



# Solar Powered 3G Wireless HD Web Camera Systems



# The Sentinel System

- High gain base station antenna for remote locations, distances and strong signal connection.
- High quality German built mono-crystalline solar panel. High efficiency, long life, heavy duty panel frame for exposed conditions, uv stabilised outdoor rated cables and connectors.
- Microprocessor controlled power management and charging system.
- Second stage load timer to efficiently manage internal power usage and limit times for internet connectivity. Ideal for long term time lapse applications and power resource reliability. This System allows for the powering up and down of camera and communications within the unit with charging systems continuing uninterrupted. 7 day fully programmable digital timer.
- Industrial grade 3G mobile broadband network modem/router to remotely access the camera system, manage configuration, retrieve internally stored images, and for the upload of images to your web server or email.
- Galvanised external mounting rails and hardware. The system is designed to integrate and mount directly with any readily available 25mm NB poles and fittings commonly used in farming, fencing, gates, masts and antenna mounting systems but to name a few.
- Independent antenna. The antenna mount can be located up to 5m from the camera position to take advantage of your particular mast/hardware setup.
- Heavy Duty Steel Outdoor Enclosure with nylon seal washers.
- Filtered air intake (multi stage) with moisture catch chamber.



Solar



3G Internet



Battery



12 Hour



Extreme



1600x1200



SD Storage



1920x1080



SD Storage



2048x1530



SD Storage



## V series 1600x1200 V HD 1920x1080

A high-end 2-megapixel network camera for outdoor applications. This camera boasts high-definition 2-megapixel resolution, allowing for the delivery of extremely detailed images and coverage 6 times larger than a VGA camera.

- 2-megapixel CMOS Sensor
- 3 ~ 9 mm Vari-focal, Auto-iris - Lens
- Removable IR-cut Filter for Day & Night Function
- Built-in IR Illuminators, effective up to 25 Meters
- Real-time MPEG-4 and MJPEG Compression (Dual Codec)
- Simultaneous Dual Streams
- Video Cropping for Bandwidth Saving
- ePTZ for Data Efficiency
- Activity Adaptive Streaming for Dynamic Frame Rate Control
- Tamper Detection for Unauthorized Changes
- Weather-proof IP67 rated Housing
- Digital I/O for External Sensor and Alarm
- Internal backup storage with the capacity for over 40,000 images at full size.

## M series - 2048x1536

High definition Multi-Stream single interchangeable lens outdoor camera delivering stunning resolution in extreme conditions. 15 frame per second full resolution streaming video (bandwidth and power permitting). The multi stream system will allow multiple simultaneous image/video stream settings for simultaneous applications.

- Exchangeable lens camera for indoor/outdoor use (IP66)
- 3Mp resolution (QXGA, 2048x1536 pixels)
- Exchangeable lenses from Super Wide Angle (90°) to Tele (15°); optional with CSVario or Hemispheric (180°)
- Internal DVR (up to 32 GB), recording without network load
- Robust, low-maintenance and weatherproof from -30 to +60 °C (-22 to +140 °F), (IP66)
- Digital continuous zoom, pan and tilt



## Overview

The 'Sentinel' web camera system brings the powerful functionality of high end HD IP cameras, to un-cabled & remote locations.

The integrated solution is a self contained wireless 3G internet, solar powered, high definition camera system. It is packed with functionality, rugged, fan cooled and built for demanding Australian conditions.

Powerful tools for timed monitoring, live remote surveillance, motion triggered alerting, time lapse sequence recording, image archiving and public viewing, packed into a transportable stand alone system.

With real time browser based system management and image viewing, your laptop or mobile internet device is your live control room.

The system can be moved and re-deployed, or stored, to suit seasonal, short term or emergency applications.

**Powerful tools**  
for live & timed monitoring,  
motion triggered alerting  
& time lapse recording.

## Ideal for

Project Management  
Construction Time Lapse  
Natural Resource Management  
Remote Live Monitoring  
Waterways & Floodways  
Rural & Farming  
Conservation & Environment  
Marketing Image Capture  
Public Web Viewing  
Crop & Livestock Monitoring  
Wildlife Monitoring  
Event Capture & Alerting  
Mining Projects  
Roadways & Transport

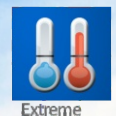
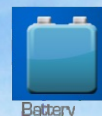




# The Ranger

The Ranger is a solar powered wireless 3G camera system for 24/7 requirements, extended component configurations or mission critical applications. This system includes dual batteries and dual solar panels for twice the charging and twice the power capacity as the Sentinel models.

