Approx. 950g	Approx. 5.2kg	Approx. 5.5kg

Item / Model		 **CG-640IP+20(35)mm** Radiometric Thermal Lens + Camera Thermal	 **SL-640CT+19(35)mm** Radiometric Thermal Lens + Camera Thermal	 **SL-640CT+55mm** Radiometric Thermal Lens + Camera Thermal	 **SL-640C+20-100mm** 5x Thermal Lens + Camera Thermal	 **SL-640C+30-150mm** 5x Thermal Lens + Camera Thermal	 **SL-640C+25-225mm** 9x Thermal Lens + Camera Thermal	 **SL-640C+30-300mm** 10x Thermal Lens + Camera Thermal	 **XV-T640GC(1505)** Thermal Camera Thermal
Camera	**Image Sensor**	Un Cooled Micro bolometer	Un Cooled Micro bolometer	Un Cooled Micro bolometer	Un Cooled Micro bolometer	Un Cooled Micro bolometer	Un Cooled Micro bolometer	Un Cooled Micro bolometer	–
	Sensor Resolution	640x480	640x480	640x480	640x480	640x480	640x480	640x480	640 x 512
	Spectral Range	8 ~ 14μm(LWIR)	8 ~ 14μm(LWIR)	8 ~ 14μm(LWIR)	8 ~ 14μm(LWIR)	8 ~ 14μm(LWIR)	8 ~ 14μm(LWIR)	8 ~ 14μm(LWIR)	8 ~ 14μm
	Pixel Pitch	17μm	12μm / 17μm (selectable)	12μm / 17μm (selectable)	12μm / 17μm (selectable)	12μm / 17μm (selectable)	12μm / 17μm (selectable)	12μm / 17μm (selectable)	17μm (detector pitch)
	Sensitivity (NETD)	17μm <50mK (0.05°C) @f1.0, 30Hz, 300K	12μm <50mK(0.05°C) 17μm <30mK(0.03°C)	12μm <50mK(0.05°C) 17μm <30mK(0.03°C)	12μm <50mK(0.05°C) 17μm <30mK(0.03°C)	12μm <50mK(0.05°C) 17μm <30mK(0.03°C)	12μm <50mK(0.05°C) 17μm <30mK(0.03°C)	12μm <50mK(0.05°C) 17μm <30mK(0.03°C)	30mK
Lens	**Focal Length**	20mm optical (35mm optional) 4x digital zoom	19mm optical (35mm optional)	55mm optical	20~100mm optical	30~150mm optical	25~225mm optical	30~300mm optical	30 ~ 150mm (5x)
	Field of View	20mm: 31.3°(H)*23.4°(V) 35mm: 17.6°(H)*13.3°(V)	19mm: 22.8°(H)*17.2°(V)*28.4°(D) 35mm: 12.5°(H)*9.4°(V)*15.6°(D)	12μm 8.0° / 17μm 11.2°(H)	12μm 22.5° / 17μm 32.6°(W)~ 12μm 4.4° / 17μm 6.2°(T)	12μm 14.7° / 17μm 20.8°(W)~ 12μm 2.9° / 17μm 4.1°(T)	12μm 17.7° / 17μm 25.3°(W)~ 12μm 1.9° / 17μm 2.8°(T)	12μm 14.6° / 17μm 20.6°(W)~ 12μm 1.5° / 17μm 2.0°(T)	–
	Aperture (F#)	–	–	f 1.0	f 0.8 ~ f1.1	f 0.8 ~ f1.2	f 0.8 ~ f1.2	f 0.85 ~ f 1.35	–
	Lens Type	–	Athermalized	Athermalized	AF 5x optical zoom lens	AF 5x optical zoom lens	AF 9x optical zoom lens	AF 10x optical zoom lens	Continuous Zoom
Image	**Temp. Measurement**	-20°C ~ 350°C(Max 500°C)	-20°C ~ 350°C(Max 500°C)	-20°C ~ 350°C(Max 500°C)	–	–	–	–	–
	ROI	10 temperature zones	10 temperature zones, 3 exclusion zones	–	–	–	–	–	–
Video	**Output Resolution**	720 x 576(640 x 480)	1,280 x 720, 640 x 480	1,280 x 720, 640 x 480	1,280 x 720, 640 x 480	1,280 x 720, 640 x 480	1,280 x 720, 640 x 480	1,280 x 720, 640 x 480	–
	Interface	RJ-45 / RS-485 / Alarm1, 2 / Sensor	Camera-link / BT.1120 / Giga-E(RAW Data)	Camera-link / BT.1120 / Giga-E(RAW Data)	Camera-link / BT.1120 / Giga-E(RAW Data)	Camera-link / BT.1120 / Giga-E(RAW Data)	Camera-link / BT.1120 / Giga-E(RAW Data)	Camera-link / BT.1120 / Giga-E(RAW Data)	–
	Frame Rate	30fps	30fps	30fps	30fps	30fps	30fps	30fps	–
Network	**Ethernet**	10/100 Base-T (RJ45)	10/100 Base-T (RJ45)	10/100 Base-T (RJ45)	10/100 Base-T (RJ45)	10/100 Base-T (RJ45)	10/100 Base-T (RJ45)	10/100 Base-T (RJ45)	–
	ONVIF	Profile S, Ver2.4	Profile S	Profile S	Profile S	Profile S	Profile S	Profile S	–
General	**Operating Temp.**	-20°C ~ 65°C	-20°C ~ 65°C	-20°C ~ 65°C	-20°C ~ 65°C	-20°C ~ 65°C	-20°C ~ 65°C	-20°C ~ 65°C	–
	Power Supply	DC12V 2A / PoE (optional)	DC12V 2A	DC12V 2A	DC12V 2A	DC12V 2A	DC12V 3A	DC12V 3A	DC12V
	Power Consumption	Max 8W	4W	Camera: 4W	Camera 4W / Lens 2W	Camera 4W / Lens 2W	Camera 4W / Lens 2W	Camera 4W / Lens 11W	–
	Certifications	Camera: KC	Camera: KC	Camera: KC	Camera: KC	Camera: KC	Camera: KC	Camera: KC	–
	Weight	Camera 310g / Lens 120g	Camera 280g / Lens 19mm: 35g, 35mm: 87.1g	Camera 280g / Lens 120g	Camera 280g / Lens 2.3kg	Camera 280g / Lens 3.3kg	Camera 280g / Lens 4.2kg	Camera 280g / Lens 9.4kg	Approx. 3,410g

