

# Brilliant Cameras with essential functions



## L series

- 2 megapixel (1920 x 1080) resolution
- H.264, MJPEG dual codec
- 30fps@2MP (H.264)
- True WDR (120dB), WiseStream II
- Hallway view, LDC (Lens Distortion Correction)
- Motion detection, Tampering
- SD/SDHC memory slot (Max. 32GB), PoE
- IP66 / IK10 support (Vandal-Resistant cameras)



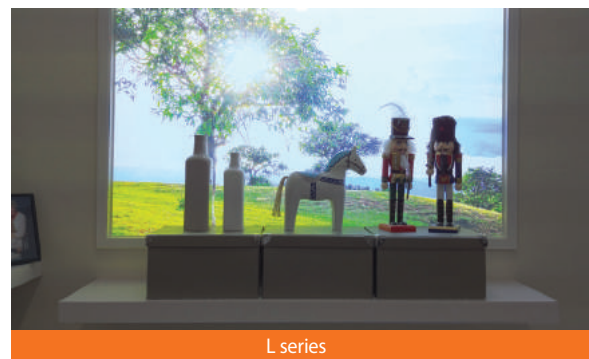
## Broad lineup and modern design for indoor and outdoor environments

The newly launched L series cameras consist of very affordable cameras with essential features. The broad line-up includes fixed and varifocal lens depending on its lens type, and bullet, dome and vandal-resistant dome cameras. The cameras have a modern design and can be used both indoors and outdoors.

Bullet		Dome		Vandal Dome	
Fixed IR	V/F IR	Fixed IR	V/F IR	Fixed IR	V/F IR
 LNO-6012R  LNO-6022R   LNO-6032R	 LNO-6072R	 LND-6012R  LND-6022R   LND-6032R	 LND-6072R	 LNV-6012R  LNV-6022R   LNV-6032R	 LNV-6072R

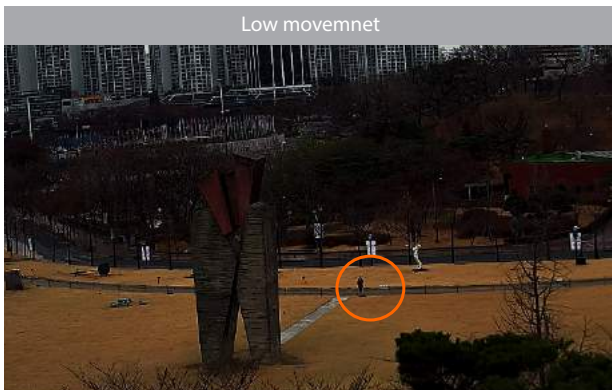
## True WDR(120dB)

The true WDR function built-in into the L series cameras can generate natural images without any image loss even in the challenging environments, such as when the background is brighter than the main object, when an image is obscured by shade due to strong light, when there is a large gap in screen brightness. In addition, it can significantly reduce the effect of motion blur, which is a critical weakness of conventional WDR.



## Improve bandwidth using WiseStream II

WiseStream II is an advanced video compression technology based on motion analytics to maintain video quality whilst reducing the amount of data required. WiseStream II reduces noise and minimizes image quality degradation, which are common problems of traditional image compression artifacts and image noise in low light settings.