The Ranger has a choice of camera head options and can be used for 24/7 day/night applications. The additional power capacity provides the ability to add extra components such as a second camera head, a Davis Weather Station, a local access Wi-Fi module or water level height sensors.



## More Options



### Wi Fi

Point-to-point, multi-point or access point Wi Fi for local access and moving your images.



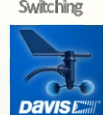
### SMS Alerts from Digital Inputs

Use a mechanical switch, float switch, level sensor or other device to trigger your alerts.



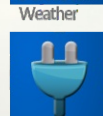
### Digital Outputs

Real time web control to switch your pumps, gates or other local systems.



### Weather Station Integration

Live weather to your website every minute with forecasting, data retrieval and graphing.



### Mains

Mains supplied and 12 Volt systems available.

### System Shown

Ranger M-series with single lens 2048x1520 camera and integrated Davis Vantage Pro sensor suite for live weather to web.





### Freestanding

Shown with M-Series fixed lens camera head and long range base station antenna detached from the system case allowing maximum flexibility for camera placement.



### Dual Lens with Wi Fi

Shown with M-Series dual lens day night camera head, long range base station antenna and WiFi unit.





# Applications

## Live remote monitoring

The web based system allows you to log in and view real-time streaming vision from the remote camera(s) to your internet browser in fantastic detail from any internet connection around the world. Monitor any asset, or keep an eye on important projects or events with out the need to be on location. Live pan and zoom with in the field of view. Simultaneous Multi-Stream capabilities allow you to be viewing live without interruption to other tasks the camera is running like recording extended sequences for time lapse.

## Timed images to web

For many applications, receiving regular high detail images from a remote location over a longer period is an effective and efficient way to assist in managing your important assets and resources. Images can be uploaded to an offsite server, sent directly to your email or viewed via the website at any time. The perfect system for displaying latest images to project stakeholders, investors, associates or a public audience. Ideal for securely managing waterways, stock and feed locations, crops and fields, monitoring gates, sheds or other equipment and locations. Our flexible systems allow sequence times to be configured for any application whether you need an image every 5 minutes or only once a day. Cut down your travel time or share the responsibility with others at multiple locations.

## Motion triggered recording & alerts

Increased security and piece of mind for remote locations. The stand alone Sentinel systems can be configured with multiple detect zones to record events such as vehicles that pass, stock coming to feed or movement at depots, sheds or silos. Configure the system to send an alert email with a full image attached to allow you to decide what needs to be done as it is happening.

## Extended applications

The solar powered, high definition system opens a new world of possibilities, with leading agronomists now recommending the ANSO 'Sentinel' system for real time remote crop monitoring.

The systems extended durability simplifies long term image archiving for visual comparative studies, research, time lapse compilation, wildlife monitoring or documenting the effects of erosion and resource depletion over time.

Talk to us about your application.





