UViRCO TECHNOLOGiES

CoroCAM 8®

COMBINED IR AND CORONA IMAGING CAMERA

The **CoroCAM 8®** is a combined thermal IR, solar blind corona and video camera. It features a high spec Sony visible camera, a radiometric FLIR thermal IR camera and a solar blind UV camera. The **CoroCAM 8®** is intended for use by professional HV inspectors. The combination of these 3 cameras makes it possible to do both thermal IR and UV inspections at the same time, saving time and effort. Co-location of electrical discharges and hot spots give the inspector more insight into the cause of a fault. The **CoroCAM 8®** can be used to inspect HV infrastructure operating at 3.3kV and above.

Features:

- A high sensitivity UV detector, which can detect UVc light at 2.05×10^{-18} W/cm^2, this allows for the detection of the smallest corona discharges
- A 9Hz FLIR Radiometric IR camera module with a sensitivity of NEdT <62.5mK delivering images at 640 x 480 pixel resolution
- Syncronised Smooth Zoom of all 3 camera channels. IR & UV channels are zoomed digitally, visible is zoomed optically
- Manual or Auto focus for Visible and IR channels, UV channel has manual focus or can be synchronized with either Visible or IR channel
- Onboard still image and video recording in high quality formats
- A 5.7" viewable area, robustly mounted, variable angle, colour LED backlit LCD display with 640x480 pixels resolution optimised for use in full daylight makes for easy inspection
- Manual or Auto brightness control for LCD display
- A fixed angle focusable viewfinder with 800x600 pixel resolution
- Fast set up & boot up avoids the need for power saving modes
- The On Screen Display (OSD) shows all the relevant information
- Rotational handle (right hand only) with primary interface keys

- Easy operation of the camera with one hand via a multifunction keypad
- Access specific functions with Quick keys on the left side of the camera
- Manual or Auto Exposure of Visible, UV (Gain) and IR (Level) cameras
- Integrated GPS with internal and complimentary external booster antenna
- Meta data recording of camera settings and measurement plus environmental variables manually entered - distance, air temperature, air pressure, ambient humidity and wind speed
- Freely resizable and positionable UV Intensity sampling box
- UV overlay colors has 6 pre-sets or 255 selectable hue levels
- UV overlay translucency control
- UV threshold and Integration control
- 15 IR color palettes with contrasting Isotherms
- Auto or Manual IR Span
- Laser pointer and integrated LED Flashlight
- Camera software update via download to SD card
- Ethernet and USB port for media download or remote control
- A 15 Month warranty

Unique Features:

Combined UV/VIS & IR imaging | Radiometric IR | Fast set up | One handed operation | High resolution video recording | Translucent UV overlay
Onboard GPS with booster antenna port | Onboard microphone and speaker | Focusable viewfinder | I/O connectors (Ethernet, USB)
Quick function keys on left | Simple & powerful user interface

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

FIELDS OF VIEW
@ 0.5x Zoom: 16° | **@ 1x Zoom:** 8° | **@ 2x Zoom:** 4° | **@ 4x Zoom:** 2° | **UV & IR Channel Zoom:** Digital to match visible FOV - up to 4x zoom | **FOV with UV Overlay:** All | **Focus:** Automatic or manual on visible & IR channels, UV slaved to visible/IR or independent manually | **Minimum Focus Distance:** UV 0.7 m, VIS 1.5 m, IR 2.3m

SENSITIVITY (TYPICAL)
Ultraviolet: 2.05^{-18} x 10 Watt/cm² | **Infrared (NEdT):** <50mK @ f1.0 (-25°C to +135°C) <62.5mK @ f1.25 (Standard lens) | **Visible:** 0.4 lx (F1.35, 50 % IRE, ICR off), normal 0.01 lx (F1.35, 50 % IRE, ICR on), auto low light

RESOLUTION
Ultraviolet: 640 x 480 pixels | **Infrared:** 640 x 512 pixels | **Visible:** 768 x 576 pixels

IMAGE ACQUISITION
Ultraviolet: Averaging & Integration | **Infrared:** Auto flat field correction (0.5s) Auto level and span | **Visible:** Auto low light, manual back light compensation

DISPLAY SPECIFICATIONS
Viewfinder: Ventilated rubber eye cup, 800 x 600 pixels LED | **LCD:** 5.7" Backlit LCD 450 cd/cm², 640 x 480 pixels
Channel Fusion: Picture in Picture, Threshold Mask, Variable Translucency | **Fusion Accuracy:** Better than 1 milliradian
IR & UV palettes: Standard IR + UV Rainbow

INTERFACE
Ergonomic Grip: Multifunction buttons | **Menu:** Icon Based Menu System
Short Cut Buttons: Activate specific functions | **Remote Control:** Via USB / Ethernet

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

IMAGE & DATA STORAGE
Output / Saved Image Options: As displayed, Simplified, No info overlay | **Video Format:** AVI (H.264 compression)
Image Format: Overlaid channels saved as JPEG | **Separately saved Visible channel:** JPEG | **UV channel:** JPEG
IR channel: Radiometric JPEG | **Meta-data contains:** Camera settings, GPS location, range to object
Storage Media: SD Card (up to 64GB)

FIRMWARE FEATURES
Image Series Numbering: Allows for auto sorting of images at download to PC for reporting
Gallery & Playback: Review recorded media | **Field Upgradable:** Download latest firmware
Quick Startup: Power on to record capable in 60 s

POWER
Battery: Sony Li-ion | **Operating Time:** 90 min operation | **Recharge time:** 250 min

PHYSICAL SPECIFICATIONS
Weight: 2.5 Kg | **Dimensions:** 215 mm L x 200 mm W x 155 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 54
Physical Protection: Impact absorbing covers | **Safety Standard:** CE,IEC1010-1

STANDARD SYSTEM
- CoroCAM 8® DAYLIGHT UV & IR IMAGER
- Li-ION BATTERY (X2), Charger
- 8GB SD CARD
- AC MAINS ADAPTER
- OPERATING MANUAL
- PROTECTIVE HARD CARRY CASE
- BASIC ANALYSIS & REPORTING SOFTWARE

OPTIONAL ACCESSORIES
- ACCESSORY PACK I - ADVANCED INSPECTION GUIDE, FEATURING THE EPRI FIELD GUIDE
- ACCESSORY PACK II - SAFETY VEST WITH POUCHES FOR SPARE BATTERIES