WiseStream II OFF : 7162kbps **WiseStream II ON : 1685kbps**



WiseStream II OFF : 7434kbps **WiseStream II ON : 3822kbps**

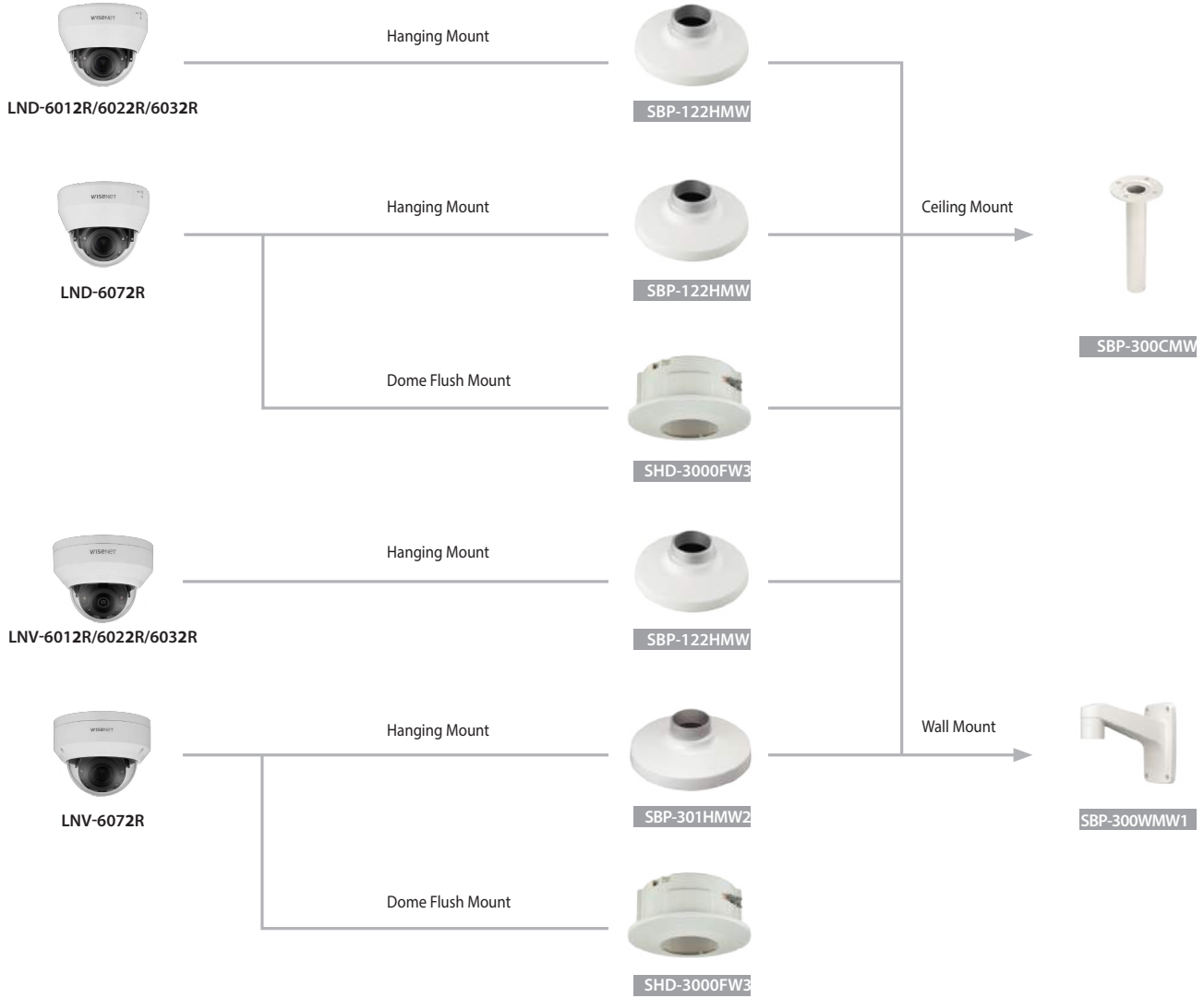
## Hallway view

In a vertical shaped environment, such as corridors, hallways, tunnels, or aisles, traditional horizontal shaped videos focus on unnecessary edges of the area causing bandwidth and storage waste.

By using the hallway view, 3:4 and 9:16 aspect ratio image is created : a vertically oriented video that maximizes image quality in narrow locations.



