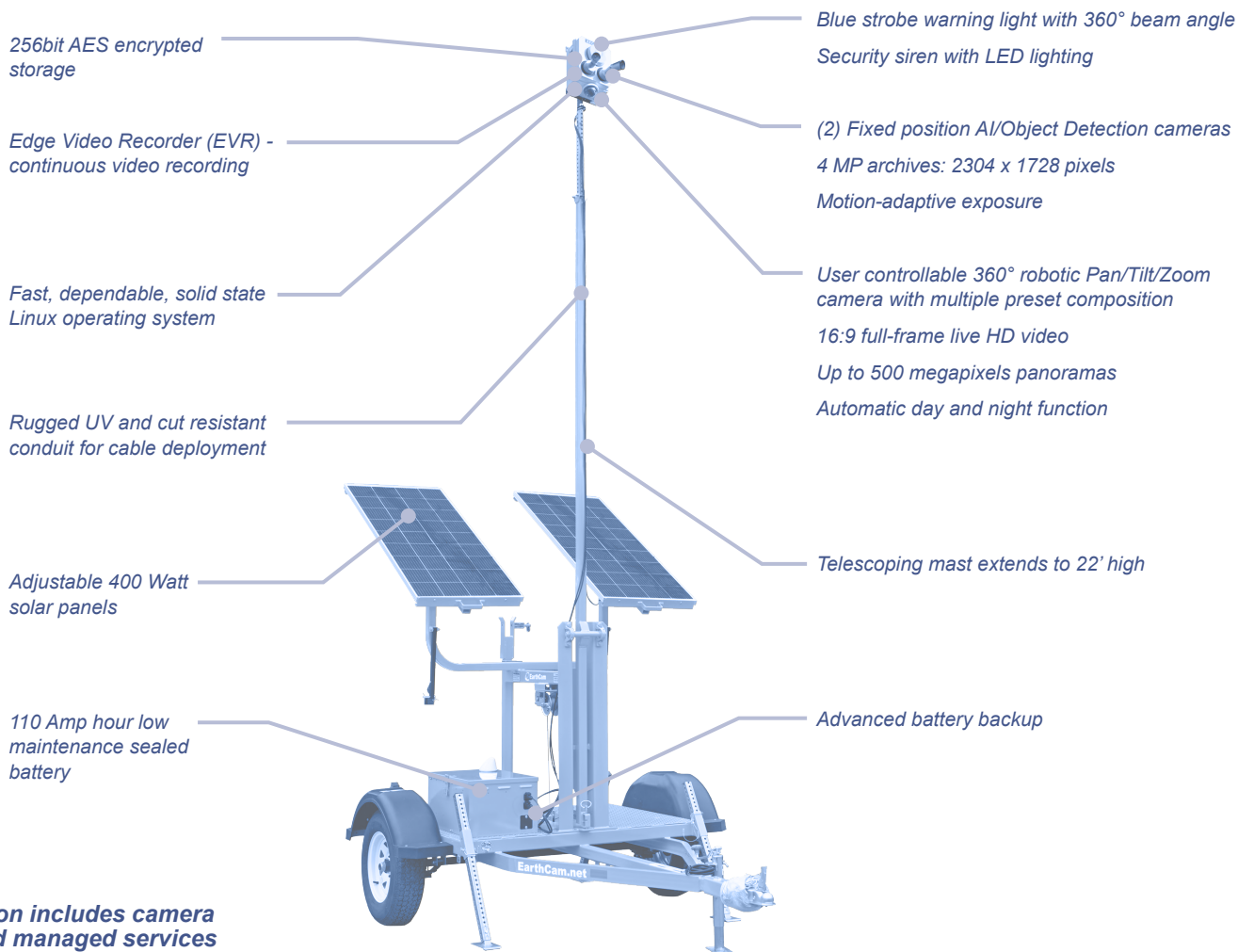


Bid Specification

Video Monitoring and Documentation

AI Safety Trailer



Specification includes camera system and managed services



Live Streaming Video



Current and Historical Weather Data



Continuous Video Recording



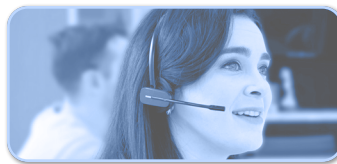
AI Object Detection



Installation and Maintenance



iOS and Android App



Full Service Support



AI Media Dashboard

Additional services included



EarthCam.net
The Webcam Technology Experts

1-800-EARTHCAM
www.earthcam.net/contactus



EarthCam AI Safety Trailer - 3 cameras Model # ECPN0322-1

01.32.36 Video Monitoring and Documentation Bid Specification

1. The Contractor shall provide a Robotic Live Streaming Webcam for users to remotely view the project on a secure connection via a network connection. The camera will provide a full view of the work area on the construction site.
CONTACT SYSTEM VENDOR: EarthCam / Brian Cury +1 201.488.1111 Email: WWW.EARTHCAM.NET/CONTACTUS
2. The trailer camera system shall meet or exceed the following requirements:
 - 2.1. Dimensions: 7' (2.1m) W x 14' (4.3m) L
 - 2.2. Weight: 1600 lbs (725.75kg)
 - 2.3. Heavy gauge steel tubing and structural channel w/ 3500 lbs capacity axle
 - 2.4. Low density thermoplastic with splash shields fenders
 - 2.5. DOT approved lighting package to include brake and marker lights
 - 2.6. Solar powered and wireless
 - 2.7. 110 Amp hour low maintenance sealed battery
 - 2.8. Adjustable 400 Watt solar panels
 - 2.9. Telescoping mast extends to 22' high
 - 2.10. Blue Strobe Warning Light w/ 360° beam angle, IP Rating: IP67 rated waterproof
 - 2.11. Security LED Lighting: Illumination LED: Red, blue, green, amber (RGBA) LEDs, White LEDs max 893 lm
 - 2.12. Security Siren: Max sound pressure level: >110 dB, 1 m at 3.4 kHz, includes two way audio – microphone with talkback feature
 - 2.13. Security AI/Object Detection Cameras – 2 units
