



H.265 FHD IR PTZ Network Camera

WV-X6533LN (Outdoor 40x zoom model)

WV-S6532LN (Outdoor 22x zoom model)

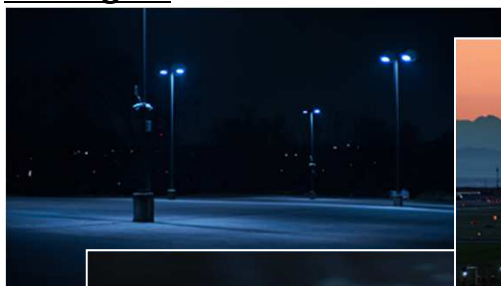
Ver. 1.00

Security Systems Business Division

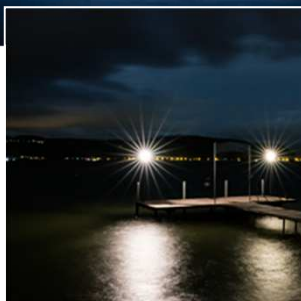
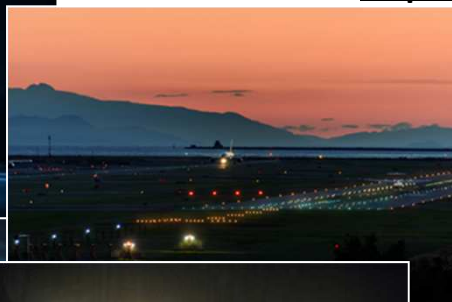
Panasonic Co., Ltd.

How to achieve wide area surveillance even in dark environments such as night?

Parking lot



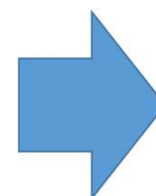
Airport



Lake



Park



Built-in IR LED and high magnification optical zoom in new PTZ cameras to realize wide area surveillance at night

Concept & Main Features

i-PRO
EXTREME

New i-PRO extreme camera built-in IR-LEDs enable the capture of low light evidence even at distances 350 meter away in a 0 lux environment.

Extreme Visibility

View objects in dark condition with IR LED with new auto focus
High powered 40x optical zoom / Intelligent zoom stabilization
ClearSight coating
Dehumidification and defrosting with the new defroster
Intelligent Auto **iA** / 30 degree elevation angle

Extreme Compression

H.265 compression with new smart coding technology

Extreme Analytics

i-VMD(intelligent Video Motion Detection) license bundled

Extreme Data Security

Secure communication with Digicert (Formerly Symantec) certification

Extreme Reliability

Vandal resistant / IP66 compliant

Usability

Support Fiber Optic Media Converter Unit (Option)



40x WV-X6533LN
22x WV-X6532LN



Extreme Visibility

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✓ View objects in dark conditions

Enables user to see an object at 350m away with built-in IR-LED lighting even in a 0 lux environment.



New i-PRO
extreme camera
WV-X6533LN

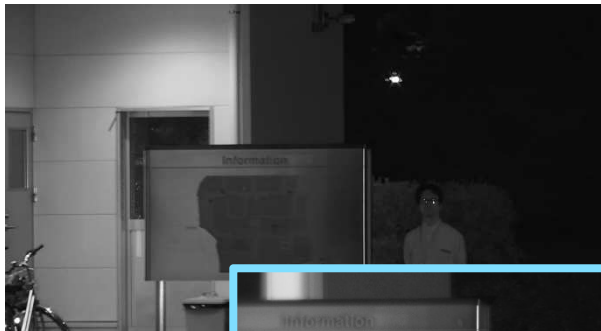
Extreme Visibility

i-PRO
EXTREME

✓ View objects in dark conditions

Improve visibility in low-light environments by mixing visible and IR LED lighting through a new auto focus with visible light cut filter

