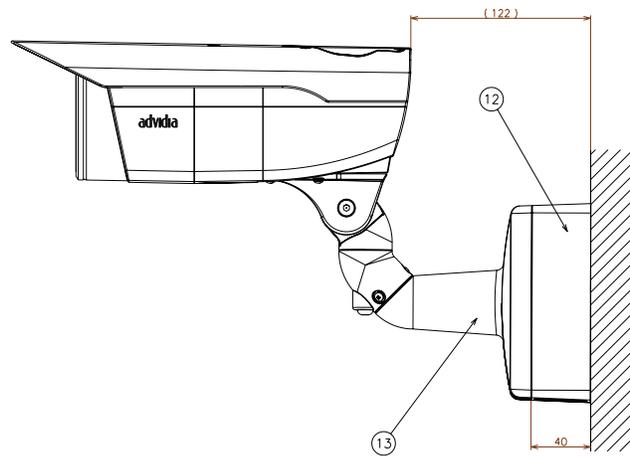
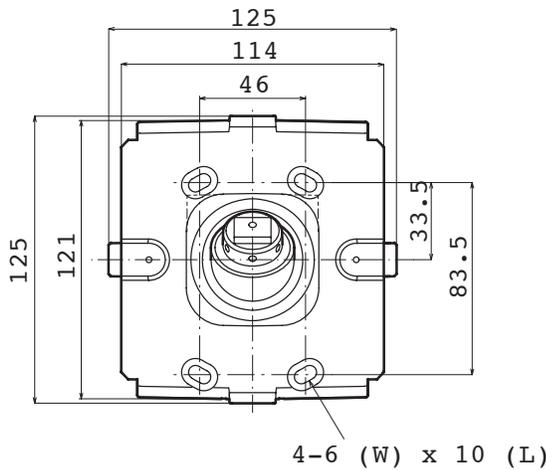


Overview

- 2.4 megapixel IR Bullet
- 1920 x 1080 Full HD at up to 60fps H.264
- Enhanced Super Dynamic and Adaptive Black Stretch
- Auto Back Focus and Motorized Zoom (2.8-10 mm) lens
- 4 Programmable Motion Detection Areas
- VIQS (Variable Image Quality on Specified area)
- Lens Distortion Compensation
- Easy Installation – Mounts to various gang boxes
- IP66 Rated
- Video Insight VMS license included



Technical Specifications



Camera	
Image Sensor:	Approx. 1/3 type MOS image sensor
Effective Pixels:	Approx. 2.4 megapixels
Scanning Area:	5.28 mm (H) x 2.97 mm (V) {7/32" (H) x 1/8" (V)}
Scanning System:	Progressive
Minimum Illumination:	<p>Color: 0.04 lux {0.00372 foot-candle} (F1.3, Maximum shutter: Off (1/30 s), AGC: High) 0.003 lux {0.00028 foot-candle} (F1.3, Maximum shutter: max. 16/30 s, AGC: High)*</p> <p>BW: 0 lux {0.000 foot-candle} (F1.3, Maximum shutter: OFF (1/30 s), Gain: High, when the IR LED is lit) 0.01 lux {0.00093 foot-candle} (F1.3, Maximum shutter: Off (1/30 s), AGC: High) 0.0007 lux {0.00007 foot-candle} (F1.3, Maximum shutter: max. 16/30 s, AGC: High)*</p> <p>*Converted value</p>

Technical Specifications

Super Dynamic:	On (High)/ On (Normal)/ Off *When frame rate is set to 60 fps, Off is displayed for Super Dynamic function.
Dynamic Range:	133 dB type. (Super Dynamic: On)
Face SD (Super Dynamic):	On/ Off (only when Super Dynamic: On)
Gain (AGC):	On (High)/ On (Mid)/ On (Low)/ Off
Adaptive Black Stretch:	On/ Off (only when Super Dynamic: Off)
Back Light Compensation (BLC):	On/ Off (only when Super Dynamic: Off)
Fog Compensation:	On/ Off (only when Super Dynamic/ Adaptive black stretch: Off)
High Light Compensation (HLC):	On/ Off (only when Super Dynamic/ Back light compensation: Off)
Light Control Mode Setting:	Outdoor scene/ Indoor scene (50 Hz)/ Indoor scene (60 Hz)/ Fix shutter
Shutter Speed:	[2 megapixel [16:9] (60 fps mode)] OFF(1/60), 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 Other than [2 megapixel [16:9] (60 fps mode)] OFF(1/30), 3/100, 3/120, 2/100, 2/120, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
Maximum Shutter:	max. 1/1000 s, max. 1/500 s, max. 1/250 s, max. 1/120 s, max. 2/120 s, max. 1/100 s, max. 2/100 s, max. 1/60 s, max. 1/30 s, max. 2/30 s, max. 4/30 s, max. 6/30 s, max. 10/30 s, max. 16/30 s
Color/BW:	Off/ On/ Auto1 (Normal)/ Auto2 (IR Light)/ Auto3 (SCC)
IR LED Light:	Off/ Auto (High/ Mid/ Low), Irradiation Distance: 30 m {98.43 ft}
White Balance:	ATW1/ ATW2/ AWC
Digital Noise Reduction:	High/ Low
Privacy Zone:	On/ Off (up to 8 zones available)
Camera Title on Screen:	On/ Off Up to 20 characters (alphanumeric characters, marks)
Video Motion Detection (VMD):	On/ Off, 4 areas available
Lens	
Zoom Ratio:	3.6x Varifocal Lens 10.8x Extra Optical Zoom* is available. *16:9 mode must be selected
Digital (Electronic) Zoom:	Choose from 3 levels of x1, x2, x4
Focal Length:	2.8 mm – 10 mm {1/8" – 13/32"}
Maximum Aperture Ratio:	1:1.3 (WIDE) – 1:3.0 (TELE)
Focus Range:	0.3 m - ∞
Aperture Range:	F1.3 - F11
	[16:9 mode] Horizontal: 30.9° (TELE) – 105.4° (WIDE) Vertical: 17.4° (TELE) – 57.3° (WIDE) [4:3 mode] Horizontal: 25.8° (TELE) – 86.4° (WIDE) Vertical: 19.3° (TELE) – 63.9° (WIDE)