 - a) 1/2.7" progressive scan RGB CMOS Image Sensor
 - b) Lens: Fixed iris, fixed focus, IR corrected 2.4 mm, F2.1
 - c) 4 Megapixel images (2304 x 1728 pixels)
 - d) Auto Features: Compression, color, brightness, sharpness, contrast, white balance, exposure control, motion-adaptive exposure
 - e) Video Compression: H.264 (MPEG-4 Part 10/AVC) Main and High Profiles, H.265 (MPEG-H Part 2/HEVC)
 - 2.14. Pan/Tilt/Zoom Robotic Camera
 - a) Capable of maintaining multiple preset composition
 - b) Progressive scan RGB CMOS Image Sensor
 - c) Lens: Varifocal. 2.2–11.0 mm, F1.4–F2.5
 - d) 2.1 Megapixel images (1920 x 1080 pixels)
 - e) Up to 500 Megapixel Panoramas
 - f) Auto Features: Saturation, contrast, brightness, sharpness, WDR, white balance, day/night threshold, local contrast, tone mapping, exposure mode, exposure zones, compression, rotation: 0°, 180°, barrel distortion correction, text and image overlay, polygon privacy masks
 - 2.15. Video Compression: H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High profiles, H.265 (MPEG-H Part 2/HEVC)
 - 2.16. Communications: 10base-T/100base-TX Ethernet, IP Addressing: Dynamic or Static
 - 2.17. Wireless 4G modem LTE
 - 2.18. Secure 256 bit AES encrypted onboard storage
 - 2.19. High-Definition continuous video recording with 120 days of retention (up to 1 year available)
 - 2.20. Industrial grade solid state embedded Linux System
 - 2.21. Custom branding to display company logo
 - 2.22. Designed for EarthCam Control Center
3. Internet Based Online Interface: The camera will be accessible via an internet based Software as a Service (SaaS) solution. This online interface will be managed and supported by the System Vendor. The service will be available for the term of the project and allow the viewing of live video and High Definition digital still images captured and stored of the project on both mobile and desktop platforms.

