

## DESCRIPTION

Eaton brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance.

As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network security camera is a streamlined, outdoor-ready fixed dome that can provide HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

## DOME CAMERA SPECIFICATION FEATURES

### Image sensor

- Progressive scan RGB CMOS 1/3"

### Lens

- Varifocal, 3.0–10.5 mm, F1.4
- Horizontal angle of view 92°
- Vertical angle of view 50°
- Remote focus and zoom, P-Iris control, IR corrected

### Day & Night

- Auto-removable IR-cut filter

### Minimum illumination

- HDTV 1080p 50/60 fps:
- Color: 0.32 lux, F1.4
- B/W: 0.06 lux, F1.4

### Shutter time

- 1/66500s to 1s

### Camera angle adjustment

- Pan ±180°, tilt -5 to +75°, rotation ±95°

## VIDEO

### Video compression

- H.264 Baseline, Main and High Profile (MPEG-4 Part 10/AVC) Motion JPEG

### Resolution

- Up to 1920x1080

### Frame rate

- Up to 50 fps with power line frequency 50/60 Hz

### Video streaming

- Controllable frame rate and bandwidth, VBR/MBR H.264
- Multiple, individually configurable streams in H.264 & M-JPEG
- Digital PTZ with remote zoom (digital zoom reduces utilized field of view and resolution)

### Image settings

- Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control (including automatic gain control), Exposure zones, Backlight compensation, Fine tuning of behavior at low light, Local contrast, Text and image overlay, Mirroring of images, Privacy masks, Rotation: 0°, 90°, 180°, 270°, including Corridor Format

## NETWORK

### Security

- Password protection, IP address filtering, HTTPS encryption, IEEE 802.1X network access control, Digest authentication, User access log, Centralized Certificate Management

### Supported protocols

- IPv4/v6, HTTP, HTTPS, SSL/TLS, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMP v1/v2c/v3(MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH

## SYSTEM INTEGRATION

### Application programming interface

- Open API for software integration, ONVIF Profile S and ONVIF Profile G

## GENERAL

### Casing

- Aluminum inner camera module with encapsulated electronics IP66- and NEMA 4X-rated, IK10 impact-resistant casing with dehumidifying membrane
- Color: White NCS S 1002-B, consult factory for custom options

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		



## LUMENS SAFE

### INTEGRATED NETWORK SECURITY CAMERA

### Storage

- Support for microSD/microSDHC/microSDXC card
- Support for recording to dedicated network-attached storage (NAS)

### Approvals

- EN 55022 Class B, EN 61000-6-1, EN 61000-6-2, EN 55024, EN 50121-4, IEC 62236-4, FCC Part 15 Subpart B Class A and B, ICES-003 Class B, VCCI Class B, C-tick AS/NZS CISPR 22 Class B, KCC KN22 Class B, KN24 IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC/EN 62471 IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14 IEC 60068-2-6 (vibration), IEC 60068-2-27 (shock), IEC 60068-2-30, IEC 60068-2-78, IEC/EN 60529 IP66, NEMA 250 Type 4X, IEC/EN 62262 IK10

### Dimensions

- Height 104 mm (4 1/16 in) with 149 mm (5 7/8 in)

### Included

- Windows decoder 1-user license, Resistorx T20 L-key

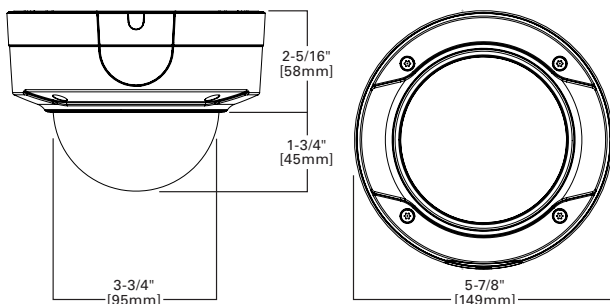
### Video management software

- Widely compatible with VMS platforms and video analytics. Compatibility to be verified by user.

### ONLY AVAILABLE WITH THE FOLLOWING LUMINAIRES

Galleon  
Navion

## DOME CAMERA DIMENSIONS



**WI-FI BRIDGE / ANTENNA**

The Wi-Fi bridge establishes wireless connections over both 2.4 GHz and 5 GHz bands. Whenever the 2.4 GHz airspace is overcrowded with competing wireless transmission, the bridge can be switched over to 5 GHz band to keep the camera feed flowing. The bridge uses a multi-layered security approach to addresses stingent security requirements. These advanced security features include wireless security, network security, communication security and device security.

