



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/cm², 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
- Synchronised 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



SYSTEM SPECIFICATIONS

BROCHURE VERSION: 0.2

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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/cm ² Infrared (NEtT): <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/cm ² , 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

