![Architect & Engineer Specification]

Illustra 200 Series
Indoor/Outdoor Mini-Dome IP Cameras

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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Contents

1 Bid-Spec

The illustra 200 Series IP cameras are the lower cost, full featured cameras in the illustra product portfolio of IP networked cameras. They operate across an IP network such as the internet, a LAN or a WAN. The 200 series cameras support an extensive list of premium features including; True Day/Night, Wide Dynamic Range, excellent low-light sensitivity and an IP67 environmental rating. 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 optional on-board IR illumination of the fixed domes. These cameras can power themselves and the IR illuminator via PoE (802.3af or 802.3at). The illustra 200 camera product line offers affordability and versatility in form factor, functionality and durability.

As with all the latest American Dynamics illustra IP Minidome Cameras, the illustra 200 series includes solutions allowing for fast and easy installation. 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, out of the box the cameras are plenum-rated without requiring additional accessories. These ONVIF-compliant cameras have motorized zoom and focus control making setup and maintenance using the web browser extremely easy. The cameras provide a range of features including on-board motion detection, wide dynamic range and exposure control. These features make the illustra 200 series the premier choice for full featured, economical IP cameras on the market today.

Key differentiators are:
- Digital wide dynamic range for clarity in backlit environments
- Dome models use motorized zoom and one-touch auto focus for 3-9mm lens
- Hard and recessed mounts for easier and faster installation
- Motion and blur (focus) detection
- Leading low light CMOS clarity in color and black & white
- H.264 compression with 30 ips
- Resolution up to 720x480

2 Product Description

- The mini-dome cameras have an integrated 3-9mm IR corrected vari-focal 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 3-9mm lens has a horizontal Field of View of 97º-36º

- 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 optional pendant mount or wall mount accessories.

- 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 720(H) x 480(V) pixels at a maximum frame rate of 30 frames per second (FPS).

- The camera supports both NTSC and PAL standards

- 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 3 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 0.1 Lux @ F1.2 in color mode.

- The camera supports an IR sensitive minimum illumination of 0.03 Lux @ F1.2 in B/W mode.

- The camera's primary power source is Power over Ethernet (PoE) complying with the IEEE 802.3af standard (indoor versions) and IEEE 802.3at (outdoor versions)

- The camera has IR illuminators capable of illumination up to 60 feet powered by PoE (802.3af or 802.3at).

- 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 (at least 7W for models with IR illuminator).

- 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 has the ability to directly export snapshot images in JPEG form and video clips via email, FTP, Network storage and on board SDHC card. (Note the SDHC card will only store JPEG snapshots.)

- 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, 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.

- The camera has the capability to provide 1 privacy zone.

- 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 when the image being blurred or out of focus.

- The camera supports wide dynamic range up to 70dB with 9 quality settings.

- The camera is offered in white only.

- The camera has covers for trim ring screws that match the color of the trim ring.

3 Product Quick Specification

3.1 Quick Spec for the 200 Mini-Dome Models

Video
Compression. . . . . H.264, MJPEG
Max Frame Rate. . . . . H.264 30 ips 720x480
                                    MJPEG: 30 ips 720x480
ONVIF-Compliant. . . . . Yes

Camera
Video Output . . . . 1.0 Vp-p, 75 ohm, composite, RCA
Resolution . . . .   CIF, 4 CIF, 720x480
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
Audio. . . . .   Bi-directional duplex, half-duplex
Alarm input/output. 2/1
Video Streams. . . . . 3 simultaneous streams

Minimum Illumination . . . . 0.1 lux at F1.2 color; 0.03 lux at F1.2 b/w
                                    0.00 lux w/ IR illuminator model

Wide Dynamic Range. . . . . . . 70dB, 9 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 8.x or greater
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. . . . . .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. . . . .

Illustra 200 Model	24 VAC	12VDC	PoE IEEE 802.3af™	PoE+ IEEE 802.3at™
Indoor	5W	5W	5W	5W
Indoor IR	7W	7W	7W	7W
Outdoor	31.5W	NA	NA	25W
Outdoor IR	31.5W	NA	NA	25W

Physical
200 Series Indoor
Dimensions (W x H). . . . .130mm x 120 mm (5.11 in. x 4.72 in.)
Weight. . . . .907 g (2 lbs)
Housing Color . . . .White
Operating Temperature. . . . .-10° to 50°C (-14° to 122°F)

200 Series Outdoor
Dimensions (W x H). . . . .157mm x 147 mm (6.18 in. x 5.79 in.)
Weight. . . . .1.07 kg (2.3 lbs)
Housing Color . . . .White
Operating Temperature. . . . .-30° C to 50° C (-22° F to 122° F) via PoE+
                                   -40° C to 50° C (-40° F to 122° F) via 24VAC
Outdoor Rating ………………….IP66/IP67

Regulatory
Emissions. . . . .FCC 107 & 109, Part 15b
                                   EN55022, Class A; N6100;3-3
                                   ICES-003/NMB-003, Class A
                                   AS/NZS CISPR22, Class A
Immunity . . . . CE: EN50130-4
Safety. . . . .UL 60950-1, 2nd Ed
                                   EN 60950-1, 2nd Ed
                                   CSA C22.2 No.60950-1-07, 2nd Ed

4   Model Numbers and Descriptions

Model	Description
ADCi210-D111	Indoor D1, TDN, WDR, 3-9mm Auto Focus, PoE, white, clear bubble
ADCi210-D011	Indoor D1, TDN, WDR, 3-9mm Auto Focus, IR Illuminator, PoE, white, clear bubble
ADCi210-D121	Outdoor D1, TDN, WDR, 3-9mm Auto Focus, vandal resistant, PoE+ heater, white, clear bubble
ADCi210-D021	Outdoor D1, TDN, WDR, 3-9mm Auto Focus, IR Illuminator, vandal resistant, PoE+ heater, white, clear bubble
ADCi210-D113	Indoor D1, TDN, WDR, 3-9mm Auto Focus, PoE, white, smoked bubble
ADCi210-D013	Indoor D1, TDN, WDR, 3-9mm Auto Focus, IR Illuminator, PoE, white, smoked bubble
ADCi210-D123	Outdoor D1, TDN, WDR, 3-9mm Auto Focus, vandal resistant, PoE+ heater, white, smoked bubble
ADCi210-D023	Outdoor D1, TDN, WDR, 3-9mm Auto Focus, IR Illuminator, vandal resistant, PoE+ heater, white, smoked bubble