**SPECIFICATION FEATURES****TECHNOLOGY****Wireless technology**

- IEEE 802.11 a/b/g/n, Wi-Fi Compliant

**Frequency**

- 2.4 ~ 2.4835 GHz (US/Canada/Europe)
- 5.150 ~ 5.350 GHz
- 5.725 ~ 5.825 GHz

**Modulation technology**

- DSSS, CCK, OFDM

**Modulation type**

- DSSS, CCK, OFDM

**Network access modes**

- Infrastructure (Client), Ad Hoc

**Range**

- LumenSafe Wi-Fi will connect and stream over a Internet enabled Wi-Fi network within range
- Connection range is dependent on obstructions and customer router configurations and specifications

**Channels**

- US/Canada: 11 Channels 802.11b/g, 13 Channels 802.11a

**Wireless data rates**

- Up to 65 Mbps

**Network protocols**

- TCP/IP, ARP, ICMP, DHCP, DNS, UDAP, TFTP, UDP, PING, HTTP, FT

**Wireless security**

- Open, WEP 64 & 128 bit, WPA-PSK (TKIP), WPA2-PSK (AES), 802.1x (EAP), WPA-Enterprise, WPA2-Enterprise, EAP-TLS/MSCHAPv2, EAP-TTLS/MSCHAPv2, EAP-TTLS (MD5), EAP-PEAPv0/MSCHAPv2, LEAP
- Zero host security footprint
- Advanced certificate storage and management

**Secure communications**

- SSH and SSL tunneling
- Encrypted configuration

**Transmit power**

- 802.11b 15 dBm (31.6mW)
- 802.11g 12.6dBm (18.12mW)
- 802.11a 17 dBm (50.1mW)

**MECHANICAL****Antenna**

- 802.11b 15 dBm

**REGULATORY APPROVALS**

- FCC Part 15.247, Class B Sub C Modular Approval Industry Canada RSS-21
- FCC Part 15 Subpart B:2007, Part 15.107(b) (conducted emissions, Class A), Part 15.109(g) (radiated emissions, Class B)
- RoHS and WEEE Compliant

**LTE GATEWAY / ANTENNA**

Designed to withstand harsh industrial conditions, the LTE gateway is tested to meet and exceed the MIL-STD-810G specification for shock, vibration, temperature and humidity. Support for VPN tunnels, port filtering and trusted IP protect the connected devices from unwanted access and maintain secure cellular communications. Integrated GPS for tracking equipment provides an additional level of physical security. The gateway automatically configures the radio based on the SIM, which provides versatility and simplicity when changing operator networks. The omni-directional antenna provides reliable signal strength with the ability to fallback to 2G and 3G networks for deployments in areas with limited LTE coverage.

**SPECIFICATION FEATURES****LTE GATEWAY****Peak**

- DL Up to 100 Mbps
- UL Up to 50 Mbps

**GSM Frequency band**

- Quad-band

**Approvals**

- Regular: FCC, IC, PTCRB
- Carrier: Verizon, AT&T, Sprint, T-Mobile USA, US Cellular, Rogers, Bell, Telus

**Network and routing**

- Network Address Translation (NAT), Port Forwarding, Host Port Routing, NEMO/DMNR, VRRP, Reliable Static Route, Dynamic DNS

**Network management**

- Secure network management applications, Router configurations and template management, Over-the-air software and radio-module firmware updates, Configurable monitoring and alerting

**VPN**

- IPsec, GRE, and OpenVPN Client with up to 5 concurrent tunnels, split tunnel, dead peer detection (DPD), multiple subnets

**Events engine**

- Configurable interface for custom event triggers and reports
- Event Types: Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature and Voltage
- Report Types: RAP, SMS, Email, SNMP Trap, TCP (Binary, XML, CSV)

**Security**

- Remote Authentication (LDAP, RADIUS, TACACS+), DMZ, Inbound and Outbound Port filtering, Inbound and Outbound Trusted IP, MAC Address Filtering, PCI compatible

**Satellite navigation**

- 12 Channel GPS and GLONASS Receiver
- Tracking Sensitivity: -145 dBm
- Reports: NMEA 0183 V3.0, TAIP, RAP, XORA

**Industry certifications**

- Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950
- Hazardous Environments: Class 1 Div 2
- Environmental: RoHS, REACH, WEEE

**ANTENNA****Electrical data**

- Frequency Range: Elements 1 & 2 698-960 / 1710-3800MHz, Element 3 1562-1612MHz
- Peak Gain: Isotropic: Cellular - 698-960MHz 1.5dBi, 1710-2700MHz 4.5dBi, 2500-3800MHz 5dBi
- Pattern: Omni-directional
- Nominal Impedence: 50Ω

**GNSS Data**

- Frequency Range: 1562-1612MHz
- LNA Gain: 26dB
- Polarisation: Right Hand Circular

**Dimensions**

- Height 49mm (1.92"), Length 150mm (5.90"), Width 45mm (1.77")

**ETHERNET**

The ethernet data backhaul option is a great solution for installations where an ethernet cable can be brought to the luminaire. These hard-wired solutions do not require an antenna to be specified. An ethernet connection point is provided inside the luminaire for ease of installation.

