**illustra 600/610 Series   
Indoor/Outdoor Fixed Dome HD (High Definition) Cameras**

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NOTE:

The specifier should carefully select the portions of this document that fit the intended application. Feel free to consult with American Dynamics regarding your particular application.

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# Bid-Spec

The illustra 600 Series HD IP cameras are the next in the illustra line of cameras that offer high definition resolution and dynamic bandwidth management. They operate across an IP network such as the internet, a LAN or a WAN. Low light performance at 0.3 color, and .04 lux in black and white, leads the industry in clarity at all light levels. The low light clarity is bolstered by the on-board IR illumination of the fixed domes. These cameras can power themselves and the IR illuminator via PoE (802.3af). The illustra 600 line offers versatility in both form factor and color options.

These intelligent cameras can detect faces in a region of interest and dynamically increase image quality. The mini-domes are vandal resistant, and have integrated surface, electrical box and recessed mounting, eliminating the need for additional hardware and cost. In addition, the cameras are also plenum-rated. These ONVIF-compliant cameras provide a range of options including on-board motion detection, wide dynamic range and exposure control. These features make them the premier choice in high definition cameras on the market today.

Key differentiators are:

* Digital wide dynamic range for clarity in backlit environments
* Hard and recessed mounts for easier and faster installation
* Face-detected regions of interest
* Leading low light CMOS clarity in color and black & white
* H.264 compression with 30 ips
* Resolution up to 1280x720p (Illustra 600) and up to 1920x1080p (Illustra 610)
* Dome models use motorized zoom and one-touch auto focus for 3-9mm lens

# Product Description

* The mini-dome cameras have an integrated 3-9mm IR corrected varifocal lens.
* The 3-9mm lens has a motorized zoom function with remote operation via the camera’s web interface.
* The 3-9mm lens has a one-touch auto focus feature with remote operation via the camera’s web interface.
* The camera dome chassis is vandal resistant, constructed of aluminum with a polycarbonate dome bubble.
* The dome camera has a 3-axis gimbal with 360° pan, 70° tilt, and 180° Z-rotation for easy and accurate positioning.
* The camera is surface mountable with no additional hardware needed.
* The camera has threaded conduit access in the rear and side of the body.
* The camera has an optional pendant mount or wall mount.
* The optional wall mount has conduit access via the rear, right and left sides of the mount.
* The indoor camera has a recess or flush mount without additional hardware.
* The camera attaches to single or double gang electrical boxes without an adapter.
* The outdoor dome cameras have an enclosure complying with IP66 and IP67 weatherproofing standards.
* The outdoor camera has an optional recess or flush mount kit that maintains the IP66 and IP67 weatherproof rating.
* The outdoor camera is operational to -40c
* The outdoor camera reduces or eliminates condensation from the field of view without the use of desiccant.
* The outdoor camera reduces or eliminates condensation from the field of view without the use of a fan.
* The camera supports both H.264 and MJPEG compression.
* The camera has dual standard compression support with simultaneous streaming of both H.264 and MJPEG formats.
* The camera has dual non-identical concurrent streams (different frame rate, bit rate, resolution, quality and compression format).
* The camera has Real Time Streaming Protocol (RTSP) support allowing for compatibility with media players such as Windows Media Player, Apple QuickTime, VLC Player and others.
* The camera’s output at its maximum resolution of 1280(H) x 720(V) or 1910(H) x1080(V) pixels at a maximum frame rate of 30 frames per second (FPS).
* It is possible to program the camera to output a variety of lower resolution images, i.e., CIF and 4 CIF 30 FPS.
* The camera provides 5 level settings for quality of H.264 compression.
* The camera has the options to operate with the H.264 codec in constant bit rate, variable bit rate, and constrained variable bit rate modes
* The camera supports HTTP and RTSP/RTP network protocols.
* The cameras feature motion detection with a minimum of 25 independent detection zones.
* The cameras feature automatic exposure, automatic white balance, shutter speed control, 50/60Hz selectable flicker control, programmable brightness, saturation, gamma, sharpness, windowing and decimation, simultaneous delivery of full-field view.
* The camera incorporates necessary algorithms and circuits to detect motion in low light with clarity.
* The camera supports a minimum illumination of 0.3 Lux @ F1.2 in color mode.
* The camera supports an IR sensitive minimum illumination of 0.04 Lux in B/W mode.
* The camera’s primary power source is Power over Ethernet (PoE) complying with the IEEE 802.3af standard.
* The camera has IR illuminators capable of illumination up to 60 feet powered by PoE (802.3af).
* The indoor camera has the alternative option to be powered from between a 12V DC or 24V AC power source providing at least 5W of power.
* The camera’s operating ambient temperature is -40°C (-40°F) to 50ºC (122ºF) for warm start conditions (for outdoor fixed dome models).
* The camera is FCC Part 15, Class A and CE compliant.
* The camera is UL listed.
* The recessed indoor camera models are UL rated as suitable for use in environmental air handling spaces, other than inside air ducts or furnace plenums, and so stated in the installation manual.
* The camera is capable of increasing the bit rate within up to 5 independent regions of interest.
* The camera is able to detect up to 5 faces in a scene and increase the bit rate in the area of those faces.
* The camera has the ability to directly export snapshot images in JPEG form and video clips via email, FTP, Network storage and on board SDHC card.
* The camera can store and utilize the user name and password of the SMTP server to enable protected email export.
* The camera can record to an SDHC card based on motion detection, face detection, alarm input, or on schedule managed via the camera’s web-based GUI.
* The camera can record to a SDHC card in a circular fashion.
* Recorded video on the camera’s SDHC card is accessible via the cameras web browser GUI.
* The camera has the capability to provide at least 3 independent privacy zones.
* The camera has at least 1 alarm output and 2 alarm inputs.
* The camera has a Linux based operating system.
* The camera supports bi-directional audio in half and full duplex.
* The camera can send an alarm based on on-board motion detection.
* The camera can send an alarm based on audio detection.
* The camera can send an alarm based on the detection of a face.
* The camera can send an alarm when the image being blurred or out of focus.
* The camera supports wide dynamic range up to 70dB with 5 quality settings.
* The camera is offered in white and black colors.
* The camera has covers for trim ring screws that match the color of the trim ring.