Technical Specifications

Camera Mount Bracket	
Adjusting Angle:	PAN: ±100° TILT: +30° ~ - 90°
Dimensions:	125 mm (W) x 125 mm (H) x 108 mm (L) {4-15/16" (W) x 4-15/16" (H) x 4-1/4" (L)}
Mass:	Approx. 220 g {0.49 lbs}
Finish:	Aluminum die cast, metallic silver coating
Network	
Network:	10BASE-T/100BASE-TX, RJ45 connector
Resolution: H.264 JPEG (MJPEG)	<ul style="list-style-type: none"> • 2 megapixel [16:9] (30 fps mode)/ 2 megapixel [16:9] (60 fps mode) 1920x1080, 1280x720, 640x360, 320x180, 160x90 • 2 megapixel [4:3] (30 fps mode) 1600x1200, 1280x960, 800x600, VGA, 400x300, QVGA, 160x120 • 3 megapixel [4:3] (30 fps mode) *Used by super resolution techniques 2048x1536, 1280x960, 800x600, VGA, 400x300, QVGA, 160x120
Image Compression Method: H.264* ¹	<p>Transmission Priority: Constant bit rate/ Variable bit rate/ Frame rate/ Best effort/ Advanced VBR</p> <p>Frame Rate: <When Variable bit rate, Frame rate, or Advanced VBR is selected> 1 fps / 3 fps / 5 fps*/ 7.5 fps*/ 10 fps*/ 12 fps*/ 15 fps*/ 20 fps*/ 30 fps*/ 60 fps*</p> <p>*The frame rate is limited to "Max bit rate (per client)*". When a value with an asterisk (*) on the right of it is selected, the actual frame rate may be lower than the value selected.</p> <p>Bit Rate Per Client: 64 kbps/ 128 kbps*/ 256 kbps*/ 384 kbps / 512 kbps*/ 768 kbps*/ 1024 kbps*/ 1536 kbps*/ 2048 kbps*/ 3072 kbps*/ 4096 kbps*/ 6144 kbps*/ 8192 kbps*/ 10240 kbps*/ 12288 kbps*/ 14336 kbps*/ 16384 kbps*/ 20480 kbps*/ 24576 kbps*/ 30720 kbps*/ 40960 kbps*</p> <p>*The available range of the H.264 bit rate varies depending on the setting selected for "image capture size".</p> <p>Image Quality: <When Constant bit rate or Best effort is selected>Low/Normal/Fine <When Variable bit rate is selected> 0 SUPER FINE/1 FINE/2/3/4/5 NORMAL/6/7/8/9LOW</p> <p>Transmission Type: Unicast/Multicast</p>
JPEG (MJPEG)	<p>Image Quality: 0 SUPER FINE/ 1 FINE/ 2/ 3/ 4/ 5 NORMAL/ 6/ 7/ 8/ 9 LOW (10 steps: 0-9)</p> <p>Transmission Type: Pull/ Push</p> <p>Refresh Interval: 0.1 fps – 30 fps (JPEG frame rate will be restricted when displaying both JPEG and H.264 images.)</p>