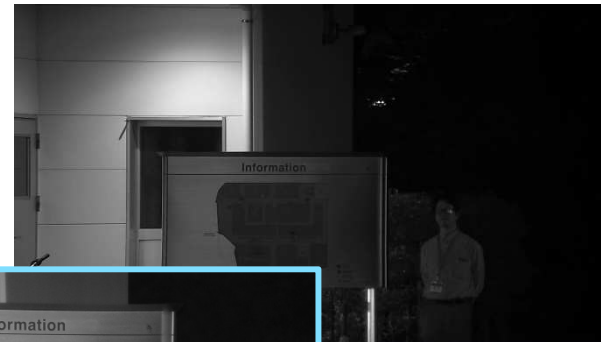
Other leading brand camera



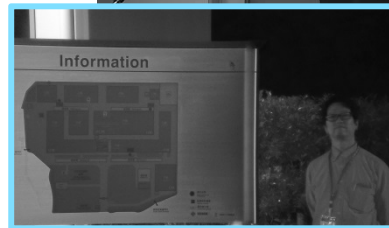
Zoom in



i-PRO Extreme camera WV-X6533LN



Zoom in



New i-PRO
extreme camera
WV-X6533LN

New Auto Focus

Under visible light

Extreme Visibility

i-PRO
EXTREME

✓ High powered 40x optical zoom

40x optical zoom function can survey further, and clearly see objects at long distances



New i-PRO
extreme camera
WV-X6533LN

Extreme Visibility

i-PRO
EXTREME

✓ Intelligent zoom stabilization

Enables the capture of a stabilized image even when the object is located a long distance away by absorbing vibrations.



Extreme Visibility

i-PRO
EXTREME

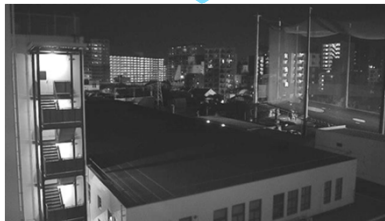
✓ ClearSight coating

The specially coated (ClearSight) cover resists water, stains, and dust accumulation, enabling the capture of clear images even in rainy environments, reducing the need for periodic maintenance.

Without
any special
coating



With
ClearSight
coating



It shows clear images even if IR-LEDs
are on when it is rain



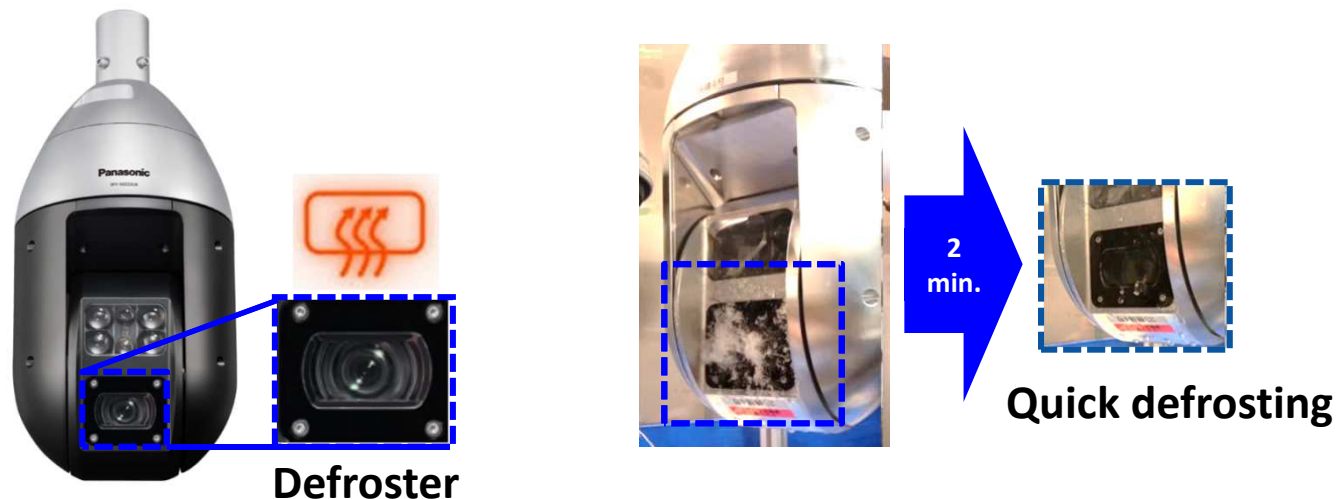
With
ClearSight coating

Without
any special coating

Extreme Visibility

i-PRO
EXTREME

- ✓ Dehumidification and defrosting with the new defroster
By the defroster on the transparent cover part on the front of the lens , against temperature drop inside the camera, the temperature inside the camera is kept properly to prevent dew condensation.