# Product Quick Specification

## Quick Spec for the 600/610 Dome Models

Video

Compression. . . . . . . . . . . . . H.264, MJPEG

Max Frame Rate. . . . . . . . . . . **Illustra 600**

H.264 30 ips 1280x720

MJPEG: 30 ips 1280x720

**Illustra 610**

H.264 30 ips 1920x1080

MJPEG: 30 ips 1920x1080

ONVIF-Compliant. . . . . . . . . . Yes

Camera

Video Output . . . . . . . . . . . . . 1.0 Vp-p, 75 ohm, composite, RCA

Resolution . . . . . . . . . . . . . . . CIF, 4 CIF, 720p

Imager. . . . . . . . . . . . . . . . . . 1/2.7” inch CMOS progressive scan

Day/Night. . . . . . . . . . . . . . . . Auto (true day/night)

Motion Detection . . . . . . . . . . Yes

Alarms. . . . . . . . . . . . . . . . . . .Motion, schedule, dry contact, Ethernet loss, blur detection, face  
 detection

Audio. . . . . . . . . . . . . . . . . . . Bi-directional duplex, half-duplex

Alarm input/output. . . . . . . . . ..2/1

Video Streams. . . . . . . . . . . . 3 simultaneous streams

Minimum Illumination . . . . . . . **Illustra 600**

0.3 lux at F1.2 color; 0.04lux at F1.2 b/w

0.00 lux w/ IR illuminator model

**Illustra 610**

0.3 lux at F1.2 color; 0.04 lux at F1.2 b/w

0.00 lux w/ IR illuminator model

Wide Dynamic Range. . . . . . . 70dB, 5 level settings

Lens Type. . . . . . . . . . . . . . . . 3-9mm varifocal, IR corrected

Auto-Iris Support . . . . . . . . . . No

Plenum-Rated . . . . . . . . . . . .Yes

Network

Interface. . . . . . . . . . . . . . . . . Ethernet 10/100Base-TX

Ethernet Port. . . . . . . . . . . . . .RJ-45

Supported Protocols . . . . . . . TCP/IP, DHCP, HTTP, ICMP, UPnP, ARP, DNS,

DDNS, PPPoE, SMTP, FTP, RTSP

Configuration Management

Web Browser. . . . . . . . . . . . . MS IE 6.x or greater, Mozilla Firefox, Chrome

