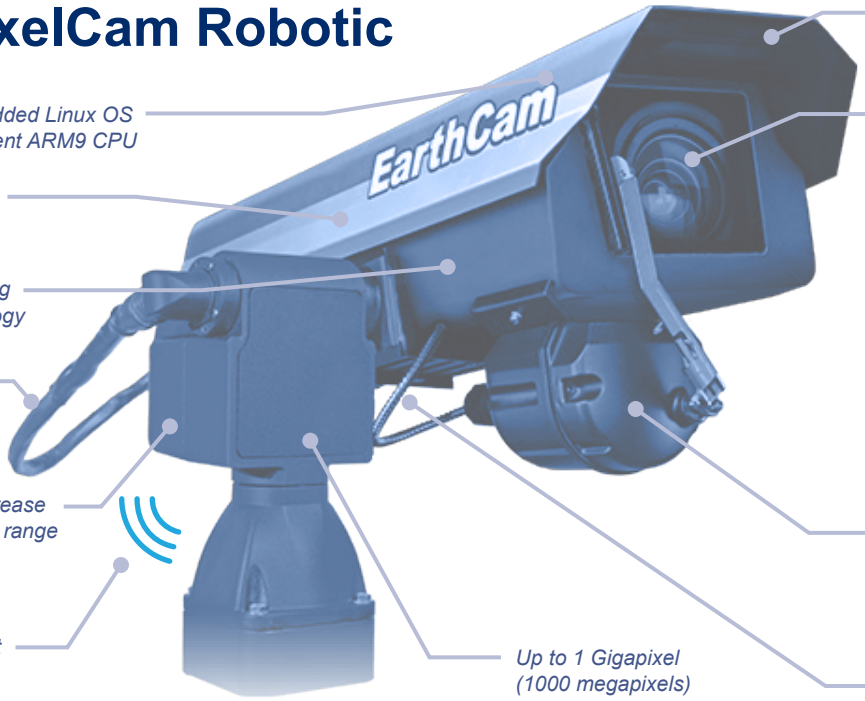
Bid Specification

Video Monitoring and Documentation

61 MegapixelCam Robotic



Industrial solid state embedded Linux OS platform with an ultra-efficient ARM9 CPU

Fail safe - 64GB on-board backup storage

Next-generation self-healing and auto-recovery technology

Rugged UV and cut resistant cable with military connectors

Lower-profile design to increase precision throughout its full range of motion

10/100 ethernet or transmit over 4G networks

Thermostatically regulated, corrosion-resistant black enclosure

Full Frame camera with a 35mm Exmor R CMOS Image Sensor

Live streaming video preview

User controllable ultra-precise 360° robotic Pan/Tilt camera with multiple preset composition