# Accessory configuration



# LND-6072R

2MP Network IR Dome Camera

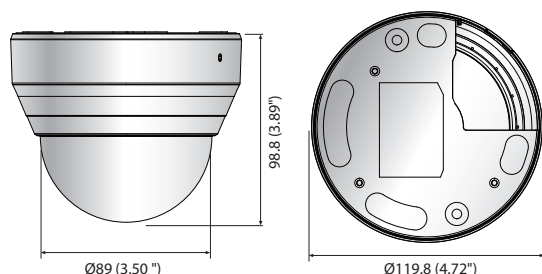


## Key Features

- 2 megapixel (1920 x 1080) resolution
- 3.2 ~ 10mm varifocal lens
- 30fps@all resolutions (H.264)
- H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Tampering, Motion detection
- Micro SD/SDHC memory slot (Max. 32GB), PoE
- Hallway view, WiseStreamII support
- IR viewable length 20m

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-122HMW



SBP-300MMW1



SBP-300CMW



SHD-3000FW3

## LND-6072R

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive Scan
Min. Illumination	Color : 0.095Lux (F1.6), B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	3.2 ~ 10mm (3.1x) varifocal
Max. Aperture Ratio	F1.6 ~ F2.9
Angular Field of View	H : 101.6°(Wide) ~ 31.3°(Tele) / V : 54.1°(Wide) ~ 17.8°(Tele) / D : 120.6°(Wide) ~ 36.0°(Tele)
Min. Object Distance	0.5m (1.64ft)
Focus Control	Manual
Lens / Mount Type	DC auto iris / Board-in type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	20m (65.62ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangler zones)
Privacy Masking	Off / On (6ea rectangler zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Off / On, Hallway view
Video & Audio Analytics	Tampering, Motion detection
Alarm Triggers	Motion detection, Tampering detection, SD card error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, Max. 15fps at other resolution
WiseStream II	Support
Video Quality Adjustment	H.264, MJPEG : Target Bitrate Level Control
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP(RTP), NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, 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	6 users at unicast mode
Edge Storage	Micro SD/SDHC Max. 32GB - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Non-plugin Webviewer - Supported Browser : Google Chrome 63, MS Edge 41, Mozilla Firefox 57 (Window 64bit only), Apple Safari 11 (Mac OS X only) Plug-in Webviewer - Supported Browser : MS Explore 11
Central Management Software	SmartViewer, SSM
<b>ENVIRONMENTAL</b>	
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
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3)
Power Consumption	6.5W
<b>MECHANICAL</b>	
Color / Material	White / Plastic
Dimensions (WxH)	Ø119.8 x 98.8mm (Ø4.72" x 3.89")
Weight	274g (0.60 lb)

\* The latest product information / specification can be found at [hanwha-security.com](http://hanwha-security.com)

\* Design and specifications are subject to change without notice.

\* Wisenet is the proprietary brand of **Hanwha Techwin**, formerly known as Samsung Techwin.

# LND-6012R/6022R/6032R

2MP Network IR Dome Camera

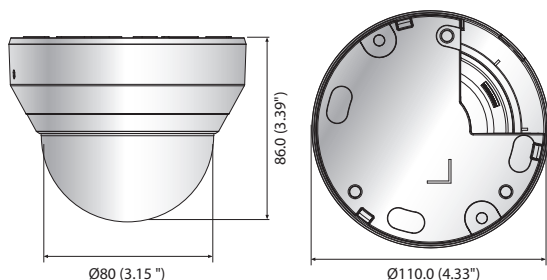


## Key Features

- 2 megapixel (1920 x 1080) resolution
- Built-in 3mm fixed lens (LND-6012R)  
4mm fixed lens (LND-6022R)  
6mm fixed lens (LND-6032R)
- 30fps@all resolutions (H.264)
- H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Tampering, Motion detection
- Micro SD/SDHC memory slot (Max. 32GB), PoE
- Hallway view, WiseStreamII support
- IR viewable length 20m