Enables to capture clear image with the new defroster under extreme environments

Extreme Visibility

i-PRO
EXTREME

✓ iA(Intelligent Auto)



iA monitors scene dynamics and motion to adjust key camera settings automatically all in real-time, reducing distortion such as motion blur on moving objects.

iA OFF



iA ON

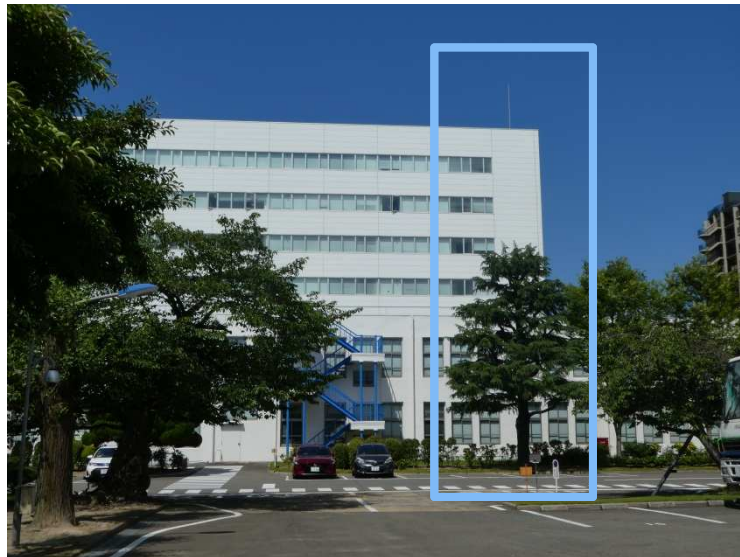


Extreme Visibility

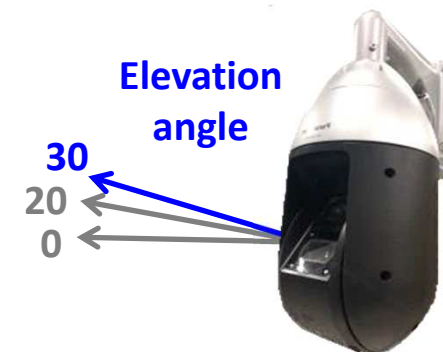
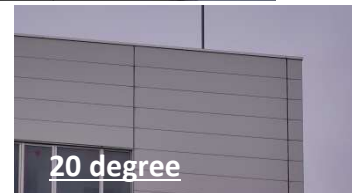
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✓ 30 degree elevation angle

Enables to monitor dam release, landslide, iron tower and slope road by using with 30 degrees elevation angle from low installation location.



Smart phone camera image



Extreme Compression

i-PRO
EXTREME

✓ H.265 compression with new smart coding technology

GOP control

Reduces encoding data by using p-frame in place of i-frame when no motion is detected.

With motion

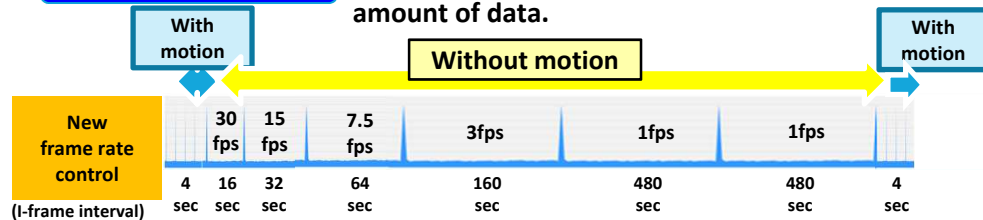


Without motion



Frame control

Dynamically reduce the i-frame rate to reduce the amount of data.



Auto-VIQS

Automatically determines areas with and without motion and reduce the data volume of those without motion. It has built in "Smart Facial Coding" which detects faces at high quality.



Bit rate reduction

Conventional
H.264



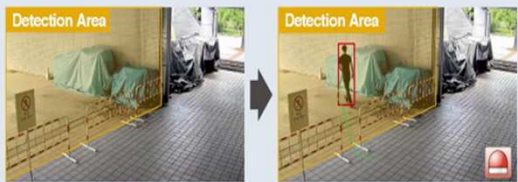


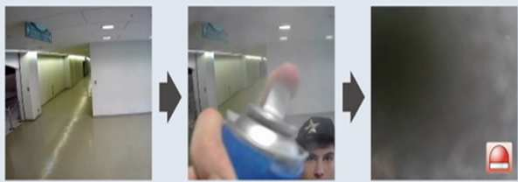


i-PRO extreme
H.265 + Smart coding
Max.95%

Value in bit rate depends on scene

Extreme Analytics

i-PRO
EXTREME

✓ i-VMD(Intelligent Video Motion Detection) license bundled

Intruder Detection Crossing over the fence 	Loitering Detection Objects staying longer than a specified time 	Direction Detection Objects moving in a specified direction 
Scene Change Detection Interference such as blockage of the lens with a cloth or spray paint 	Object Detection Removed Object Detection Abandoned Object Detection 	Cross Line Detection A person who crosses the virtual line to the specified direction 