SONY optics for superior image quality

Take and share on demand snapshots

Maintenance-free wiper to ensure clear images

On-board diagnostic LED system

Up to 1 Gigapixel (1000 megapixels) auto-generated 360° multilayer panoramas

Specification includes camera system and managed services

Live Video 360° User Controllable

Multiple Preset Archiving

Daily Auto-generated Panoramas

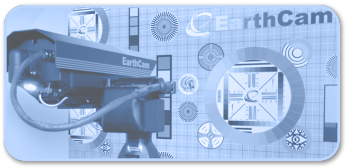
Current and Historical Weather Data

iOS and Android App

AI Media Dashboard

Fail Safe On-Board Backup Storage

Installation and Maintenance



Quality Control and Maintenance

Full Service Support

AI-Edited Time-Lapse Videos

Additional services included

EarthCam.net
The Webcam Technology Experts

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

GSA

Connect: YouTube Call: **1-800-327-8422**

EarthCam 61 MegapixelCam Robotic Model # ECAC06152

01.32.36 Video Monitoring and Documentation Bid Specification

1. The Contractor shall provide a Robotic High Definition Megapixel 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 camera shall meet or exceed the following requirements:
   - 2.1 Thermostatically controlled IP66/IP67 rated environmentally sealed black powder coated enclosure with stainless steel hardware
   - 2.2 User controlled window maintenance-free wiper to ensure clear images
   - 2.3 Industrial grade solid state embedded Linux System
   - 2.4 61.0 Megapixels (9504 x 6336 pixels), Full Frame camera with a 35mm Exmor R CMOS Image Sensor
   - 2.5 Lens: F3.5-5.6 OSS, 28-70mm
   - 2.6 SONY optics for superior image quality
   - 2.7 Professional photo grade glass enclosure window
   - 2.8 Auto Features: ISO, Shutter, White Balance and Focus
   - 2.9 Live streaming video preview
   - 2.10 567-point wide area autofocus system
   - 2.11 425-point contrast detect points
   - 2.12 Rapid archiving capability with on demand image capture as fast as every 10 seconds for short term events
   - 2.13 Ultra-precise, Pan/Tilt robotic base designed to provide consistent imaging in all environments
   - 2.14 Pan/Tilt: Pan Range 360° Continuous Pan, Tilt: +45° to -90° pan mode
   - 2.15 Up to 1 Gigapixel (1000 megapixels) auto-generated 360° multilayer panoramas
   - 2.16 Communications: 10base-T/100base-TX Ethernet, IP Addressing: Dynamic or Static
   - 2.17 4G cellular modem
   - 2.18 Smart diagnostic LED multi-color power indicator lamp
   - 2.19 64GB On-Board Data Backup to provide a minimum of thirty days of on-board image retention
   - 2.20 Short term power device to send alerts if camera goes offline
   - 2.21 120VAC, 220-230VAC
   - 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 Real-time live video viewing with user-controllable Robotic Pan and Tilt
   - 3.6 User-controllable settings for creating and editing multiple preset compositions, each preset will be displayed as a thumbnail image
   - 3.7 Daily auto-generated 360° multilayer panoramas
   - 3.8 Onscreen control button for wiper and washer control to allow for remote cleaning of the viewing window
   - 3.9 Digital Pan, Tilt and Zoom capability within a High Definition images
   - 3.10 Custom tiling player to easily view High Definition panoramic images
   - 3.11 Instant live snapshot capability in addition to preset scheduled archives
   - 3.12 Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour
   - 3.13 AI-edited time-lapse technology removes frames obscured by foreign objects or weather elements, with music and graphics then added for downloadable presentations
   - 3.14 Full Screen Mode for displaying complete image without any graphical frame
   - 3.15 Photo Filters and Graphical Markup Tools for detailing and creating notes with graphical overlays on images, including project title, logo and time date stamp
   - 3.16 Image Comparison Tool for comparing two images taken at different times, overlayed on top of each other
   - 3.17 Share Image Tool for saving, printing, emailing and posting to Hall of Fame
   - 3.18 Project Management Software integration (Autodesk Construction Cloud, Autodesk Build, CMiC, Esri, InEight, Infotech, Procore, Projectmates, Raken, Salesforce)
   - 3.19 3D/4D Model Integration (Autodesk Navisworks, Autodesk Revit, Bentley Synchro)
   - 3.20 Social Media Integration Tools for sharing project images and notes
   - 3.21 Automatically generated daily/weekly project progress update email with camera image and weather
   - 3.22 AI Media Dashboard – Interactive charts displat AI-detected events and observations
   - 3.23 Graphical Weather applet displaying local weather data with satellite and updating radar imaging
   - 3.24 Integration of maps, aerial and satellite imagery
   - 3.25 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 15 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 time-lapse 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 System Vendor shall provide time-lapse movie(s) at the end of the project. Time-lapses shall be professionally edited by a video editor using image stabilization software. The movie will start with a graphic, incorporating project title, date and logo. Periods of bad weather or inactivity shall be removed to produce a compelling and consistent movie. A machine edited movie will not be acceptable.

12. The Contractor shall secure a nearby structure for camera mounting or provide a fixed pole (40 foot / 12 meters height recommended) and 3 inch / 8 centimeters minimum diameter 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 building access, 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.