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-122HMW



SBP-300MMW1



SBP-300CMW

## LND-6012R/6022R/6032R

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive Scan
Min. Illumination	Color : 0.18Lux (F2.0), B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	3mm fixed (LND-6010R), 4mm fixed (LND-6020R), 6mm fixed (LND-6030R)
Max. Aperture Ratio	F2.0
Angular Field of View	H : 102° / V : 54° / D : 120° (LND-6010R) H : 80° / V : 43° / D : 94° (LND-6020R) H : 51° / V : 29° / D : 58° (LND-6030R)
Min. Object Distance	0.5m (1.64ft)
Lens / Mount Type	Fixed / Board-in type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	20m (65.62ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Off / On, Hallway view
Video & Audio Analytics	Tampering, Motion detection
Alarm Triggers	Motion detection, Tampering detection, SD card error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, Max. 15fps at other resolution
WiseStream II	Support
Video Quality Adjustment	H.264, MJPEG : Target Bitrate Level Control
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTPSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, 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	6 users at unicast mode
Edge Storage	Micro SD/SDHC Max. 32GB - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Non-plugin Webviewer - Supported Browser : Google Chrome 63, MS Edge 41, Mozilla Firefox 57 (Window 64bit only), Apple Safari 11 (Mac OS X only) Plug-in Webviewer - Supported Browser : MS Explore 11
Central Management Software	SmartViewer, SSM
<b>ENVIRONMENTAL</b>	
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
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3)
Power Consumption	6.5W
<b>MECHANICAL</b>	
Color / Material	White / Plastic
Dimensions (WxH)	Ø110.0 x 86.0mm (Ø4.33" x 3.39")
Weight	230g (0.51 lb)

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# LNV-6072R

2MP Vandal-Resistant Network IR Dome Camera

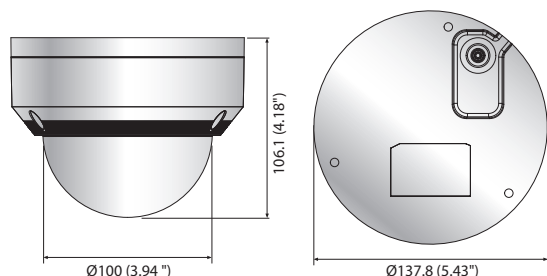


## Key Features

- 2 megapixel (1920 x 1080) resolution
- 3.2 ~ 10mm varifocal lens
- 30fps@all resolutions (H.264)
- H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Tampering, Motion detection
- Micro SD/SDHC memory slot (Max. 32GB), PoE
- Hallway view, WiseStreamII support
- IR viewable length 30m
- IP66, IK10 support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



## LNV-6072R

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive Scan
Min. Illumination	Color : 0.095Lux (F1.6), B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	3.2 ~ 10mm (3.1x) varifocal
Max. Aperture Ratio	F1.6 ~ F2.9
Angular Field of View	H : 101.6°(Wide) ~ 31.3°(Tele) / V : 54.1°(Wide) ~ 17.8°(Tele) / D : 120.6°(Wide) ~ 36.0°(Tele)
Min. Object Distance	0.5m (1.64ft)
Focus Control	Manual
Lens / Mount Type	DC auto iris / Board-in type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Off / On, Hallway view
Video & Audio Analytics	Tampering, Motion detection
Alarm Triggers	Motion detection, Tampering detection, SD card error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, Max. 15fps at other resolution
WiseStream II	Support
Video Quality Adjustment	H.264, MJPEG : Target Bitrate Level Control
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP(RTP), NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, 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	6 users at unicast mode
Edge Storage	Micro SD/SDHC Max. 32GB - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Non-plugin Webviewer - Supported Browser : Google Chrome 63, MS Edge 41, Mozilla Firefox 57 (Window 64bit only), Apple Safari 11 (Mac OS X only) Plug-in Webviewer - Supported Browser : MS Explore 11
Central Management Software	SmartViewer, SSM
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3)
Power Consumption	6.5W
<b>MECHANICAL</b>	
Color / Material	White / Aluminum, Plastic
Dimensions (WxH)	Ø137.8 x 106.1mm (Ø5.43" x 4.18")
Weight	515g (1.16 lb)

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# LNV-6012R/6022R/6032R

2MP Vandal-Resistant Network IR Dome Camera

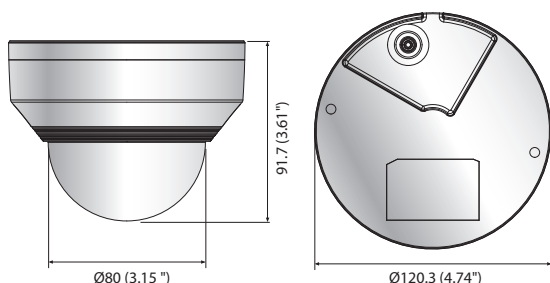


## Key Features

- 2 megapixel (1920 x 1080) resolution
- Built-in 3mm fixed lens (LNV-6012R)  
4mm fixed lens (LNV-6022R)  
6mm fixed lens (LNV-6032R)
- 30fps@all resolutions (H.264)
- H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Tampering, Motion detection
- Micro SD/SDHC memory slot (Max. 32GB), PoE
- Hallway view, WiseStreamII support
- IR viewable length 30m
- IP66, IK10 support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-122HMW



