



# C-12 INDOOR 12MP

 360° Fisheye Panoramic

C12-IEC1-O



## HIGH SPEED FRAME RATES

Capture every movement in sharp detail with market leading **55 fps at full 9MP** resolution or **maintain** your chosen frame rate up to **30 fps** on primary stream with 3 other streams running. Alternatively experience best in class performance of **25 fps with TrueDetail HDR**.



## ADVANCED LIGHT MANAGEMENT TECHNOLOGY

Dynamically manage the available light to optimize image quality to **produce clearer, full-color, lower noise videos**. Maintain the sharpness of moving or static objects even in challenging low and mixed light conditions.



## STREAMLITE COMPRESSION TECHNOLOGY

Lower video bandwidth and storage by an **average of 50% or more** on both H.264 and H.265, and over 90% when there is no motion and Dynamic FPS is enabled. Integrated VMS / NVR partners have access to **StreamLite+**, and can achieve an additional **20%** thanks to **ColorMap Compression<sup>5</sup>**.



## TRUEDETAIL HDR TECHNOLOGY

Reveal the **hidden details** in both dark and bright areas of the same scene. Correctly expose every detail with dual concurrent exposures.



## MULTI-MODE

Simultaneously stream up to four different views from a choice of five (inc. dewarped views)<sup>6</sup>

## COMPACT SURVEILLANCE

- Powerful, compact camera with a diameter of only 92mm, built upon Oncam's expertise in 360-degree IP video technology
- Multi-core CPU, high sensitivity 12MP sensor, and Oncam's latest cutting-edge technologies for detailed crisp images
- Edge dewarping for additional streaming flexibility (Fisheye only, Panoramic+ only or Multi-Mode<sup>9</sup>)
- Clean, modular low-profile design for quick, simple and intuitive installation
- Support for both terminated RJ45 and unterminated cabling, with punch down connectivity option
- Variety of mounting options, including Recessed, Pendant and Panoramic+ Tilt Mount
- Market leading 3D dewarping software supported by major VMS / NVR partners
- 5-year warranty



# Technical Specifications

## General

<b>Field of view</b>	180° Horizontal, 180° Vertical
<b>Image sensor</b>	12.4MP (approx.) CMOS sensor
<b>Lens</b>	180°, 1.6mm, F 2.0, all-glass, fixed focus, fixed Iris, fisheye
<b>Day/Night IR cut filter</b>	Automatic, manual
<b>Minimum illumination</b>	Color: 0.1 lux at 50 IRE F/2.0 Mono: 0.1 lux at 50 IRE F/2.0
<b>Video motion detection</b>	16 configurable polygonal regions
<b>Analytics</b>	Motion Region Detector, Tampering, Loitering Object Detector, Line Crossing./Counting, Region Object Detector, Object Tracking Only, Region Object Occupancy
<b>Advanced event management</b>	Configurable Triggers: Motion regions, Network message, Link down Configurable Actions: SMTP (snapshot), Local recording
<b>Networking</b>	IPv4, TCP/IP, UDP, HTTP, DHCP, DNS, NTP, SMTP, RTP, RTSP, RTCP, WEB RTC, HTTPS, WS-Discovery, TLS, ARP and SNMP v2c or V3
<b>Privacy</b>	5 configurable privacy regions/masks
<b>SD card</b>	Built in MicroSD card slot, up to 512GB (FAT32), minimum class 10 with AES256 File based encryption
<b>White balance range</b>	Auto White Balance (Range = approx. 2,500 K ~ 8,000 K)
<b>Security</b>	Password protection WS-Username token RTSP authentication HTTP Digest authentication Authorization levels Brute force protection IP address filtering User access log Encrypted TLS 1.2 HTTPS encryption IEEE 802.1x Authentication, EAP-MD5, EAP-TLS, EAP-PEAP

## Video

<b>Frame rate</b>	max 55 fps at full resolution <sup>1</sup> or 30 fps with TrueDetail HDR
<b>Video compression</b>	H.264, H.265, MJPEG and VP8 (WEB RTC)
<b>Smart compression</b>	StreamLite H.264 and H.265 StreamLite+ H.264 and H.265 (with ColorMap compression <sup>5</sup> )

**Fisheye stream 1 (Primary - 360° Fisheye Stream H.264/H.265)** Up to 55 fps<sup>1</sup>:  
2992 x 2992 (9.0 MP, max resolution)  
30 fps when multi-streaming<sup>2</sup>

Up to 60 fps<sup>1</sup>:  
2800 x 2800 (7.8 MP)  
2304 x 2304 (5.3 MP)  
1920 x 1920 (3.7 MP)  
1440 x 1440 (2.1 MP)  
992 x 992 (0.98 MP)  
512 x 512 (0.26 MP)<sup>3</sup>