Technical Specifications

Cropping Function:	<ul style="list-style-type: none"> • Off/ JPEG(1)/ JPEG(2)/ JPEG(3)/ H.264(1)/ H.264(2)/ H.264(3)/ H.264(4)/ H.264 (all) • Alarm action On/ Off
Audio Compression Method:	G.726 (ADPCM) 32 kbps/ 16 kbps, G.711 64 kbps, AAC-LC*2
Bandwidth Control:	Unlimited/ 64 kbps/ 128 kbps/ 256 kbps/ 384 kbps/ 512 kbps/ 768 kbps/ 1024 kbps/ 2048 kbps/ 4096 kbps/ 8192 kbps
Protocol:	<p>IPv6: TCP/IP , UDP/IP, HTTP, HTTPS, FTP, SMTP, DNS, NTP, SNMP DHCPv6, RTP, MLD, ICMP, ARP</p> <p>IPv4: TCP/IP , UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP</p>
OS*3:	<p>Microsoft Windows 8.1</p> <p>Microsoft Windows 8</p> <p>Microsoft Windows 7</p> <p>Microsoft Windows Vista</p>
Browser*3:	<p>Windows Internet Explorer 11 (32-bit)</p> <p>Windows Internet Explorer 10 (32-bit)</p> <p>Windows Internet Explorer 9 (32-bit)</p> <p>Windows Internet Explorer 8 (32-bit)</p> <p>Windows Internet Explorer 7 (32-bit)</p>
Maximum Concurrent Access Number:	14 (Number of sessions that can connect to cameras at the same time) *Depends on network conditions
FTP Client:	Alarm image transmission, FTP periodic transmission (When the FTP transmission is failed, backup on an optional SD memory card is available.)
Multi-Screen:	Up to 16 camera images can be displayed simultaneously on a multi-screen. (Including the camera itself)
Compatible SDXC/SDHC/ SD Memory Card*4 *5:	<p>Manufactured by Panasonic (SD speed class 4 or higher)</p> <p>SDXC Memory Card: 64 GB</p> <p>SDHC Memory Card: 4 GB, 8 GB, 16 GB, 32 GB</p> <p>SD Memory Card: 2 GB (except miniSD card and microSD card)</p>
Cellular Phone Compatibility:	JPEG image, AUX control (by access level)
Mobile Terminal Compatibility:	(As of June, 2015)*6 iPad, iPhone, iPod touch (iOS 4.2.1 or later) Android™ mobile terminals
Basic	
Power Source:	12 V DC, PoE (IEEE802.3af compliant)
Power Consumption:	<p>DC 12V: 930 mA/Approx. 11.2 W PoE</p> <p>DC48 V: 260 mA/Approx. 12.5 W (Class 0 device)</p>
Ambient Operating Environment:	-40 °C to +50 °C{-40 °F to 122 °F}*7
Ambient Operating Humidity:	10% to 90% (no condensation)
Monitor Output (For Adjustment):	<p>VBS: 1.0 V [p-p]/75 , composite, RCA jack</p> <p>An NTSC or PAL signal can be outputted from camera(use the selector switch or software to select either NTSC or PAL signal).</p>
External I/O Terminals:	<p>ALARM IN 1 (DAY/NIGHT IN)/ ALARM IN 2 (ALARM OUT)/ ALARM IN 3 (AUX OUT) (x1 each)</p> <p>DAY/NIGHT IN, ALARM OUT, and AUX OUT can be used by changing the settings of Terminal 1, Terminal 2, and Terminal 3.</p>

Technical Specifications

Microphone/Line Input: For Microphone Input: For Line Input:	<p>ø3.5 mm stereo mini jack Input Impedance: Approx. 2 k (unbalanced) Applicable Microphone: Plug-in power type Supply Voltage: 2.5 V±0.5 V Recommended Sensitivity of Microphone: -48 dB±3 dB (0 dB=1 V/Pa, 1 kHz) Input Level: Approx. -10 dBV</p>
Audio Output:	<p>ø3.5 mm stereo mini jack (stereo output) Output Impedance: Approx. 600 (unbalanced) External speaker with an amplifier Output Level: -20 dBV</p>
Waterproof*8:	<p>Main Body: IP66 (IEC60529), T type 4X (UL50), NEMA 4X compliant</p>
Dimensions:	<p>94 mm (W) x 89 mm (H) x 226 mm (L) {3-45/64" (W) x 3-1/2" (H) x 8-57/64" (L)}</p>
Mass:	<p>Approx. 1.4 kg {3.09 lbs}</p>
Finish:	<p>Main Body: Aluminum die cast (Light gray) Dome Cover: Clear polycarbonate resin</p>

*1 Transmission for 4 streams can be individually set.

*2 AAC (Advanced Audio Coding - Low Complexity) is only used when recording audio on an SD memory card.

*3 For further information about PC system requirements and precautions for when using

Microsoft Windows 8.1, Microsoft Windows 8, Microsoft Windows 7, Microsoft Windows Vista, or Windows Internet Explorer, click "Manual" - "Open" from the supplied CD-ROM and refer to "Notes on Windows® / Internet Explorer® versions".

*4 When repeatedly recording images on an SD memory card using the auto overwrite function, make sure to use an SD memory card with high reliability and durability.

*5 When using an SD memory card supporting Class 10 of the speed class, use a UHS-I (Ultra High Speed-I) compliant card.

*6 For further information about compatible devices, refer to our website (<http://advitia.com/cameras/>).

*7 When using this product without turning the power off. (However, the temperature inside the camera shall be -10 °C {14 °F} or higher.) Perform settings or startup operations when the ambient temperature is -30 °C {-22 °F} or higher. The auto focus function is not available until the heater unit of the camera raises the internal temperature of the camera.

*8 Only when installation work is properly performed according to the instructions in this book and appropriate waterproof treatment is performed.