UViRCO TECHNOLOGIES

CoroCAM® 7
Professional Solar Blind Corona Camera

The **CoroCAM® 7's** easy to use, yet powerful, features makes detection and location of corona discharges effective and fast. Features are available to increase sensitivity (adjustable Long Integration & Non - Solar Blind Mode), reduce false signals (adjustable Noise Reduction & Threshold Level) and improve the visibility of the discharge indicating blob (adjustable Background Priority, Blob Transparency and Blob False Color).

The adjustable viewfinder, rotatable grip and LCD display makes for optimal ergonomics and allows the operator to use the camera in all light conditions from multiple stances, minimizing muscle fatigue.

PRODUCT HIGHLIGHTS:

High sensitivity UV camera | Adjustable UV image optimization | Non-Solar Blind mode | Transparent UV overlay | Premium specification visible camera | High visible zoom | UCF recording | GPS booster antenna port | Onboard microphone and speaker | Adjustable Viewfinder | Rotating LCD display | Fast boot up | User profiles | I/O connectors (Ethernet, USB, RS232/485) | Remote Control | One handed operation | Optimal Ergonomic Design | 18 month warranty

NOTABLE FEATURES:

- High sensitivity detector, which can detect UVc emissions down to 2.05×10^{-18} W/cm^2, this allows for the detection of the smallest corona discharges.
- Motorised solar blind filter removal in Non-Solar Blind Mode to increase sensitivity for use at night or indoors.
- Users can select optimised presets for detection or location of discharges.
- Corona signals above the threshold level are displayed in real time.
- High zoom color visible camera with a resolution of 768 x 576 pixels (Optional HD module).
- Synchronized UV & Visible Zoom from 1x system zoom (defined as 8°x6° / 10° Diagonal) to 4x system zoom (optical for the Visible channel and digital for the UV channel).
- Onboard still image and video recording in JPG and AVI formats.
- UCF metadata file containing uncompressed displayed image and raw UV image, camera settings and preset values.
- Integrated GPS with internal and booster antenna.
- Integrated high power flashlight with adjustable brightness levels.

- High resolution angle adjustable, focusable ventilated viewfinder (800 x 600 pixels) and a large, robust mounted, variable angle, color LED backlit LCD display (640 x 480 pixels), both optimised for use in full daylight to make inspection comfortable.
- The On-Screen Display (OSD) shows all the relevant information.
- Easily replaceable Li-ion batteries deliver up to 3 hours operating time. Additional batteries are readily available and lightweight.
- Fast boot up avoids the need for power saving modes.
- User profile setup, save and restore.
- Easy operation of the camera with one hand via a multi-function keypad, with shortcut keys to specific functions.
- Ethernet port for remote control.
- Camera software update via download to SD card.
- 18 month warranty, extendable to 36 months.
- Compatible with **CoroBASE® 2.0** Analysis and Reporting software.

SENSITIVITY (TYPICAL)
Ultraviolet: 2.05×10^{-18} Watt/cm^2 | **Visible:** 0.4 lx (F1.35, 50 % IRE, ICR off), normal 0.01 lx (F1.35, 50 % IRE, ICR on)

ZOOM
Visible Camera Zoom: 28x optical, 12x digital | **UV Camera Zoom:** 1x optical, 8x digital

FIELDS OF VIEW
Optical Wide Zoom: 16° | **Optical Tele Zoom:** 2° (1° on optional HD module) | **UV Channel Zoom:** Digital to match visible FOV | **FOV with UV Overlay:** All Optical | Digital Enlargement / Zoom 12x from minimum optical FOV | **Focus:** Automatic or manual on visible channel, UV slaved to visible or independent manually | **Minimum Focus Distance:** UV 0.7m, VIS 0.7m

RESOLUTION
Ultraviolet: 640 x 480 pixels | **Visible:** 768 x 576 pixels | **Maximum Visible Channel IFOV:** 0.0477mRAD (0.024 mRAD on optional HD)

IMAGE ENHANCEMENTS
Ultraviolet: Long Integration & Noise Reduction | **Visible:** Auto low light, manual exposure control

DISPLAY SPECIFICATIONS
Viewfinder: Focusable, Adjustable Angle, Ventilated rubber eye piece, 800 x 600 pixels LED | **LCD:** 5.7" Backlit LCD 450cd/cm^2, 640 x 480 pixels | **Channel Fusion:** Threshold Mask, Variable Transparency | **Fusion accuracy:** Better than 1 milliradian on all optical zoom levels | **UV Overlay Colors:** 6 predefined, 100 user selectable **UV Transparency:** 0 – 100% | **Background Priority:** 0 – 100%

INTERFACE
Ergonomic Grip: Multi-function buttons | **Menu:** Icon Based Menu System **Short Cut Buttons:** Activate specific functions | **Remote Control:** Via Ethernet

CAMERA I/O
USB: Auto connect USB 2.0 | **Ethernet:** Video streaming & remote control **Composite Video:** PAL & NTSC formats

IMAGE & DATA STORAGE
Image Format: Displayed channels saved as JPEG or AVI (H.264 compression) **UCF Radiometric file contains:** Displayed image, raw UV image and Meta-data **Meta-data contains:** Camera settings, GPS location, User entered environmental variables **Storage Media:** SD Card (up to 64GB)

FIRMWARE FEATURES
Image Series Numbering: Allows for grouping of images in CoroBASE 2.0 **Gallery & Playback:** Review recorded media | **Field Upgradable:** Download latest firmware | **Quick Startup:** Power on to record capable in 60s

POWER
Battery: Sony Li-ion, Type L compatible | **Operating Time:** 3hrs maximum

PHYSICAL SPECIFICATIONS
Weight: 2.2 Kg | **Dimensions:** 275 mm L x 135 mm W x 190 mm H **Operating Temp:** -15 °C to 55 °C | **Storage Temp:** -20 °C to 60 °C

PROTECTION
Storage / Transport Case: Pelican style plastic hard case | **Camera Body:** Tested to IP 55 **Physical Protection:** Impact absorbing covers **Safety Standard:** CE, IEC1010-1