**Fisheye stream 2<sup>4</sup> (Secondary - 360° Fisheye Stream H.264/H.265)** Up to 15 fps:  
2992 x 2992 (9.0 MP, max resolution)  
2800 x 2800 (7.8 MP)  
2304 x 2304 (5.3 MP)  
1920 x 1920 (3.7 MP)  
1440 x 1440 (2.1 MP)  
992 x 992 (0.98 MP)  
512 x 512 (0.26 MP)<sup>3</sup>

**Fisheye stream 3 (Tertiary - 360° Fisheye Stream H.264/H.265)** Up to 30 fps:  
1920 x 1920 (3.7 MP, max resolution)  
1440 x 1440 (2.1 MP)  
992 x 992 (0.98 MP)  
512 x 512 (0.26 MP)<sup>3</sup>

**Fisheye stream 4 (Low resolution - 360° Fisheye Stream H.264/H.265/ MJPEG)** Up to 10 fps:  
512 x 512 (0.26 MP max resolution)<sup>3</sup>

**Camera modes<sup>6</sup>** Fisheye only, Panoramic+ only, Multi-Mode

**Multi-stream capacity** 4 multiple streams can run concurrently. Primary stream maintains a frame rate of 30 fps<sup>2</sup>

**Dewarped views<sup>6</sup>** Panoramic+ (180° view): 3040 x 1216 to 800 x 320  
Corridor+ (ceiling split corridor view): 2432 x 1520 to 640 x 400  
T Corridor+ (three-way split corridor view): 3456 x 1440 to 768 x 320  
Vcam (up to 4): 1280 x 720 to 576 x 432

**Image settings** Brightness, contrast, saturation, sharpness, exposure compensation, exposure priority, imaging preference, text overlay, 180° rotate, multiple color spaces

**Image enhancement** TrueDetail HDR up to 25 fps. TrueDetail HDR maximum dynamic range 120dB, Wide Dynamic Range image adjustment

**PTZ functionality** 10x zoom with Oncam 3D client-side dewarping software

**VMS/NVR support** ONVIF Profile G, M, S, T conformant. Contact Oncam for the up-to-date VMS compatibility list

**Web browser compatibility** Supported minimum browsers versions: Chrome 95, Firefox 94, Edge 95 and Safari 14.1.1

<b>Unicast</b>	Up to 20 simultaneous users depending on the resolution settings
<b>Multicast</b>	Supported for all streams (Video and Metadata <sup>6</sup> )
<b>Bit rate control</b>	Fixed Quality (Capped Bitrate) or Constant Bit Rate

## Electrical

<b>Ports</b>	RJ45 for 100/1000BASE-Tx
<b>Power input</b>	Power over Ethernet (PoE), IEEE standard 802.3af
<b>Power consumption (maximum)</b>	> 12.95W (IEEE 802.3af, PoE 48VDC)

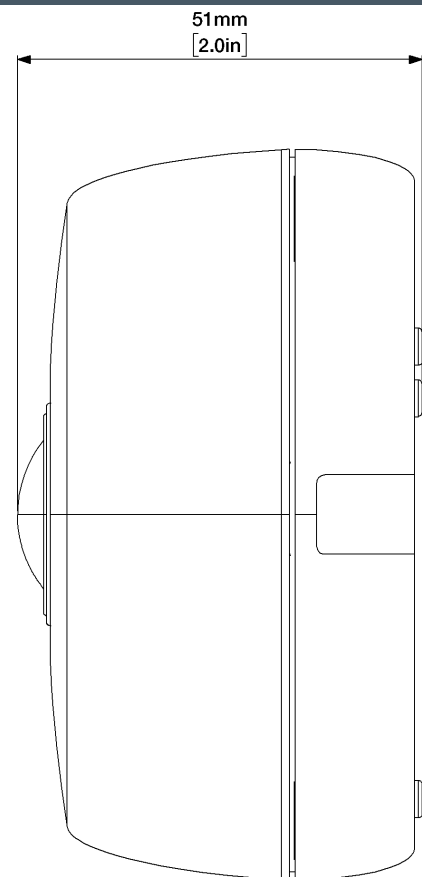
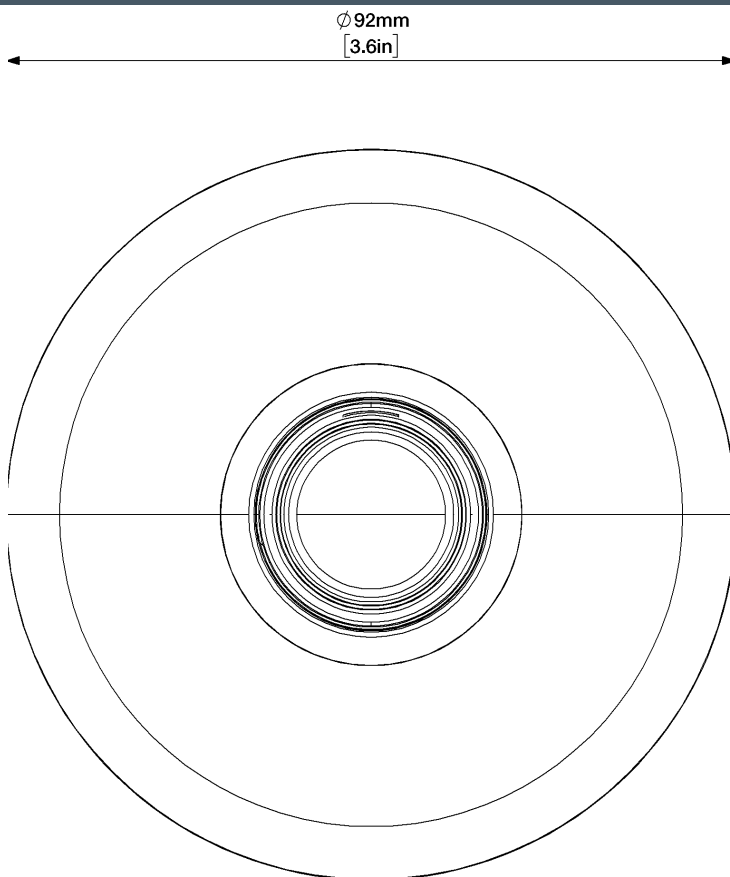
## Mechanical