Item / Model		 **L8(800M)** Laser Illuminator, up to 800m IR Illuminator	 **L12(1200M)** Laser Illuminator, up to 1,200m IR Illuminator	 **L15(1500M)** Laser Illuminator, up to 1,500m IR Illuminator	 **L20(2000M)** Laser Illuminator, up to 2,000m IR Illuminator
Specifications	**Illumination Range**	Up to 800m	Up to 1,200m	Up to 1,500m	Up to 2,000m
	Beam Angle	68° ~ 1.5°	30° ~ 1°	70° ~ 0.8°	70° ~ 0.8°
	Wavelength	808nm (940nm option)			
	Zoom Speed	2.5sec	–	–	–
	IR Output Power	5W	10W	12W	15W
	Power Consumption	DC12V (15W)	DC12V (25W)	24VDC (41W)	24VDC (41W)
	Operating Temp.	-40°C ~ 70°C			
	Activation	Photosensor / camera sync			
	Beam Centering	Manual beam-center adjustment	Manual beam-center adjustment	Motorized beam-center adjustment	Motorized beam-center adjustment
	Brightness Control	Auto / Manual			
	Lifetime	30,000+ hours			
	Laser Safety Class	CLASS-4(3B)			
	Dimensions	98(W) x 55(H) x 57(L)mm	66(W) x 68(H) x 131.8(L)mm	66(W) x 76(H) x 171(L)mm	66(W) x 76(H) x 171(L)mm
	Weight	Approx. 250g	Approx. 470g	Approx. 650g	Approx. 650g