Extreme Data Security

**i-PRO
EXTREME**

✓ Secure communication with Digicert(Formerly Symantec) certification



Vulnerability Assessment

- 3rd party assessment and penetration tests made to achieve higher security standards



DigiCert (Formerly Symantec) Device Certification

- Pre-installed DigiCert (formerly Symantec) Certification
- Video tampering detection



End-to-End Data Encryption

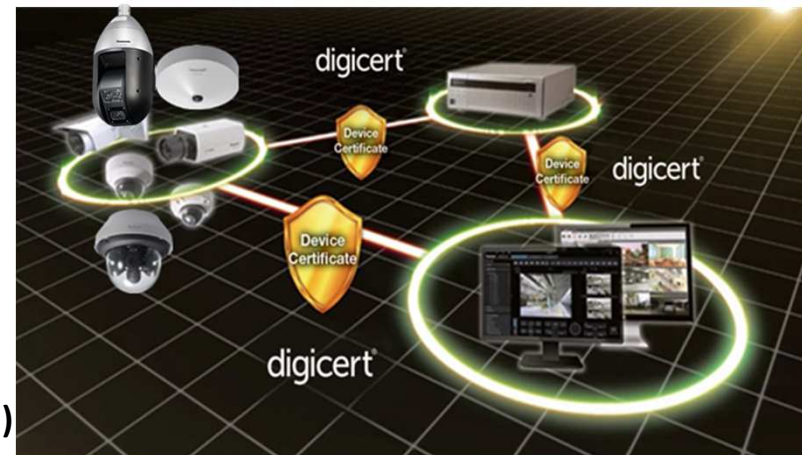
- Support full encryption communication
- Camera encryption recording on-the-edge



FIPS140-2 Level 1 CAVC compliant

(Federal Information Processing Standardization)

- For federal/public safety usage



Extreme Reliability

i-PRO
EXTREME

Achieve high endurance and long life usage under extreme conditions

■ Dustproof Test



■ High-Temperature Test



■ Pressure Test



■ Earthquake Test



■ Waterproof Test



■ Lifetime Test



■ Thunder Test



■ Static Electricity Test



■ Drop Test



■ Box Shaking Test

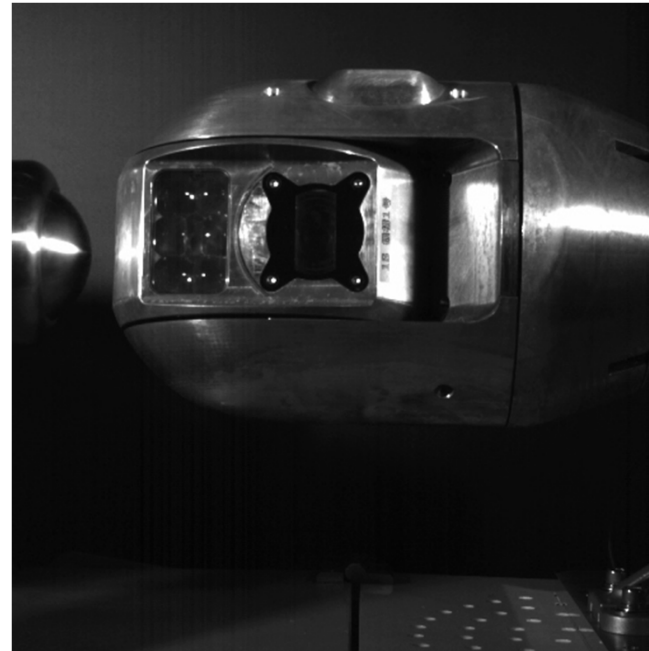


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Extreme Reliability

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Vandal resistant (IK10) under challenging environments



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Extreme Reliability

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✓ High Durability Mechanism for PTZ Cameras

The precise gear drive allows longer life than belt-drive and reduce replacement & field dispatch costs.

