

VIDEO PTZ CONSTRUCTION CAMERA SPECIFICATIONS

PART 1 – GENERAL

1.01 SUMMARY

- A. Section includes a professional grade 2-megapixel camera system providing on-demand live video streaming for real-time access at 1080p over a cellular network with storage and remote customer access to stored still images. All hardware, software, and time-lapse movie production services to be provided by a proven construction camera System Vendor.

1.02 VENDOR

OxBlue / SCCS
Alpha House, Alpha Dr., Eaton Socon,
St Neots, Cambs PE10 8JJ
+44 (20) 45181100
www.oxblue.com/en-gb/

1.03 CLOSEOUT SUBMITTALS

- A. Submit all digital still images without alteration, manipulation, editing, or modifications using image-editing software.
- B. Submit a professionally produced high-definition time-lapse movie of the project. Editing shall include image stabilisation, colour correction, removal of inclement weather footage, and removal of images outside the desired daily time range to be determined by the Owner.

1.04 WARRANTY

- A. Vendor Warranty: Vendor agrees to repair or replace components of system that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
- B. Warranty Period: Video PTZ Camera shall have a three-year hardware warranty.

1.05 SHIPPING

- A. All domestic shipping fees shall be included in the equipment price.

1.06 OWNERSHIP DOCUMENTS

- A. All images and time-lapse footage shall be the property of the Owner.

PART 2 – PRODUCTS

2.01 CAMERA

- A. Resolution: 2-megapixel (1920 x 1080)

- B. Pan: 360°
- C. Tilt: 180°
- D. 30x optical zoom
- E. Progressive scan CMOS 8.5 mm image sensor
- F. Lens: 4.4-132 mm, F1.4-4.6, autofocus, auto-iris
- G. 256 preset positions

2.02 VIDEO

- A. Live HD video streaming
- B. Current weather detection
- C. Aspect ratio of video 16:9 (widescreen)
- D. Stream profile: H.264
- E. 1920 x 1080 recording resolution
- F. 1080p streaming resolution
- G. Dynamically sized viewing window

2.03 DATA CONNECTIVITY AND STORAGE

- A. Cellular data services provided by the System Vendor
- B. Onboard Memory: Up to 4 Week Video Storage. Resolution can be adjusted but will impact storage time.
- C. Remote Storage: Archive a still image approximately every 10 minutes.

2.04 POWER CONNECTION

- A. 240 VAC (optional 12 VDC version for compatible OxBlue solar power station available)

2.05 DIMENSIONS AND WEIGHT

- A. Camera Dimensions: 222.3 mm L X 165.1 mm W X 165.1 mm H
- B. Mount Dimensions: 274.6 mm L X 165.1 mm W X 165.1 mm H
- C. Weight: 2.7 kg installed

2.06 MOUNT

- A. Pole or wall mount provided by the System Vendor
- B. Optional mounts (parapet mount, non-penetrating roof mount, etc.) available

2.07 OPERATING ENVIRONMENT AND CONTROLS

- A. -40 to 60°C
- B. 240 VAC units come standard with blower and defroster; 12 VDC units come standard with blower.

2.08 VIDEO CONTROLS

- A. Snapshot function
- B. 8 button directional input
- C. Home button

2.09 SOFTWARE

- A. Responsive software interface for use on computer, tablet and mobile screens
- B. Display Owner or Project logo on desktop software interface
- C. Dashboard display of all cameras
- D. Camera search capability
- E. Visual calendar showing actual photos from each day of the project
- F. Access to each individual photo archived
- G. Ability to schedule the automated delivery of images & time-lapses to users via email
- H. Display weather data with each image
- I. Ability to compare images from two cameras or two specific times simultaneously
- J. Ability to overlay and compare images from different times
- K. Interactive map showing project location
- L. Provide iPhone/iPad app and Android app

2.10 HOSTING AND WEBSITE INTEGRATION

- A. Provide links to thumbnails of most recent image
- B. Provide API access for use in software and website integration

2.11 DATA SECURITY AND INFRASTRUCTURE

- A. Multiple access options shall be available, including publicly available links, username authentication, IP restrictions, and HTTPS communication protocols
- B. Actual access method used shall be specified by the Owner
- C. Data shall be stored on redundant servers owned and managed by the System Vendor
- D. Optional time-delay feature for time-lapse videos and images on websites

2.12 SOLAR POWER STATION FOR CAMERA (OPTIONAL)

- A. Turnkey system designed specifically for use with the camera
- B. 5-day minimum solar autonomy based on lowest monthly average solar hours for the region
- C. Charge control with digital display metre showing system status
- D. 1-yr minimum system warranty with up to 25-yr solar module warranty
- E. Domestic freight included in solar power station cost

PART 3 – TIME-LAPSE MOVIE TECHNOLOGY & SERVICES

3.01 AUTOMATICALLY GENERATED TIME-LAPSE MOVIES

- A. System shall automatically generate up-to-date high-definition time-lapse movies throughout the duration of the project. Automatically generated time-lapse movies shall be available for download at any time. The online system shall intelligently select frames in order to produce time-lapse movies of appropriate duration for viewing on the Web, typically 30-60 seconds.

3.02 USER-CREATED CUSTOM TIME-LAPSE MOVIES

- A. System shall allow users with appropriate permissions to create custom time-lapse movies at any time during the project. Users shall be able to control start and end dates, filter daily images by time, and specify time-lapse movie duration.

3.03 PROFESSIONALLY PRODUCED TIME-LAPSE MOVIE

- A. At the completion of the project the System Vendor shall create a professionally produced time-lapse movie of the project. As part of the service, the time-lapse movie shall be prepared based on the Owner's instructions for resolution, duration, date range, time range, and audio.

PART 4 – AUTOMATED INTELLIGENCE (AI) SERVICES

4.01 AUTOMATED AI ANALYSIS FOR MONITORING ACTIVITY

- A. System shall allow users with appropriate permissions & views to access an activity dashboard generated by AI analysis of the images from the site with start & stop times of activity for the day and weather information.

4.02 AUTOMATED AI ANALYSIS FOR MONITORING SAFETY

- A. System shall allow users with appropriate permissions & views to monitor safety compliance on their job site through a dashboard generated by AI analysis of the images.