Item / Model		 **XV-590IRPT(HPT)** Mid/Long-Range Worm-Gear Dual Housing Pan-Tilt Wing-Body	 **XV-592IRPT(HPT)** Mid/Long-Range Servo-Motor Housing Pan-Tilt Wing-Body	 **XV-540IRPT(HPT)** High-Speed BLDC-Motor Dual Housing Pan-Tilt Wing-Body	 **XV-593IRPT(HPT)** Mid-Range Servo-Motor Dual & Triple Housing Pan-Tilt Top-Body	 **XV-580IRPT(HPT)** Short-Range Dual Housing Pan-Tilt Top-Body	 **XV-570IRPT(HPT)** Short-Range Single Housing Pan-Tilt Top-Body
Payload Options	**Day (EO) Camera**	1200mm / 850mm / 540mm / 300mm / 260mm	1200mm / 850mm / 540mm / 300mm / 216mm	540mm / 300mm / 260mm / 216mm	850mm / 540mm / 300mm / 216mm	540mm / 300mm / 260mm / 216mm	540mm / 300mm / 260mm / 216mm Third-party camera compatible (RS-485)
	Thermal (IR) Camera	225mm motorized zoom / 150mm motorized zoom	225mm / 150mm / 300mm motorized zoom	100mm motorized zoom / 35mm / 20mm / 19mm	150mm / 100mm motorized zoom / 55mm / 35mm / 19mm	75mm / 55mm / 35mm	–
	IR Laser Illuminator	3km / 2km / 1.5km / 1.2km / 800m	3km / 2km / 1.5km / 1.2km / 800m	2km / 1.5km / 1.2km / 800m	2km / 1.5km / 1.2km / 800m	2km / 1.5km / 1.2km / 800m	IR illuminator 850nm × 2EA (optional)
Pan-Tilt Drive	**Wiper, Fan, Heater**	Equipped	Equipped	Equipped, front snow shield	Equipped	Equipped	Equipped
	Pan Range / Speed	360° / 0.01° ~ 100°/s (PT Only)	360° / 0.01° ~ 100°/s (PT Only)	360° / 0.01° ~ 180°/s (PT Only)	360° / 0.01° ~ 100°/s (PT Only)	360° / 0.01° ~ 100°/s (PT Only)	360° / 0.01° ~ 60°/s (PT Only)
	Tilt Range / Speed	-90° ~ +90° / 0.1° ~ 30°/s (PT Only)	-90° ~ +90° / 0.01° ~ 60°/s (PT Only)	-90° ~ +90° / 0.01° ~ 120°/s (PT Only)	-90° ~ +40° / 0.01° ~ 60°/s (PT Only)	-88° ~ +38° / 0.01° ~ 40°/s (PT Only)	-88° ~ +38° / 0.01° ~ 30°/s (PT Only)
	Payload / Material	20kg (50kg optional) / Aluminum alloy	50kg / Aluminum alloy	15kg / Aluminum alloy	50kg / Aluminum alloy	7kg / Aluminum alloy	Die-cast aluminum
	Drive Mechanism	Worm gear	Worm gear, servo motor	Worm gear, BLDC motor	Worm gear, servo motor	Belt gear, stepper motor	Belt gear, stepper motor
	Reliability Tests	KC, IP66, salt-spray, weather	KC, IP66, salt-spray	Built to order	KC, IP66, salt-spray, weather	KC, IP66, salt-spray, weather, flame-retardant, operating temp.	KC / XV-570IRPT: IP66, IK10, wind pressure (max 50m/s), package drop
	Operating Temp.	-40°C ~ 70°C	Operate(-30°C~60°C) Storage(-40°C~70°C)	Operate(-30°C~60°C) Storage(-40°C~70°C)	Operate(-30°C~60°C) Storage(-40°C~70°C)	Operate(-30°C~60°C) Storage(-40°C~70°C)	Operate(-30°C~60°C) Storage(-40°C~70°C)
	Power Consumption	DC48V, 150W	DC48V, 150W	DC24V, 65W (camera, fan, heater powered separately)	DC48V, 150W	DC24V, 55W (75W with camera & IR illuminator)	AC24V 3A (6A with IR illuminator) 55W (91W with IR illuminator)
	Overall Dimensions	738(W) x 454(H) x 360 or 599(L)mm	738.5(W) x 633(H) x 530(L)mm (may vary by order)	434(W) x 321(H) x 360(L)mm	412(W) x 759(H) x 468(L)mm	250(W) x 472(H) x 360(L)mm	223(W) x 496(D) x 478(H)mm
	Weight	55kg	55kg	Approx. 13kg	45kg	22kg	22kg

"Creating Value for a Safer World"

404, 53, Gasan digital 2-ro, Geumcheon-gu, Seoul, Republic of Korea
hkct@ctec.co.kr / www.ctec.co.kr

CTEC 한국씨텍(주)