SBP-300MMW1



SBP-300CMW

## LNV-6012R/6022R/6032R

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive Scan
Min. Illumination	Color : 0.18Lux (F2.0), B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	3mm fixed (LNV-6010R), 4mm fixed (LNV-6020R), 6mm fixed (LNV-6030R)
Max. Aperture Ratio	F2.0
Angular Field of View	H : 102° / V : 54° / D : 120° (LNV-6010R) H : 80° / V : 43° / D : 94° (LNV-6020R) H : 51° / V : 29° / D : 58° (LNV-6030R)
Min. Object Distance	0.5m (1.64ft)
Lens / Mount Type	Fixed / Board-in type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
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Alarm Triggers	Motion detection, Tampering detection, SD card error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, Max. 15fps at other resolution
WiseStream II	Support
Video Quality Adjustment	H.264, MJPEG : Target Bitrate Level Control
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Streaming Capability	Multiple streaming (Up to 3 profiles)
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Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Edge Storage	Micro SD/SDHC Max. 32GB - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API)
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Central Management Software	SmartViewer, SSM
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3)
Power Consumption	6.5W
<b>MECHANICAL</b>	
Color / Material	White / Aluminum, Plastic
Dimensions (WxH)	Ø120.3 x 91.7mm (Ø4.74" x 3.61")
Weight	395g (0.87 lb)

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# LNO-6072R

2MP Network IR Bullet Camera

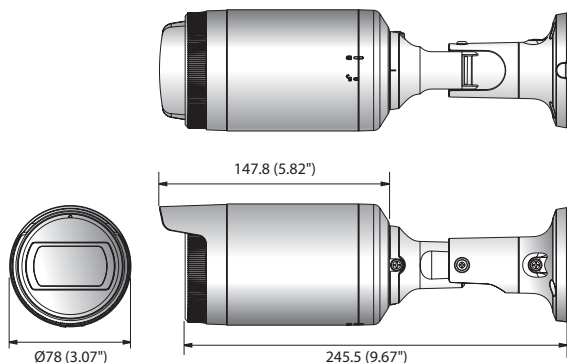


## Key Features

- 2 megapixel (1920 x 1080) resolution
- 3.2 ~ 10mm varifocal lens
- 30fps@all resolutions (H.264)
- H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Tampering, Motion detection
- Micro SD/SDHC memory slot (Max. 32GB), PoE
- Hallway view, WiseStreamII support
- IR viewable length 30m
- IP66 support

## Dimensions

Unit : mm (inch)



## LNO-6072R

VIDEO	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive Scan
Min. Illumination	Color : 0.095Lux (F1.6), B/W : 0Lux (IR LED on)
LENS	
Focal Length (Zoom Ratio)	3.2 ~ 10mm (3.1x) varifocal
Max. Aperture Ratio	F1.6 ~ F2.9
Angular Field of View	H : 101.6°(Wide) ~ 31.3°(Tele) / V : 54.1°(Wide) ~ 17.8°(Tele) / D : 120.6°(Wide) ~ 36.0°(Tele)
Min. Object Distance	0.5m (1.64ft)
Focus Control	Manual
Lens / Mount Type	DC auto iris / Board-in type
OPERATIONAL	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Off / On, Hallway view
Video & Audio Analytics	Tampering, Motion detection
Alarm Triggers	Motion detection, Tampering detection, SD card error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
NETWORK	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, Max. 15fps at other resolution
WiseStream II	Support
Video Quality Adjustment	H.264, MJPEG : Target Bitrate Level Control
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTPC/RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, 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	6 users at unicast mode
Edge Storage	Micro SD/SDHC Max. 32GB - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Non-plugin Webviewer - Supported Browser : Google Chrome 63, MS Edge 41, Mozilla Firefox 57 (Window 64bit only), Apple Safari 11 (Mac OS X only) Plug-in Webviewer - Supported Browser : MS Explore 11
Central Management Software	SmartViewer, SSM
ENVIRONMENTAL	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
ELECTRICAL	
Input Voltage / Current	PoE (IEEE802.3af, Class3)
Power Consumption	6.5W
MECHANICAL	
Color / Material	Dark gray / Plastic
Dimensions (WxH)	Ø78.0 x 262.0mm (Ø3.07" x 10.32")
Weight	380g (0.84 lb)