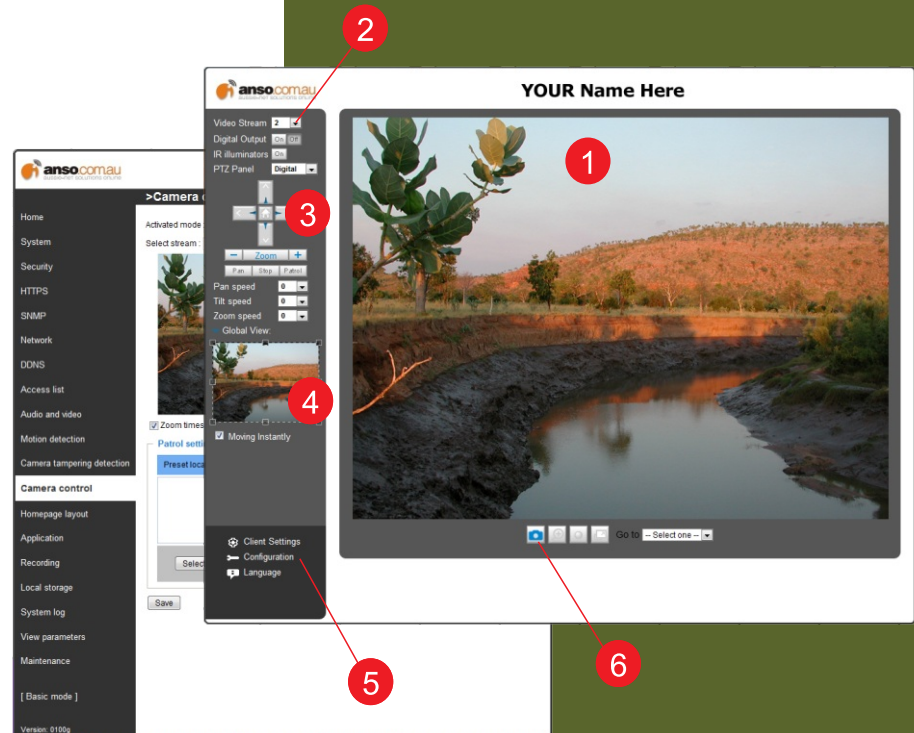
## Live Camera Access

# 2Mp V Series

Logged in to the camera remotely you can view in real time, zoom and pan within the field of view, manage your events setup and timing such as when to record to SD card or FTP an image to a web server, email to your address, take snapshots or download images.

RIGHT >

These images are screenshots of the web based camera interface.



## Pre-Configured & Shipped Anywhere

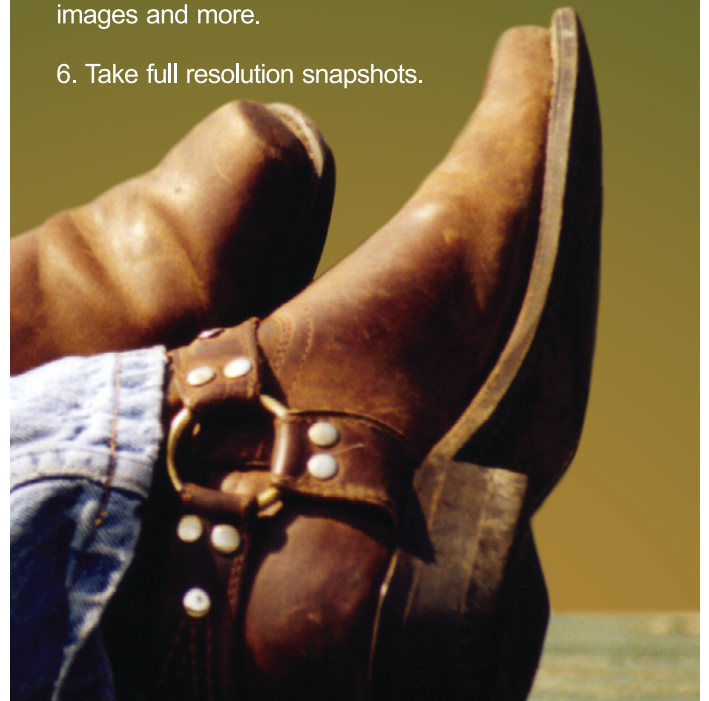
Our systems are shipped pre-tested & pre-configured for your particular application & image requirements.

Simply bolt into position and activate.

We are happy to setup your 3G internet account and activate your sim card so you are ready to go.



1. Monitor your camera in real time, streaming video from 1 fps up to 30 fps (bandwidth permitting)
2. Switch between the 4 configurable image streams.
3. Zoom and pan controls.
4. Electronic point to zoom - easily zoom, pan and navigate within your cameras field of view, live.
5. Access your camera configuration, setup, stored images and more.
6. Take full resolution snapshots.



[webcamerasystems.com.au](http://webcamerasystems.com.au)

# Live Camera Access

# 3.1Mp M Series

## Live View

RIGHT >

This is the normal startup view for the camera system when you first login to the camera. You can return to this view at any time by selecting the "LIVE" button in the top left of the viewer. It displays a live view from the camera. You can raise or lower the refresh rate of the live view by altering this drop down.

## Player View

The Player View is an interface to view your events that have been stored on the internal camera memory.

## Multi View & the Event List

The event list shows all events that have been stored on the internal storage of the camera system.

From this event list you can view any image or download a sequence of events (images) using a date range. this will download your sequence as a single compressed file.



Our M series systems are offered with a range of fixed and variable lenses, including a 180degree hemispherical lens, to suit your application.