**ORDERING INFORMATION**

**Sample Number:** GLEON-AF-06-LED-E1-T4W-GM-MS/DIM-L40-LDV

Product Family <sup>1</sup>	Camera Type	Data Backhaul	Data Plan (Optional, Order Separately)	Data Options	Gigabyte	Usage
L=LumenSafe Technology	D=Dome Camera	C=Cellular, Customer Installed SIM Card <sup>2</sup> A=Cellular, Factory Installed AT&T SIM Card <sup>2</sup> V=Cellular, Factory Installed Verizon SIM Card <sup>2</sup> S=Cellular, Factory Installed Sprint SIM Card <sup>2</sup> R=Cellular, Factory Installed Rogers SIM Card <sup>3</sup> W=Wi-Fi Networking w/ Omni-Directional Antenna E=Ethernet Networking	DATA-LMSF-L=Eaton Provided Cellular Data Plan, 1 Year <sup>4,5</sup> DATA-LMSF-M=Eaton Provided Cellular Data Plan, 1 Year <sup>4,6</sup> DATA-LMSF-H=Eaton Provided Cellular Data Plan, 1 Year <sup>4,7</sup>	Low (DATA-LMSF-L) Medium (DATA-LMSF-M) High (DATA-LMSF-H)	L-5 GB / per month M-10 GB / per month H-50 GB / per month	24 Hours / Day 24 Hours / Day 24 Hours / Day

**NOTES:**  
 1. Add this catalog logic as a suffix to the luminaire catalog logic. For any luminaire restrictions, please reference the appropriate luminaire specification sheet.  
 2. Available in North America only.  
 3. Available in Canada only.  
 4. Requires use of 'V' data backhaul. Available in the United States only.  
 5. This plan provides the anticipated date totals for transmitting sufficient data for transmitting 1080p low resolution and 6 frames per second on a 24 hour basis. Data overages charge may apply.  
 6. This plan provides the anticipated date totals for transmitting sufficient data for transmitting 1080p high resolution and 6 frames per second on a 24 hour basis. Data overages charge may apply.  
 7. This plan provides the anticipated date totals for transmitting sufficient data for transmitting 1080p high resolution and 30 frames per second on a 24 hour basis. Data overages charge may apply. Coming soon. Contact factory for availability.  
 \* Data overages will incur additional charges which will be billed separately and are non-refundable. When supplying data plans and software services, Eaton will provide required bandwidth settings and reserves the right to manage bandwidth settings on the customer's behalf with written notification.

**PRODUCTS AVAILABLE WITH LUMENSAFE CAMERA TECHNOLOGY**

**Galleon area/site luminaire**

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications.

- Choice of 16 high-efficiency optical distributions
- Wide range of specifiable lumen packages, providing up to >55,000 delivered lumens
- Available with WaveLinx, LumaWatt Pro, integrated photocell receptacle, After Hours Dim and occupancy control options
- Pole, mast-arm or wall-mounted configurations
- All configurations utilize housing width of at least 21-5/8"
- Filler plates used when ordered with less than six light squares

**NOTES:**  
 1. Not available with 9-10 light square housing.  
 2. Not available with 347V, 480V or high ambient options.



**CONNECT**

**Navion area, site and roadway luminaire**

The Navion LED luminaire combines world class optical performance, energy efficiency and outstanding versatility to meet the requirements of any area, site and roadway application. Patented AccuLED Optics™ system delivers unparalleled uniformity and budget-beating operating costs for commercial sites and municipal streets and highways.

- Choice of 16 high-efficiency optical distributions
- 24 lumen packages, providing up to >42,000 delivered lumens
- Available with WaveLinx, LumaWatt Pro, integrated photocell receptacle, After Hours Dim and occupancy control options
- All configurations utilize housing width of 15"
- Filler plates used when ordered with less than four light squares

**NOTES:**  
 1. Not available 347V, 480V or high ambient options.



**CONNECT**

**Archeon roadway luminaire**

The Archeon Large LED luminaire combines world class optical performance, energy efficiency and outstanding versatility to meet the requirements of any roadway application. This discrete LED solution with the patented, high-efficiency AccuLED Optics™ system, provides uniform and energy conscious illumination for municipal streets and highways.

- Choice of 4 high-efficiency optical distributions
- 20 lumen packages, providing up to >31,000 delivered lumens
- Available with integrated photocell receptacle
- Single-latch tool-less entry



Coming soon!