\* The latest product information / specification can be found at [hanwha-security.com](http://hanwha-security.com)

\* Design and specifications are subject to change without notice.

\* Wisenet is the proprietary brand of **Hanwha Techwin**, formerly known as Samsung Techwin.

# LNO-6012R/6022R/6032R

2MP Network IR Bullet Camera

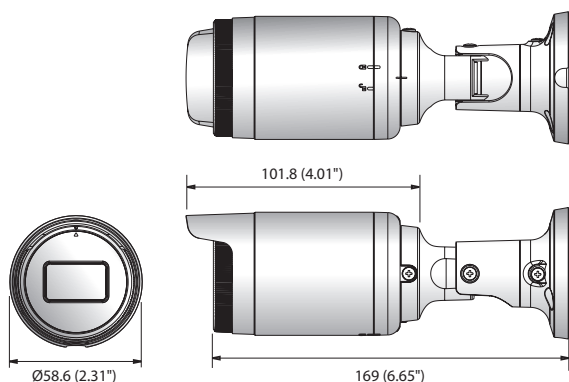


## Key Features

- 2 megapixel (1920 x 1080) resolution
- Built-in 3mm fixed lens (LNO-6012R)  
4mm fixed lens (LNO-6022R)  
6mm fixed lens (LNO-6032R)
- 30fps@all resolutions (H.264)
- H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Tampering, Motion detection
- Micro SD/SDHC memory slot (Max. 32GB), PoE
- Hallway view, WiseStreamII support
- IR viewable length 30m
- IP66 support

## Dimensions

Unit : mm (inch)



## LNO-6012R/6022R/6032R

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive Scan
Min. Illumination	Color : 0.18Lux (F2.0), B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	3mm fixed (LNO-6010R), 4mm fixed (LNO-6020R), 6mm fixed (LNO-6030R)
Max. Aperture Ratio	F2.0
Angular Field of View	H : 102° / V : 54° / D : 120° (LNO-6010R) H : 80° / V : 43° / D : 94° (LNO-6020R) H : 51° / V : 29° / D : 58° (LNO-6030R)
Min. Object Distance	0.5m (1.64ft)
Lens / Mount Type	Fixed / Board-in type
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Off / On, Hallway view
Video & Audio Analytics	Tampering, Motion detection
Alarm Triggers	Motion detection, Tampering detection, SD card error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, Max. 15fps at other resolution
WiseStream II	Support
Video Quality Adjustment	H.264, MJPEG : Target Bitrate Level Control
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTPC/RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, 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	6 users at unicast mode
Edge Storage	Micro SD/SDHC Max. 32GB - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Non-plugin Webviewer - Supported Browser : Google Chrome 63, MS Edge 41, Mozilla Firefox 57 (Window 64bit only), Apple Safari 11 (Mac OS X only) Plug-in Webviewer - Supported Browser : MS Explore 11
Central Management Software	SmartViewer, SSM
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3)
Power Consumption	6.5W
<b>MECHANICAL</b>	
Color / Material	Dark gray / Plastic
Dimensions (WxH)	Ø58.6 x 182.0mm (Ø2.31" x 7.17")
Weight	240g (0.53 lb)

\* The latest product information / specification can be found at [hanwha-security.com](http://hanwha-security.com)

\* Design and specifications are subject to change without notice.

\* Wisenet is the proprietary brand of **Hanwha Techwin**, formerly known as Samsung Techwin.

# L series

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