Live View

Event View

Multi View

MOBOTIX M24 mx10-9-25-154 Live

1 fps Image Size Mega (1280x960) HIQ

Admin Menu Setup Menu Time Tasks Event List Event Download Events Message Log Multivatcher 1x Zoom Zoom + Zoom - Center Pan

MOBOTIX M24 mx10-9-25-154 Event Player

MOBOTIX M24 mx10-9-25-154 Download Window - Windows Inter...

http://192.168.0.51/control/events.tar?source\_ip=10\_9\_25\_154&dow

MOBOTIX M24 mx10-9-25-154 Download Window

Current Selection

Download Sequences From: 2011-02-25 22:20:01.692 (#3) To: 2011-02-25 22:20:01.692 (#3) Number of Sequences: 1 Approx. Number of Images: 1 Approx. Size: 1463 KBytes Calculate

Story Images/Stream Files: include Download as: tar archive (including HTML player) Download to: Available Download Targets Local Computer USB Stick / Flash SSD External USB Harddisk is currently unavailable. External USB Harddisk would conflict with active device USB Stick / Flash-based Solid State Drive. SD Flash Card Format Storage Media

New Selection From: 2011 To: 2011 Set Range

Internet | Protected Mode: On 100%

Download required video clips via 3G (web browser) or once connected directly to the system with RJ45 ethernet cable

## Event Player

Recent Events

Multi View

MOBOTIX M24 mx10-9-25-154 MultiView Events

Stop Restart Screen: Events Define new screen

Admin Menu Setup Menu Time Tasks Event List Event Download Events Message Log Multivatcher 1x Zoom Zoom + Zoom - Center Pan

All Events List to access all recorded video



# ANSO WCS Viewer Website

The Viewer website is a complete dynamic CMS website, provided with any multiple camera installation, and is custom installed and configured onto the web server hosting plan that your cameras' images are being sent to.

This website is a dynamic Drupal CMS website, setup to look at the folders of images from the cameras and display the latest images from multiple cameras in sequence.

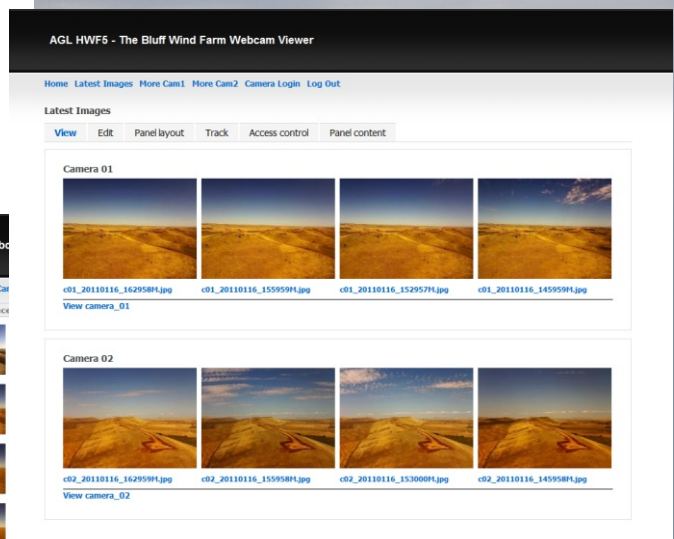
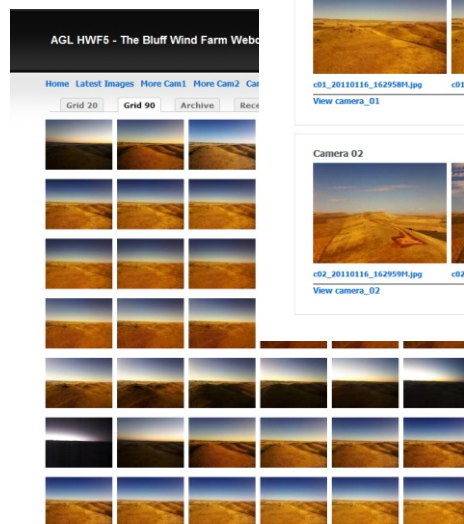
This website can be used as a secure 'Admin only' management tool to ensure the cameras are active, view the latest images (updated every 10mins), catalogue or search the images, or as a publicly viewable website if you wish to customise and add further content.

Managing multiple cameras is easier, quicker, with less bandwidth and camera system power usage using the viewer website than logging in to multiple cameras individually.

The viewer website can be further customised or upgraded with a wide scope of functionality to suit just about any need. Highly configurable permissions and user management, excellent support cross browser, the possibilities are endless.

## Included !

Dynamic Drupal Website  
for timed image viewing  
+ 1Yr Webhosting 3Gb Plan  
+ 1Yr .com Domain  
with any multi camera system.



