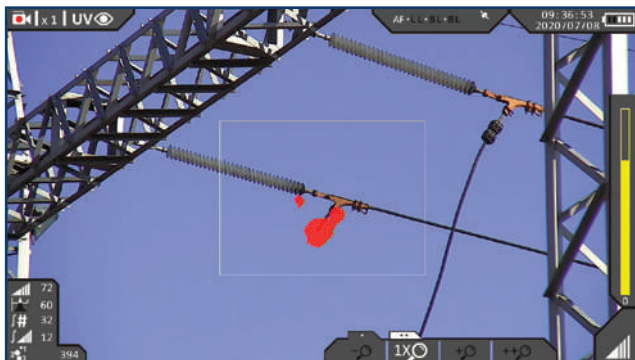


CoroCAM[®] 6HD

High Performance Daylight Corona Imaging Camera



The HD sensor allows the CoroCAM[®] 6HD to record vivid details - this means the user can see the smallest features of the fault location - making maintenance priority assessment more reliable. This economical system is trusted worldwide to deliver performance.



Synchronized optical visible zoom
& digitally enlarged UV overlay



FEATURES & PERFORMANCE:

Adjustable Angle Sun shield

Adjustable Angle LCD display

Quick Guide Sticker

Behind flap: Power input, AV Out, Mic In, RS232 I/O

Behind flap: Mini HDMI, Micro SD Card slot, USB Port



One handed operation

GPS booster antenna port

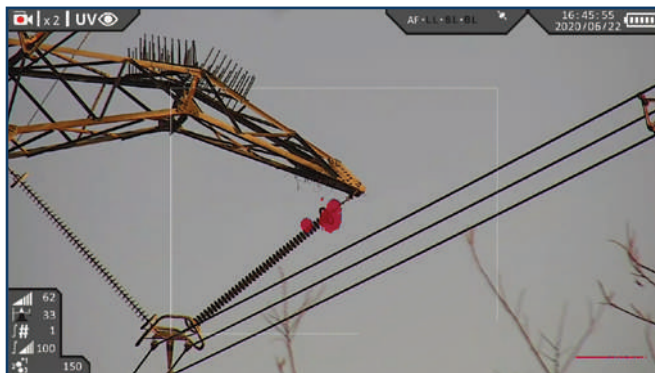
Onboard microphone and speaker

Easily replaceable Li-ion batteries

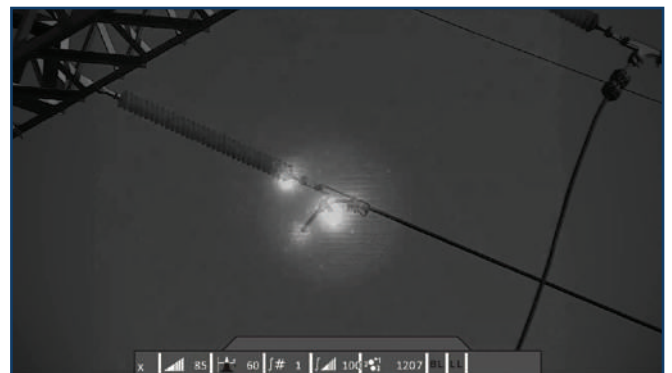
Optional Wi-Fi or Bluetooth module inside

- A high sensitivity detector, which can detect UVc emissions down to $2.05 \times 10^{-18} \text{ W/cm}^2$, this allows for the detection of the smallest corona discharges.
- UV Gain, threshold or integration can be set to optimize the resulting image.
- Factory fitted optional Motorized Solar Blind (SB) filter position module can remove the solar blind filter from the light path to enhance sensitivity - Non Solar Blind (NSB) Module. Corona signals above the threshold level are displayed in real time.
- The UV count is adjusted to compensate for camera settings.
- High sensitivity color video camera with a resolution of 1920 x 1080 pixels which can operate at light levels down to 0.03 Lux @ F1.6 at Full Frame rate; rendering it capable for conducting inspections at night.
- Synchronized UV & Visible Zoom from 1x (defined as $8^\circ \times 6^\circ / 10^\circ$ Diagonal) up to 4x system zoom (optical/ digital for the Visible Channel and digital for the UV channel). A maximum of 12x digital zoom is available for the visible channel.
- Automatic or Manual visible camera focus control from $<0.7\text{m}$ to infinity. UV camera focus can be set manually or slaved to the visible camera focus position.
- The visible image can be enhanced for back-light compensation to set to low light mode.
- UV is overlaid onto the visible in one of the 4 preset or 100 user selected colors.
- The UV overlay translucency can be adjusted to show the discharge source.
- On-board still image and video recording in high quality formats.
- Fast set up & boot up avoids the need for power saving modes.
- 18 Month warranty, extendable to 36 months.





