



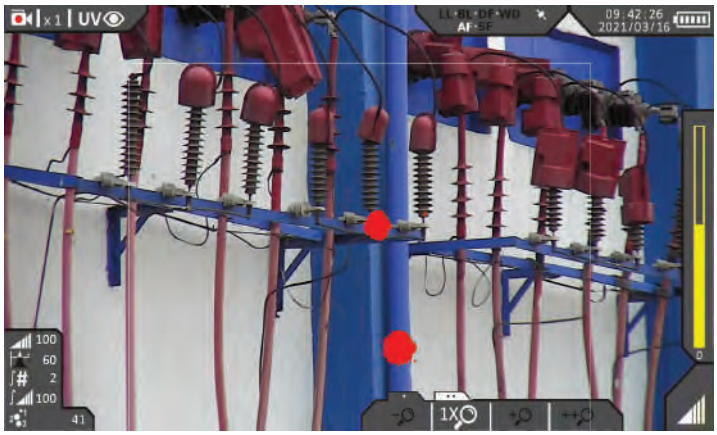


# CoroCAM® 6HD

## High Performance Daylight Corona Imaging Camera

The CoroCAM® 6HD is an easy to operate, robust system which delivers high sensitivity and resolution in a lightweight package. Ergonomic design, a large LCD display and the use of commercially available batteries and a neckstrap allows the camera operator to work all day under all applicable conditions.

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# NOTABLE FEATURES:


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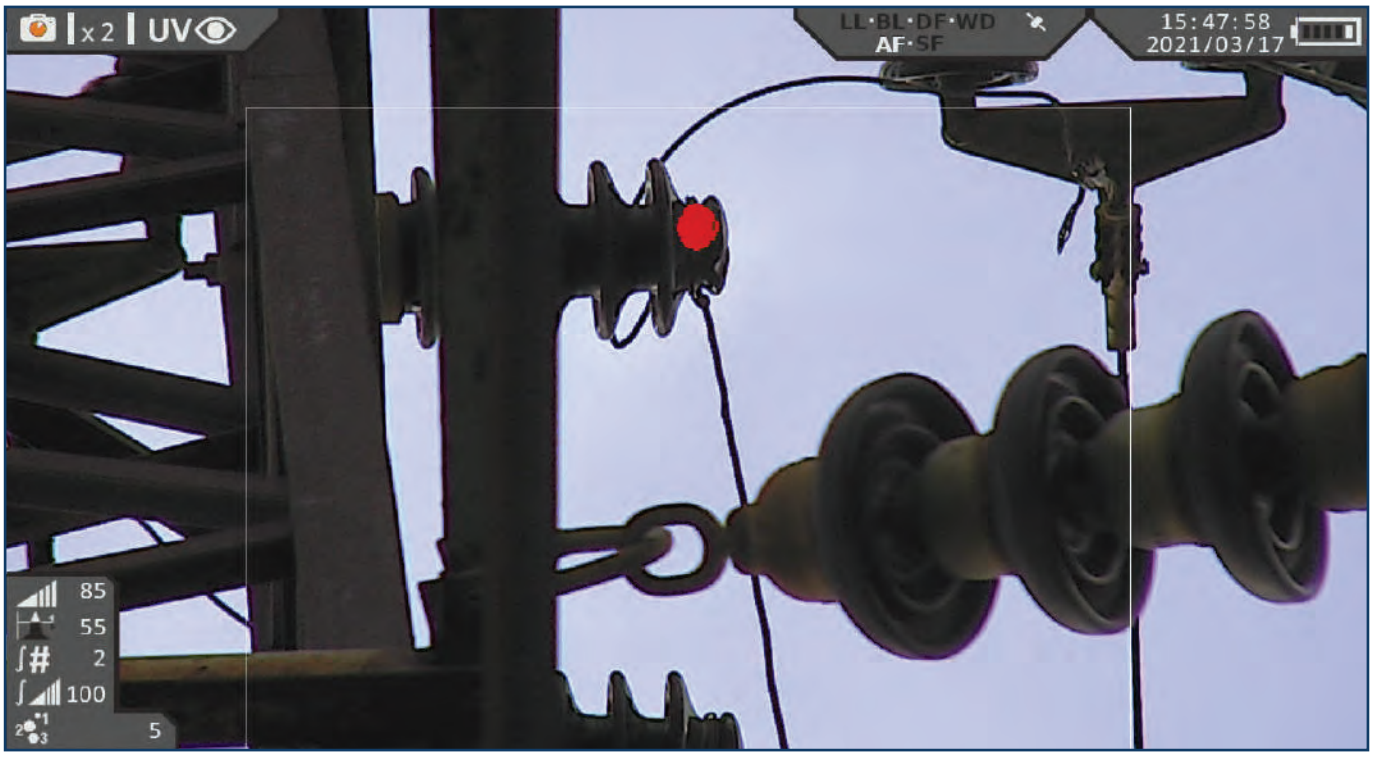
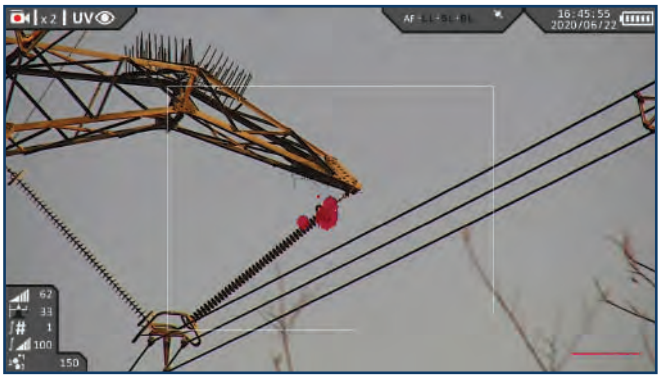
- A high sensitivity detector, which can detect UVc emissions down to 2.05 x $10^{-18}$ W/cm$^2$, this allows for the detection of the smallest corona discharges.
- UV Gain, threshold or integration can be set to optimize the resulting image.
- Factory fitted optional Motorized Solar Blind (SB) filter 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° x 6° / 10° Diagonal) up to 2x 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 <0.7m 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 compensa tion 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 (720p for video).
- Fast set up & boot up avoids the need for power saving modes.
- 18 Month warranty, extendable to 36 months.