The Internet Based Online Interface shall include the following features:

- 3.1. Responsive HTML5 design for cross-platform access on desktop and mobile devices
 - 3.2. Secure HTTPS compliant with live stream secured & encrypted via https transport
 - 3.3. Display project name and logo
 - 3.4. Project Dashboard allows easy navigation between multiple cameras and projects
 - 3.5. Security Interface offers flexible multi-view camera grid selective up to 24 cameras per screen streaming simultaneously
 - 3.6. Edge Video Recorder features searchable intuitive visual timeline interface for fast incident footage retrieval and sharing
 - 3.7. Real-time live video viewing with user controllable Robotic Pan, Tilt and Zoom
 - 3.8. User-controllable settings for creating and editing multiple preset compositions, each preset will be displayed as a thumbnail image
 - 3.9. Daily auto-generated 360° panoramas up to 500 megapixels
 - 3.10. Instant live snapshot capability in addition to preset scheduled archives
 - 3.11. Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour
 - 3.12. AI-edited time-lapse technology removes frames obscured by foreign objects or weather elements, with music and graphics then added for downloadable presentations
 - 3.13. Full Screen Mode for displaying video and complete image without any graphical frame
 - 3.14. Photo Filters and Graphical Markup Tools for detailing and creating notes with graphical overlays on images, including project title, logo and time date stamp
 - 3.15. Image Comparison Tool for comparing two images taken at different times, overlaid on top of each other
 - 3.16. Project Management Software integration (Autodesk Construction Cloud, Autodesk Build, CMiC, Esri, InEight, Infotech, Procore, Projectmates, Raken, Salesforce)
 - 3.17. 3D/4D Model Integration (Autodesk Navisworks, Autodesk Revit, Bentley Synchro)
 - 3.18. Social Media Integration Tools for sharing project images and notes
 - 3.19. Automatically generated daily/weekly project progress update email with camera image and weather
 - 3.20. AI Media Dashboard – Interactive charts display AI-detected events and observations
 - 3.21. Graphical Weather applet displaying local weather data with satellite and updating radar imaging
 - 3.22. Integration of maps, aerial and satellite imagery
 - 3.23. Graphical Data Management Tools showing archived and current system status of solar amperage, battery power remaining, wireless radio connectivity, and device location
4. Access to account protected by Account Security feature which includes four levels of password protection, IP address block/permission and SSL protection of user login password.
 5. The system shall capture and upload images every 5 minutes, 24 hours per day.
 6. The system shall have M2M – Machine to Machine 24/7 Support with active self-healing technology and automatic software upgrades to maintain the quality, consistency and reliability of all images.
 7. Images will be maintained on the System Vendor's servers for reference available at all times during the life of the project and for no less than 60 days after completion. All images will be protected on servers owned and operated by the System Vendor and located in a secure area at the System Vendor's location.
 8. The Contractor shall provide all service and maintenance, including cleaning, of the camera system throughout the life of the project including making appropriate arrangements for camera to remain in operation up to and through finalization of all structural, landscaping and "completed state" condition necessary for beginning-to-end record.
 9. The System Vendor shall provide custom public website development. Website shall be separate from the Online Interface, match the look and colors of the project's website, and be delivered as embed code or standalone web page. Additional features include Facebook and Twitter integration, full screen mode, image comparison, weather, multiple logos, graphical background image and project description.
 10. The System Vendor at the end of the project shall provide a comprehensive archive package that includes all images, historical weather data, AI-generated time-lapse movies and a royalty-free web-based viewer software. The software shall include the same interactive interface as the live camera during the project.
 11. The Contractor shall secure a nearby space to deploy the trailer as per System Vendor's instruction. The Contractor shall supply all equipment required for safe and secure access to the camera location for technicians performing installation and maintenance services, including lane closures, bucket truck and/or lift. The System Vendor will consult on and provide recommendations for optimal camera placement and provide professional installation services as required.