**Pan/Tilt Gear Drive
(No backlash mechanism)**



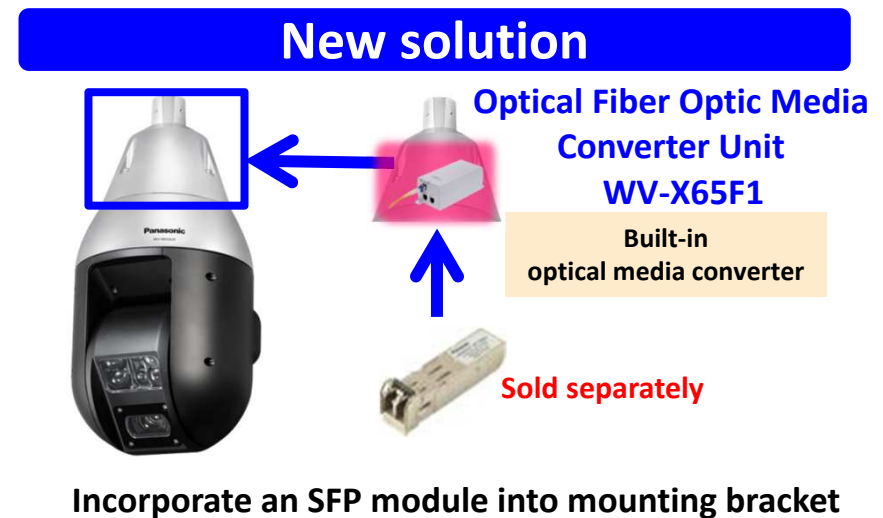
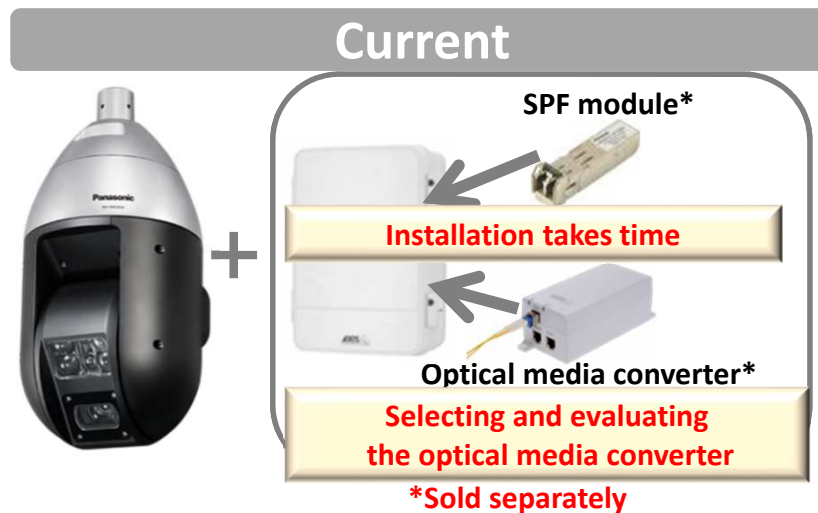
Around 4 times longer lifespan than conventional rubber belt drive

Usability

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✓ Support Fiber Optic Media Converter Unit (Option)

The optional optical interface mounting bracket with optical media converter reduces installation time and enables construction of a long distance monitoring system without spending time on selecting and evaluating the optical media converter.



Specifications

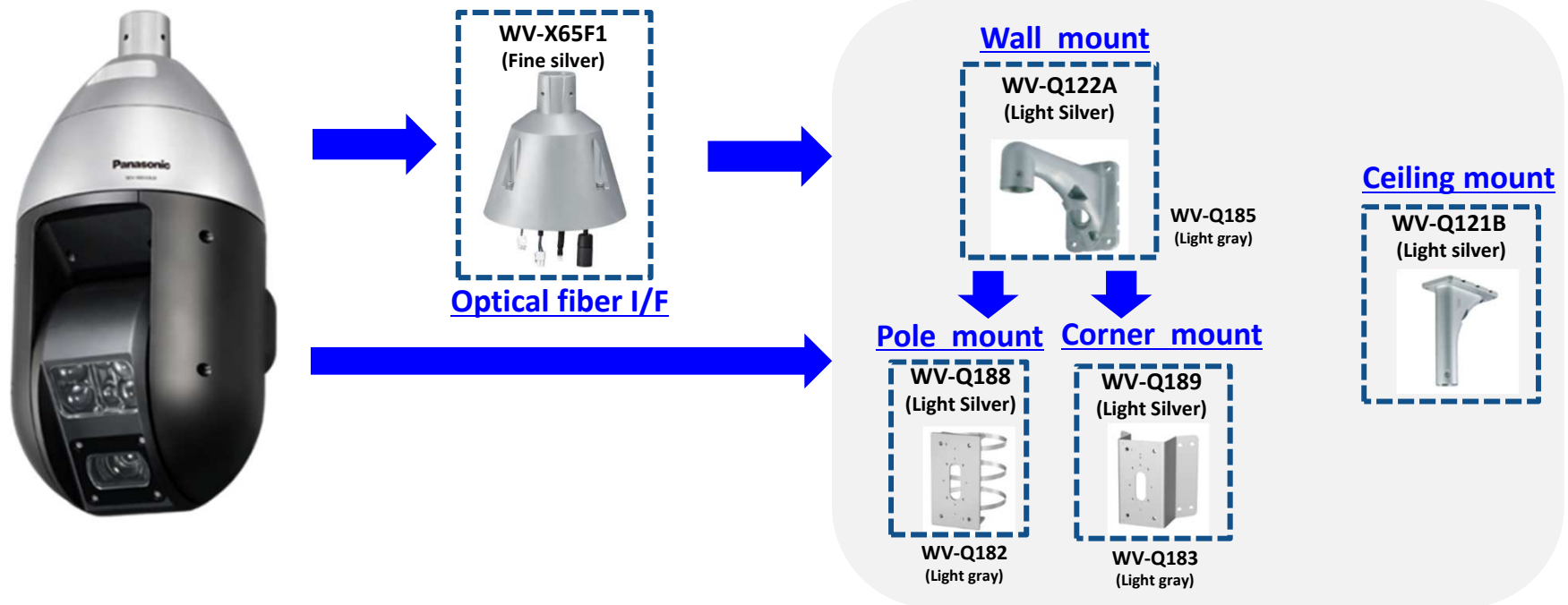
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EXTREME

