

CM-3102

FLIR *Ariel*™

1080P WDR Mini-dome Camera



**HIGHEST QUALITY. LOWEST BANDWIDTH.  
PREDICTABLE STORAGE.**

The Ariel camera series sets a new standard in its class. Featuring full HD 1080p video, Ariel cameras guarantee frame rates in high motion, complex and low light scenes, thereby lowering overall utility costs and carbon footprint.

Through its motion processing architecture, the CM-3102 cameras deliver predictable storage reducing the Total Cost of Ownership (TCO).

Now you can... deploy a Full HD 1080p surveillance camera that easily handles wide variations in motion and lighting found in airports, city surveillance projects, critical infrastructure sites, commercial offices and campuses using the most technologically advanced HD IP camera.

**Key Features**

- Multi-streaming at the highest frame rates
- Full HD 1080p at the lowest bit rate
- Included analytics:
  - Tamper Detection
  - Multi-zone VMD
  - Wide Dynamic Range
  - IR Illumination
  - Indoor/Outdoor
  - Storage on Edge
- Web interface for viewing and configuration

Features	Benefits
<ul style="list-style-type: none"><li>• Multi-stream H.264 video</li><li>• Guaranteed frame rates in complex, high motion scenes</li><li>• Motion processing</li><li>• Auto-tune technology</li><li>• IR model delivers more uniform high quality illumination</li></ul>	<ul style="list-style-type: none"><li>• Crisp, clean video for supreme identification</li><li>• Maintains evidentiary integrity of video in challenging surveillance conditions</li><li>• Maintains lowest bit rates regardless of motion/scene complexity; lowers TCO with predictable storage and network requirements</li><li>• Best out-of-the-box experience with no adjustments; auto scene adaptation eliminates service calls</li><li>• Reduces utility costs, carbon footprint and TCO</li></ul>

## General Specifications

Camera	
Image Sensor	1/2.8" BSI CMOS
Sensor Resolution	2048 x 1536
Scanning Mode	Progressive
Sensitivity	0.03 (color)/0.01 (BW), 0 Lux with IR illuminator ON, measured at 30 IRE
Lens Type	CM-3102-01-I: Fixed 2.8mm, 102° HFOV, F1.8, D/N CM-3102-11-I: Varifocal 3-10.5mm, 88°-31° HFOV, F1.4, D/N, Motorized with auto-focus and auto-iris
Automatic Electronic Shutter (AES)	1/1.75 to 1/10,000 (auto)
Digital Slow Shutter (DSS)	1/7.5 to 1/25 or 1/30 with up to 4x sensitivity boost in color or night mode
White Balance	Auto / ATW / Manual / One Push
Automatic Gain Control (AGC)	Auto
Back Light Compensation	On / Off
Wide Dynamic Range (WDR)	On / Off (78dB)
Noise Reduction	3D
Tamper Detection	Yes
Privacy Zones	Yes
Video Motion Detection	Yes
Day / Night Mode	Yes
Mechanical IR Cut Filter	Yes
Signal to Noise Ratio (SNR)	±50 dB
Video	
Compression	Fully compliant multi-stream H.264 main/high profile + MJPEG
Maximum Performance	H.264 30/25 @ 1080p + 720p + D1 (NTSC/PAL)
Resolution Range	Scalable from D1 to FHD 1080p
Bandwidth	Configurable between 64Kbps and 20Mbps
Rate Control	SVBR
SD Card Recording <sup>1</sup>	microSDXC up to 64GB (Class 10)
IR Illuminator	
Distance	up to 30 m (98 ft.)
Angle of Illumination	Full 60°
LED Type	high efficiency SMD
Peak Emission Wavelength (nm)	850
Network	
Network Protocols	TCP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4, IPv6, SSL, LDAP
Ethernet	10/100, auto sensing, half / full duplex (RJ45)
Remote Configuration	via web browser or supported video management software
Firmware Upgrade	Flash memory for upgrade of camera firmware over the network
Supported Web Browser	Internet Explorer 10+
Security	User account with password protection and IP filter

<sup>1</sup> Excluding countries where disallowed

<sup>2</sup> Startup temperature -10°C/12°F

## Camera Ordering Information

Type	Series	Camera Resolution	Lens Options	Environmental	IR Illuminator
CM	31	02	X	1	I
Mini-dome Camera	31 = Ariel Gen II	02 = 1080p FHD	0 = 2.8mm 1 = 3-10.5mm	1 = IP67 Vandal with Heater	I = 60° Illuminator

Audio	
Input	CM-3102-11-I: G.711, AAC 48KHz
Alarm	
Input	CM-3102-11-I: 1 dry alarm contact
Physical	
Enclosure	Indoor/Outdoor: IK10 rated vandal IP67
Dimensions	CM-3102-01-I: 138 x 77 mm (5.43 x 3.03 in.) CM-3102-11-I: 138 x 104 mm (5.43 x 4.09 in.)
Unit Weight	CM-3102-01-I: 0.61kg (1.34 lbs.) CM-3102-11-I: 0.92kg (2.03 lbs.)
Mechanical	
Bubble Rating	IK10 vandal resistant polycarbonate
Bubble F-Stop	F0.0 - clear bubble
Pan / Tilt	CM-3102-01-I: 360° / ±63° CM-3102-11-I: 360° / ±88°
Electrical	
Input Voltage	802.3af PoE
Power Consumption	CM-3102-01-I: 5W / 10W with heater and IR CM-3102-11-I: 8W / 12W with heater and IR
Power Connector	PoE
Environmental	
Operating Temperature <sup>2</sup>	-40°C to 50°C (-40°F to 122°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)
Humidity	90% (non-condensing)

## Warranty & Regulatory

Warranty	According to FLIR RMA Policy and Process Notice document
USA	UL, FCC Part 15 (subpart B, class A)
International	CE marked, EN55022-1998 class A, EN55024, RoHS

## Accessories

A complete list of mounts, brackets, pole mounts and recess kits for cameras can be found in the FLIR Price List and Camera Accessory Guide.

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