Typical view



Background Priority View



The CoroCAM 6HD (installed in a suitable gimbal) can be lofted by a number of enterprise grade UAV's. The mini-HDMI or composite video output can be down-linked to a base station display, while the RS232 port can accept remote control signals from a base station via a RS23 transmitter. Recordings can be made on the camera while being remote controlled. This makes the CoroCAM 6HD ideal for inspectors who want to transition into the use of UAV's.

CoroCAM 6HD lofted by Aerialtronics Altura Zenith ATX8

ULTRAVIOLET CHANNEL	
Typical Sensitivity:	SB (240 - 280 nm) 2.05×10^{-18} Watt/cm ² , 3pC @ 20m (Korea Electrotechnology Research Institute IEC 60270:2000) 13.16dB μ V(RIV) @ 1MHZ @ 10m (Korea Electrotechnology Research Institute – NEMA107-1987) ; Optional NSB (240-300 nm) ~ 1×10^{-18} Watt/cm ² , 0.8pC @ 15 m Tested & certified by Innogy SE-Eurotest Germany: IEC 60270:2000
Field of view:	8° Horizontal x 6° Vertical ~ 10° Diagonal Zoom Range (optical): 1x Zoom Range (digital): 8° to 4°, in 3 steps
Focus type:	Linked to Visible with manual override
Focus Range:	<0.7m to Infinity
Detector Life Span:	No degradation
Corona Measure Method:	Intensity based count, Calibrated for irradiance value of selected area
Threshold Mask:	Useful range 20-100%
UV Transparency:	0-100%
UV False Color Selection:	4 presets with 100 user selectable hues
UV Integration:	Adjustable period, Summation or Noise Reduction

VISIBLE CHANNEL	
Resolution:	1920 x 1080 pixels
Sensitivity Day Mode:	0.05 Lux @ F 1.6 @ 50 fps
Sensitivity Night Mode:	0.03 Lux F 1.6
Exposure / Image Enhancements:	Auto or Manual
Focus Type:	Automatic with manual override
Focus Range:	<0.7m to Infinity
Useful Zoom Range (optical):	16° (0.5x) to 4° (2x)
Camera Module Zoom Range:	10x, 53° to 4.9°
Zoom type:	Stepped
Zoom Range (digital):	4x, 6x, 8x, 12x
Maximum IFOV:	0.0445 mRAD

IO & OS	
OS Features:	Icon based menu system, 10x User Profile. Boot to inspection capable in 6s, to record capable in 60s. Image Sort Numbering. Video list and playback.
Input:	Keypad (right hand), Onboard & External Microphone
Output:	HDMI & Composite Video ; Onboard speaker
Bi-Directional:	Mini USB, RS-232 ; Optional Wi-Fi
Firmware:	Internal GPS, with external hotplug booster antenna
Software Update:	Via files downloaded from website to Mirco SD card

ACCESSORIES	
Reporting Software:	CoroBASE®
Carrying:	Neckstrap
	Camera Harness

MEDIA & DATA STORAGE	
Storage Medium:	Micro SD card (32 GB supplied with camera)
Storage Capacity:	1000+ images or >1 hr video/GB
Storage Format Video:	AVI, 720p (H.264 compression)
Storage Format Still:	JPG
Media Download:	Via Card Reader or USB

DISPLAY	
Type:	5.7" LCD, 640 x 480 pixels, color, manual or auto brightness up to 450cd/m ² , variable angle
Display Modes:	UV+Vis, VIS only, UV only, UV Priority
UV Overlay Accuracy:	<1 millirad deviation
On Screen Display:	Gain, zoom, count, active functions

POWER	
Battery:	Sony Li-ion, Type L compatible
Battery Location:	Internal, quickly replaceable
Power Consumption:	9 Watt
Operating Time:	3hrs maximum, 2.5hrs typical
Continuous Operation:	No overheating
Charging:	In camera or in external charger
External Power Supply:	9-16V 12VA - Car or mains adapter Mains Adaptor: 110-240 V ac 50 - 60 Hz / 12 V dc 3A Protection: Reverse polarity, over current, under voltage

PHYSICAL SPECIFICATION	
Weight:	1.9 kg including battery
Dimensions:	220 mm L x 160 mm W x 80 mm H
Window aperture:	Ø = 62 mm
Operating Temp:	-15 °C to 55 °C
Storage Temp:	-20 °C to 60 °C
Humidity:	Up to 90 %, non condensating
Mounting Point	Standard 1/4" X20 thread tripod mount

PROTECTION	
Storage / Transport Case:	Pelican style plastic hard case
Environmental Protection:	IP54
Safety Standard:	CE, IEC1010-1
Warranty:	18 months

