



## 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  $2.05 \times 10^{-18}$  W/cm<sup>2</sup>, this allows for the detection of the smallest corona discharges
- A 9Hz FLIR Radiometric IR camera module with a sensitivity of NEΔT <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

<b>ZOOM</b>	<b>Visible Camera Zoom:</b> 28x optical, 12x digital   <b>UV Camera Zoom:</b> 1x optical, 8x digital <b>IR Camera Optical Zoom:</b> 1x optical, 8x digital
<b>FIELDS OF VIEW</b>	<b>@ 0.5x Zoom:</b> 16°   <b>@ 1x Zoom:</b> 8°   <b>@ 2x Zoom:</b> 4°   <b>@ 4x Zoom:</b> 2°   <b>UV &amp; IR Channel Zoom:</b> Digital to match visible FOV - up to 4x zoom   <b>FOV with UV Overlay:</b> All   <b>Focus:</b> Automatic or manual on visible & IR channels, UV slaved to visible/IR or independent manually   <b>Minimum Focus Distance:</b> UV 0.7 m, VIS 1.5 m, IR 2.3m
<b>SENSITIVITY (TYPICAL)</b>	<b>Ultraviolet:</b> 2.05 <sup>-18</sup> x 10 Watt/cm <sup>2</sup>   <b>Infrared (NEtT):</b> <50mK @ f1.0 (-25°C to +135°C) <62.5mK @ f1.25 (Standard lens)   <b>Visible:</b> 0.4 lx (F1.35, 50 % IRE, ICR off), normal 0.01 lx (F1.35, 50 % IRE, ICR on), auto low light
<b>RESOLUTION</b>	<b>Ultraviolet:</b> 640 x 480 pixels   <b>Infrared:</b> 640 x 512 pixels   <b>Visible:</b> 768 x 576 pixels
<b>IMAGE ACQUISITION</b>	<b>Ultraviolet:</b> Averaging & Integration   <b>Infrared:</b> Auto flat field correction (0.5s) Auto level and span   <b>Visible:</b> Auto low light, manual back light compensation
<b>DISPLAY SPECIFICATIONS</b>	<b>Viewfinder:</b> Ventilated rubber eye cup, 800 x 600 pixels LED   <b>LCD:</b> 5.7" Backlit LCD 450 cd/cm <sup>2</sup> , 640 x 480 pixels <b>Channel Fusion:</b> Picture in Picture, Threshold Mask, Variable Translucency   <b>Fusion Accuracy:</b> Better than 1 milliradian <b>IR &amp; UV palettes:</b> Standard IR + UV Rainbow
<b>INTERFACE</b>	<b>Ergonomic Grip:</b> Multifunction buttons   <b>Menu:</b> Icon Based Menu System <b>Short Cut Buttons:</b> Activate specific functions   <b>Remote Control:</b> Via USB / Ethernet
<b>CAMERA I/O</b>	<b>USB:</b> Auto connect USB 2.0   <b>Ethernet:</b> Video streaming & remote control   <b>Composite Video:</b> PAL & NTSC formats
<b>IMAGE &amp; DATA STORAGE</b>	<b>Output / Saved Image Options:</b> As displayed, Simplified, No info overlay   <b>Video Format:</b> AVI (H.264 compression) <b>Image Format:</b> Overlaid channels saved as JPEG   <b>Separately saved Visible channel:</b> JPEG   <b>UV channel:</b> JPEG <b>IR channel:</b> Radiometric JPEG   <b>Meta-data contains:</b> Camera settings, GPS location, range to object <b>Storage Media:</b> SD Card (up to 64GB)
<b>FIRMWARE FEATURES</b>	<b>Image Series Numbering:</b> Allows for auto sorting of images at download to PC for reporting <b>Gallery &amp; Playback:</b> Review recorded media   <b>Field Upgradable:</b> Download latest firmware <b>Quick Startup:</b> Power on to record capable in 60 s
<b>POWER</b>	<b>Battery:</b> Sony Li-ion   <b>Operating Time:</b> 90 min operation   <b>Recharge time:</b> 250 min
<b>PHYSICAL SPECIFICATIONS</b>	<b>Weight:</b> 2.5 Kg   <b>Dimensions:</b> 215 mm L x 200 mm W x 155 mm H   <b>Operating Temp:</b> -15 °C to 55 °C <b>Storage Temp:</b> -20 °C to 60 °C
<b>PROTECTION</b>	<b>Storage / Transport Case:</b> Pelican style plastic hard case   <b>Camera Body:</b> Tested to IP 54 <b>Physical Protection:</b> Impact absorbing covers   <b>Safety Standard:</b> 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