Security . . . . . . . . . . . . . . . . . Multi-level; multi-users; IP address filtering, user access log, HTTPS

Onboard Storage

Card Support . . . . . . . . . . . . .Micro SDHC 2.0 up to 32GB

Pre-alarm recording. . . . . . . . Yes

Record format. . . . . . . . . . . . .JPEG, AVI

Playback. . . . . . . . . . . . . . . . Via browser

Recording Trigger. . . . . . . . . .Face detection, alarm, network loss, schedule, motion detection

Simultaneous Users. . . . . . . .Eight

Electrical

Power Input. . . . . . . . . . . . . 12VDC -10% ~ +10% (indoor)

24VAC -20%~ + 30% 47 to 63 Hz (indoor or outdoor)

PoE IEEE 802.3af (indoor)

PoE+ IEEE 802.3at (indoor or outdoor)

Power Draw. . . . . . . . . . . . . …….

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| --- | --- | --- | --- | --- |
| **Illustra 600 Model** | **24 VAC** | **12VDC** | **PoE**  **IEEE 802.3af™** | **PoE+**  **IEEE 802.3at™** |
| Indoor | 6.5W | 6.5W | 6.5W | 6.5W |
| Indoor IR | 9W | 9W | 9W | 9W |
| Outdoor | 44.5W | NA | NA | 21W |
| Outdoor IR | 46.5W | NA | NA | 23W |
| Outdoor Wide Angle | 46.5W | NA | NA | 23W |

Physical

Dimensions (W x H). . . . . . …….130mm x 120 mm (5.11 in. x 4.72 in.)

Weight. . . . . . . . . . . . . . . . . . …..907 kg (2 lbs)

Housing Color . . . . . . . . . . . . …..White or black

Operating Temperature. . . . . . ….-10° to 50°C (-22° to 122°F)