<b>Camera mount</b>	Surface, Pendant , Recessed and Panoramic+ Tilt
<b>Weight</b>	0.308kg (0.68 lbs)
<b>Dimensions (D x W x H)</b>	92 x 92 x 51 mm (3.6 x 3.6 x 2.0 in.)

## Environmental

<b>Operating temperature range</b>	0 to +50° C (32 to +122° F)
<b>Ingress protection</b>	IP40

## Dimensions



## Certifications

IEEE802.3af

AS/NZS CISPR 32: 2015 AMD 1: 2020

CE	UKCA
EN 55032:2015/A1:2020, Class B	BS EN 55032:2015 +A1:2020, Class B
EN 55035:2017/A11:2020 EN50130-4:2011/A1:2014	BS EN 55035:2017 +A11:2020 BS EN50130-4:2011 +A1:2014

EN IEC 61000-6-3:2021

FCC CFR Title 47 Part 15 Subpart B: 2020 Class B

ICES-003 Issue 7:2020, Class B  
ANSI C63.4-2014, ANSI C63.4a-2017,  
CAN/CSA-CISPR 32:17

UL/cUL 62368-1, EN 62368-1:2014/A11:2017

RoHS

REACH

IP40

BIS IS13252(Part1)/ IEC 60950-1

<sup>1</sup> High Speed Mode<sup>6</sup>, single stream only, set to 55 fps, exposure priority set to frame rate, 60Hz. Max achievable fps is dependant on VMS support

<sup>2</sup> Maintain 30 fps +/-5%, 60 Hz, 30 fps in TrueDetail HDR Mode

<sup>3</sup> MJPEG at 10 fps, >5,000 kbps supported

<sup>4</sup> Resolution and video source view shared with Primary Stream in TrueDetail HDR Mode

<sup>5</sup> Dependent on VMS support

<sup>6</sup> Firmware version 2.0.x and above required

## Optional Accessories

### Indoor Recessed Mount



SKU Number	CA-IRM1-O
Cut out	100mm (4 in.)
Cable entry	Rear
Retention	Spring clips
Construction	Rear: ADC12 Aluminum Front: Polymer
Plenum rated	UL2043
Form factor	Low profile
Installation	Ceiling
Weight	0.186kg (0.41 lb)
Depth	65 mm (2.55")
Dimensions	Ø121 mm (4.76")

### Indoor Pendant Mount



SKU Number	CA-IPM1-O
Thread	M20 & 3/4" NPT Female
Construction	ADC12 Aluminum
Form factor	Low profile
Weight	0.080 kg (0.18 lb)
Height	90 mm (3.54")
Dimensions	Ø84 mm (3.31")

### Panoramic+ Tilt Mount<sup>6</sup>



SKU Number	CA-ITM1-O
Angle	20° to 45°
Cable entry	Rear
Construction	Polymer
Installation	Wall
Weight	0.03 kg (0.07 lb)
Depth	44 mm (1.7")
Dimensions	Ø87 mm (3.25")