		WV-S6530N	WV-S6532LN	WV-X6531N	WV-X6533LN
Image sensor		1 / 2.9 type CMOS		1 / 2.8 type CMOS	
Zoom ratio		21x	22x		40x
Max. frame rate				60 fps	
Minimum Illumination *Shutter speed 1/30s	Color		0.015lx @F1.6, 0.001 lx @ shutter speed 16/30		
	B/W		0.006lx @F1.6, 0.0004 lx @ shutter speed 16/30, 0 lx @ IR		
Angular Field of View *16:9 mode	Horizontal	3.4° (Tele) – 73° (Wide)	3.4° (Tele) – 66° (Wide)	2.1° (Tele) – 65° (Wide)	1.9° (Tele) – 66° (Wide)
	Vertical	2.0° (Tele) - 42° (Wide)	2.0° (Tele) - 39° (Wide)	1.2° (Tele) - 39° (Wide)	1.1° (Tele) - 39° (Wide)
Intelligent Auto / WDR / Smart coding			Yes / Super Dynamic (144dB) / Yes		
Adjusting Angle : PAN / TILT		0 to 350° / -30° to 90°	360° endless / -30° to 210°	360° endless / -15° to 195°	360° endless / -30° to 210°
Panning speed : Manual, Preset		0.5 ° to 100° /s, 100° /s	0.065 ° to 150° /s, 300° /s	0.065 ° to 120° /s, 300° /s	0.065 ° to 150° /s, 300° /s
Tilting speed : Manual , Preset		0.5 ° to 100° /s, 100° /s	0.065 ° to 150° /s, 300° /s	0.065 ° to 120° /s, 300° /s	0.065 ° to 150° /s, 300° /s
IR LED		-	100m(AC24V/60WPoE/PoE+)	-	350m(AC24V/60WPoE) /150m(PoE+)
Day /Night function		IR cut filter ⇄ blank glass	IR cut filter ⇄ visible light cut filter	IR cut filter ⇄ blank glass	IR cut filter ⇄ visible light cut filter
Image stabilizer			Intelligent zoom stabilization (Electric Image Stabilization)		
Fiber Optic Media Converter Unit (Option)				Yes	
ClearSight				Yes	
Environmental			IP66, Type 4X(UL50E), NEMA 4X compliant, 50J (IEC60068-2-75 compliant), IK10		
Power Source		AC24V / PoE+	AC24V / PoE+ / 60W PoE	AC24V / PoE+ / 60W PoE	AC24V / PoE+ / 60W PoE
Dimension (mm)		ø229 x 360 (H)	ø226 x 415 (H)	ø229 x 360 (H)	ø226 x 415 (H)

Optional Accessories

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■ Optional brackets and optical fiber I/F



Industry examples

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Those cameras are suitable under the extreme conditions

- ✓ Safe city
 - ✓ Transportation (Airport / Train / Subway)
 - ✓ Critical infrastructure
 - ✓ Stadium
- and more.



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