Regulatory

Emissions. . . . . . . . . . . . . . . . ….FCC 47 CFR, Part 15, Class A

EN55022, Class A

ICES-003, Class A

AS/NZS CISPR22, Class A

Immunity . . . . . . . . . . . . . . . . …. EN50130-4

Safety. . . . . . . . . . . . . . . . . . . …. UL 60950-1, 2nd Ed

CSA C22.2 No.60950-1-07, 2nd Ed

# Model Numbers and Descriptions

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| **Model** | **Description** |
| ADCi600-D121 | Outdoor HD 720p minidome, TDN, WDR, 3-9mm vari-focal, vandal resistant, PoE+ heater, white, clear bubble |
| ADCi600-D021 | Outdoor HD 720p minidome, TDN, WDR, 3-9mm vari-focal, IR Illuminator, vandal resistant, PoE+ heater, white, clear bubble |
| ADCi600-D321 | Outdoor/Indoor HD 720p minidome, TDN, WDR, 1.8-3mm wide angle lens, vandal resistant, PoE+ heater, white, clear bubble |
| ADCi600-D141 | Outdoor HD 720p minidome, TDN, WDR, 3-9mm vari-focal, vandal resistant, PoE+ heater, black, clear bubble |
| ADCi600-D041 | Outdoor HD 720p minidome, TDN, WDR, 3-9mm vari-focal, IR Illuminator, vandal resistant, PoE+ heater, black, clear bubble |
| ADCi600-D341 | Outdoor/Indoor HD 720p minidome, TDN, WDR,1.8-3mm wide angle lens, vandal resistant, PoE+ heater, black, clear bubble |
| ADCi600-D123 | Outdoor HD 720p minidome, TDN, WDR, 3-9mm vari-focal, vandal resistant, PoE+ heater, white, smoked bubble |
| ADCi600-D023 | Outdoor HD 720p minidome, TDN, WDR, 3-9mm vari-focal, IR Illuminator, vandal resistant, PoE+ heater, white, smoked bubble |
| ADCi600-D323 | Outdoor/Indoor HD 720p minidome, TDN, WDR, 1.8-3mm wide angle lens, vandal resistant, PoE+ heater, white, smoked bubble |
| ADCi600-D143 | Outdoor HD 720p minidome, TDN, WDR, 3-9mm vari-focal, vandal resistant, PoE+ heater, black, smoked bubble |
| ADCi600-D043 | Outdoor HD 720p minidome, TDN, WDR, 3-9mm vari-focal, IR Illuminator, vandal resistant, PoE+ heater, black, smoked bubble |
| ADCi600-D343 | Outdoor/Indoor HD 720p minidome, TDN, WDR, 1.8-3mm wide angle lens, vandal resistant, PoE+ heater, black, smoked bubble |
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| ADCi610-D121 | Outdoor HD 1080p minidome, TDN, WDR, 3-9mm vari-focal, vandal resistant, PoE+ heater, white, clear bubble |
| ADCi610-D021 | Outdoor HD 1080p minidome, TDN, WDR, 3-9mm vari-focal, IR Illuminator, vandal resistant, PoE+ heater, white, clear bubble |
| ADCi610-D321 | Outdoor/Indoor HD 1080p minidome, TDN, WDR, 1.8-3mm wide angle lens, vandal resistant, PoE+ heater, white, clear bubble |
| ADCi610-D141 | Outdoor HD 1080p minidome, TDN, WDR, 3-9mm vari-focal, vandal resistant, PoE+ heater, black, clear bubble |
| ADCi610-D041 | Outdoor HD 1080p minidome, TDN, WDR, 3-9mm vari-focal, IR Illuminator, vandal resistant, PoE+ heater, black, clear bubble |
| ADCi610-D341 | Outdoor/Indoor HD 1080p minidome, TDN, WDR,1.8-3mm wide angle lens, vandal resistant, PoE+ heater, black, clear bubble |
| ADCi610-D123 | Outdoor HD 1080p minidome, TDN, WDR, 3-9mm vari-focal, vandal resistant, PoE+ heater, white, smoked bubble |
| ADCi610-D023 | Outdoor HD 1080p minidome, TDN, WDR, 3-9mm vari-focal, IR Illuminator, vandal resistant, PoE+ heater, white, smoked bubble |
| ADCi610-D323 | Outdoor/Indoor HD 1080p minidome, TDN, WDR, 1.8-3mm wide angle lens, vandal resistant, PoE+ heater, white, smoked bubble |
| ADCi610-D143 | Outdoor HD 1080p minidome, TDN, WDR, 3-9mm vari-focal, vandal resistant, PoE+ heater, black, smoked bubble |
| ADCi610-D043 | Outdoor HD 1080p minidome, TDN, WDR, 3-9mm vari-focal, IR Illuminator, vandal resistant, PoE+ heater, black, smoked bubble |
| ADCi610-D343 | Outdoor/Indoor HD 1080p minidome, TDN, WDR, 1.8-3mm wide angle lens, vandal resistant, PoE+ heater, black, smoked bubble |
| ADCi600-D111 | Indoor HD 720p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, PoE, white, clear bubble |
| ADCi600-D011 | Indoor HD 720p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, IR Illuminator, PoE, white, clear bubble |
| ADCi600-D131 | Indoor HD 720p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, PoE, Black, clear bubble |
| ADCi600-D031 | Indoor HD 720p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, IR Illuminator, PoE, black, clear bubble |
| ADCi600-D113 | Indoor HD 720p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, PoE, white, smoked bubble |
| ADCi600-D013 | Indoor HD 720p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, IR Illuminator, PoE, white, smoked bubble |
| ADCi600-D133 | Indoor HD 720p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, PoE, black, smoked bubble |
| ADCi600-D033 | Indoor HD 720p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, IR Illuminator, PoE, black, smoked bubble |
| ADCi610-D111 | Indoor HD 1080p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, PoE, white, clear bubble |
| ADCi610-D011 | Indoor HD 1080p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, IR Illuminator, PoE, white, clear bubble |
| ADCi610-D131 | Indoor HD 1080p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, PoE, Black, clear bubble |
| ADCi610-D031 | Indoor HD 1080p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, IR Illuminator, PoE, black, clear bubble |
| ADCi610-D113 | Indoor HD 1080p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, PoE, white, smoked bubble |
| ADCi610-D013 | Indoor HD 1080p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, IR Illuminator, PoE, white, smoked bubble |
| ADCi610-D133 | Indoor HD 1080p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, PoE, black, smoked bubble |
| ADCi610-D033 | Indoor HD 1080p minidome, TDN, WDR, 3-9mm varifocal, vandal resistant, IR Illuminator, PoE, black, smoked bubble |
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