



MLWebcam

Overview

The **Canary Systems® MLWebcam** integrates the full features of a network camera into a turnkey station for state-of-the-art video monitoring. This unit is specifically designed with geotechnical and structural monitoring applications in mind, but can be used for any project where live video monitoring is needed.

The included network camera offers **high resolution 1080p** video with an impressive 360x combined optical and digital zoom. The AXIS Q6155-E also features Axis' Zipstream technology, which significantly lowers bandwidth and storage requirements while preserving high-quality images to an SD card.

System Details

MLWebcam is designed to be a system that fully utilizes customization to suit a site's individual requirements. MLWebcam stations feature an Axis Q6155-E PTC Network Camera with a Campbell Scientific CR300 datalogger for monitoring battery voltage and internal temperature. A charging regulator, solid state relay, POE (power over ethernet) injector, 12V lead-acid battery charger, and SGX 5150 or Raven RV50 for wireless or cellular communications are also included.

The camera housing can stand up to **extreme conditions**, with arctic temperature control allowing start-up in temperatures as low as -40 °C (-40 °F) and features such as the speed dry function, which allows the camera to shake off water droplets for a clear image even in rainy weather.

Implementation can be set up utilizing a variety of **security features**. Network security options range from password protection to IP address filtering, user access logs, HTTPS encryption and more.



**MULTIPLE
STREAMS**



**SECURE USER
ACCESS**

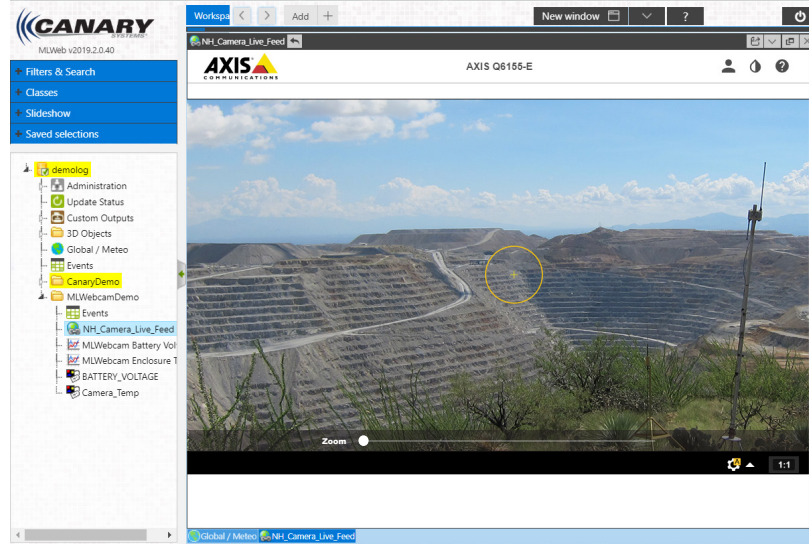


**EVENT TRIGGERS
AND ACTIONS**

Control with MLWeb®

A view for the MLWebcam feed is set up within **MLWeb®**, for easy viewing online alongside your data. **User access roles** give sites the ability to customize who can access camera controls while still allowing multiple users to view the camera feed. Users with control access can move the camera to focus on a different area, zoom as well as edit the video feed encoding, set up an overlay, initiate recording, and more.

Trigger events and actions can be set up for the camera to initiate recording after events such as motion or shock detection, or for simple triggers such as a scheduled time or whenever the live stream is accessed. Actions can then be set up to record video during alarm events and send email notifications. The video feed can be recorded to an SD card for later review.



Specifications

Datalogger CR300

- Power Requirements: 10 to 18 Vdc; 16 to 32 Vdc
- Data Storage: 30 MB serial flash
- Idle Current Drain, Average: 1.5 mA (@ 12 Vdc)
- Active Current Drain, Average: 5 mA (@ 12 Vdc for 1 Hz scan with 1 analog measurement) 23 mA (@ 12 Vdc with processor always on)
- SE Analog Channels: 6
- Input Voltage Range: 0-2.5VDC
- Pulse Count Channels: 8
- Excitation Channels: 2
- Digital Ports: 7
- Communications: RS-232, USB
- Power: 10-18VDC, 16 to 32VDC
- Power Consumption (quiescent): ~0.2mA
- Power Consumption (active): ~5mA
- Data Memory: 30 Mb flash
- OS Memory: 80 Mb flash

Solar Panel

- Output Voltage: 18.2VDC maximum (loaded)
- Output Power: 6.60A maximum (120W)

Axis Q6155-E PTZ Network Camera

- Memory: 512 MB RAM, 256 MB Flash
- Power Consumption (typical): 11 W
- Power Consumption (max): 25 W
- Resolution: 1080p
- Total Zoom: 360x
- Video Compression: H.264 (MPEG-4)
- Frame Rate (1080p): Up to 25/30 fps
- Frame Rate (720p): Up to 50/60 fps
- Streaming: Multiple, individually configurable
- Security: Network access control, encryption, user access log, IP address filtering, password protection
- System Integration Recording: event triggers including live stream access, motion, shock, scheduled
- NEMA 4X rated aluminum casing
- Hard coated polycarbonate clear dome
- SD card storage
- Arctic Temperature Control: Start-up as low as -40 °C (-40 °F)

AC Adaptor

- Output Power: 200W
- Output Voltage: 19VDC
- Output Current: 10.6A maximum

Physical

- Operating Temperature: -20 to 50 °C (-4 to 122 °F)
- Enclosure: NEMA 4/12 painted steel
- Enclosure Size (L x W x H): 61x 50 x 25cm (24" x 20" x 10")
- Enclosure Mounting (H x W): 64 x 25cm (25.25" x 10")
- Weight: 51kg (112 lbs)

System Power

- Battery: 12V 110Ahr sealed lead-acid

Wireless Interface

- Model: Lantronix® SGX 5150
- Power: 9-30VDC
- Power (quiescent): 1.9W
- Power (transmit): 5.5 max
- Communication Ports: 3
- Communications: RJ-45, RS-232, USB
- Communications Speed: up to 921 kbps
- Interface: RJ-45 Ethernet port, 10/100Mbps
- Standards: WPA/WPA2 Pre-Shared Key (PSK) or IEEE 802.1X, AES-CCMP
- Range (line-of-sight): 1 mile (with directional antenna)

Model	MCU	Enclosure Type	Size (LxWxh)	Weight (lbs)	Battery	Solar	Receiving	Transmitting
MCLOG-PW-110S	CR300	Steel	24x20x10	112	110Ahr	120W	RS-232	WiFi
MCLOG-PM-110S	CR300	Steel	24x20x10	112	110Ahr	120W	RS-232	Cellular