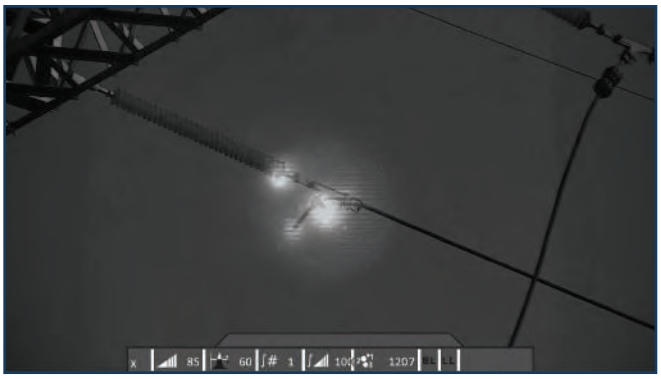

The CoroCAM 6HD (installed in a suitable gimbal) can be lofted by a number of enterprise grade UAV's. The mini-HDMI or composite video output can be down-linked to a base station display, while the RS232 port can accept remote control signals from a base station via a RS23 transmitter.
Recordings can 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 PHOTOS:

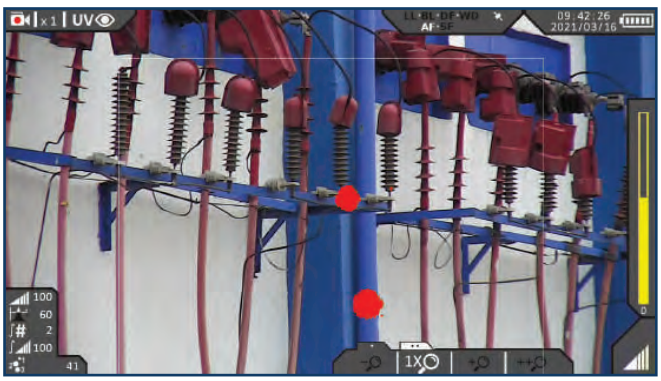


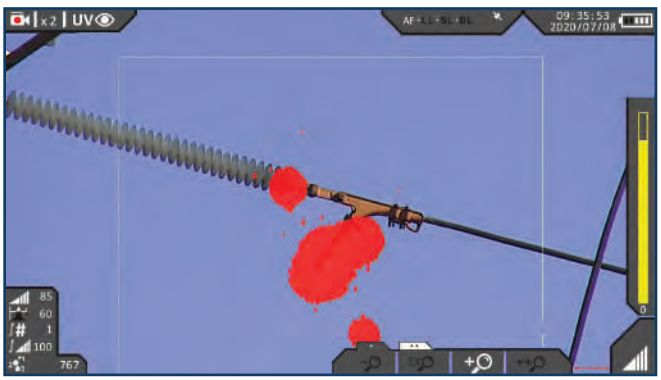



Typical view



Background Priority View





# SYSTEM SPECIFICATIONS:



| ULTRAVIOLET CHANNEL | |
|---|---|
| Typical Sensitivity: | SB (240 - 280 nm) $2.05x10^{-18}$ Watt/cm$^2$, 3pC @ 20m (Korea Electrotechnology Research Institute \| IEC 60270:2000) \| 13.16dBµV(RIV) @ 1MHZ @ 10m (Korea Electrotechnology Research Institute – NEMA107-1987) ; Optional NSB (240-300 nm) ~ 1 x $10^{-18}$ 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 1 step |
| 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 Optical zoom, 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) |
| Output: | HDMI & Composite Video |
| Bi-Directional: | Mini USB, RS-232 |
| Firmware: | Internal GPS, with external hotplug booster antenna |
| Software Update: | Via files downloaded from website to Mirco SD card |

| 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 |

# SYSTEM SPECIFICATIONS:



| 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 milirad 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 & Storage Temp: | -20 °C to 55 °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 / MIL-STD 810F (Vibration, shock, temperature, humidity) |
| Safety Standard: | CE, IEC61010-1 |
| Warranty: | 18 months |

| ACCESSORIES | |
|---|---|
| Reporting Software: | CoroBASE® |
| Carrying: | Neckstrap |
| | Camera Harness |