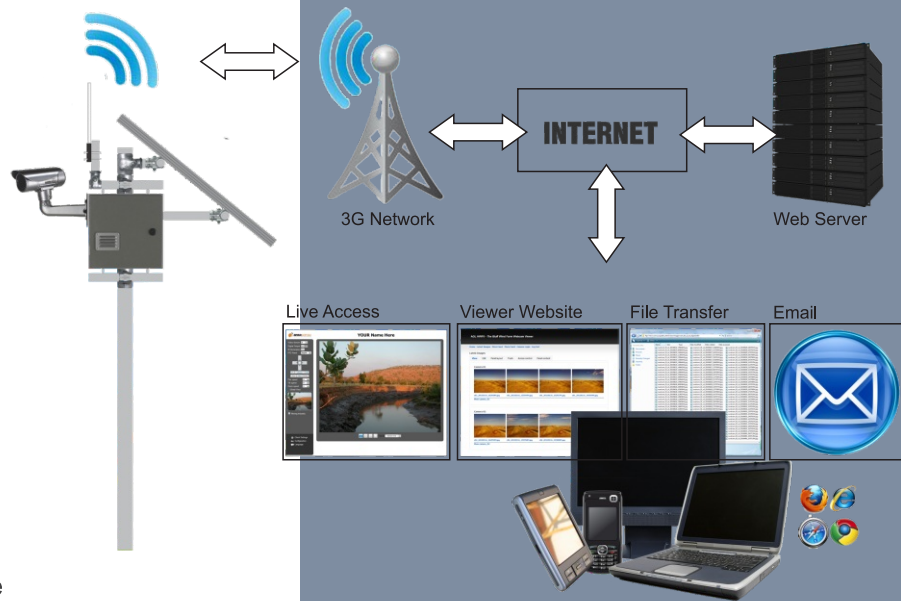
Drupal is a powerful web publishing and collaboration platform, widely used by organisations around the world. The Drupal community consists of thousands of contributors from all over the world, who work together daily to make Drupal the most scalable, flexible, extensible, and secure content management platform available. For more information visit <http://anso.com.au> and <http://drupal.org>

# System Operation

The system connects to the internet via the 3G network with a high gain base station antenna for extended coverage.

An activated account with one of the service providers and sim card is required (usually with Telstra for coverage in rural or remote areas). We are happy to set up your new service onto any existing Telstra mobile account from as little as \$29 per month, then configure and test the system prior to dispatch so all you have to do is put the system into position and turn it on.

The camera is accessed via a simple web url for streaming video, latest images or to configure and manage the system.



## Upgraded, Integrated & Custom Systems

Talk with us about the array of system upgrades available including battery and power system extensions, network and switching additions, or integration of other 3rd party systems.

We can customise a system to suit your particular application.



**DAVIS**®

## Weather Stations

Ask about our complete Davis Weather Station and Sensor Suite system integration.



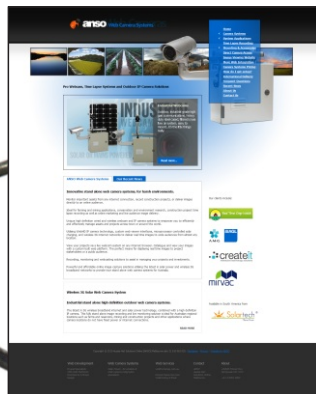
# Mounting & Installation

Our 'Sentinel' systems use a method for mounting and fixing that has components readily available, and is easily adaptable to just about any situation.

The system handles accept and integrate with all 25mm NB fittings and pipe/pole (25mm Nominal Bore, 34mm Outside Diameter), fencing, and mast hardware. This allows the camera system to be mounted easily to existing structures, or setup into complex stand alone stations using hardware and fittings available from just about any hardware store, metal product supplier or fencing product distributor.

Our systems are supplied with both top and bottom mounting bars (handles) providing a rigid fix for steady images, and a large variety of fixing options. The end caps are removable for end mounting.

Fixing your camera system using both top and bottom mounting bars will help maintain the integrity of the enclosure against weather, reduce camera movement in harsh weather, ensure adequate system cooling, and easily allow the system to be reconfigured and remounted over and over.



<http://webcamerasystems.com.au>  
for more information



## 1. Single Pole Mounting.

Your pole or ours - a wide variety of options.

## 2. Freestanding Rigs - Three & Four leg versions.

Ideal for temporary or seasonal applications where the camera needs to be repositioned periodically.

## 3. Extend the camera head up to 20m.

For those 'hard to reach places'.

## 4. Mast Mounting

The system can be split for better solar panel placement or installed to existing structures of just about any type.



**anso** Web Camera Systems  
23/820 Princes Hwy Springvale VIC 3171  
info@anso.com.au +61 3 9562 3000