



## CoroCAM<sup>®</sup> 8HD

Combined LWIR and Corona Camera

The CoroCAM<sup>®</sup> 8HD combines a FLIR<sup>®</sup> radiometric thermal camera with the CoroCAM<sup>®</sup> solar blind UV camera system, allowing simultaneous detection and location of corona discharges and hotspots, saving time and effort.

Co-location of electrical discharges and hot spots give the inspector more insight into the cause of a fault.

Advanced UVc image enhancement 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).

# FEATURES & PERFORMANCE:

Rotating LCD Display  
5.7" with 640 x 480  
pixels resolution

Short cut keys on the  
left

Easily replaceable  
Li-ion batteries

Onboard microphone  
& speaker and power  
key

Ventilated Viewfinder

Quick guide

Viewfinder

Mini HDMI Output

I/O connectors  
(Ethernet, USB,  
RS232/485, Micro-SD  
card)

Simple powerful user  
interface

One handed operation



- High sensitivity solar blind UV detector.
- 9Hz (optical 25 Hz) FLIR Radiometric LWIR camera module.
- Synchronized Smooth or Stepped Zoom of all 3 camera channels.
- IR & UV channels are zoomed digitally, visible is zoomed optically to minimum FOV, then digitally enlarged.
- Manual or Auto focus for Visible channel, UV & LWIR channel has manual focus or can be synchronized with the Visible.
- Onboard still image, video and radiometric data recording.
- Meta data recording of camera settings and measurement plus environmental variables manually entered - distance, air temperature, air pressure, ambient humidity and wind speed.
- Fast set up & boot up avoids the need for power saving modes.
- Manual or Auto Exposure of Visible and LWIR (Level) cameras, UV (Gain) is manually set.
- Easy & comfortable operation of the camera via the Rotational handle (right hand only) with primary multi-function interface keys.
- Control over UV overlay colors (6 pre-sets & 100 user selectable hue levels), UV overlay translucency, UV threshold, Integration & Noise Reduction control.
- 14 IR color palettes with contrasting Isotherms.
- Auto or Manual IR Span.
- GPS booster antenna port.
- Integrated high power LED flashlight with adjustable brightness levels & laser pointer.
- Camera software update via download to Micro-SD card.
- 12 month warranty.



# SYSTEM SPECIFICATIONS:

## ULTRAVIOLET CHANNEL

Typical Sensitivity:	SB (240 - 280 nm) $2.05 \times 10^{-18}$ Watt/cm <sup>2</sup> , 3pC @ 20m (Korea Electrotechnology Research Institute   IEC 60270:2000)   13.16dB $\mu$ V(RIV) @ 1MHZ @ 10m (Korea Electrotechnology Research Institute – NEMA107-1987)
	NSB (240-300 nm) $\sim 1 \times 10^{-18}$ Watt/cm <sup>2</sup> , 0.8pC @ 15 m Tested & certified by Innogy SE-Eurotest Germany: IEC 60270:2000
Field of view:	8° Horizontal x 6° Vertical $\sim 10^\circ$ Diagonal   Zoom Range (optical): 1x   Zoom Range (digital): 8° to 2°, in 3 steps
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:	6 pre-set colors, 100 user selectable hues
UV Integration:	Adjustable period, Summation or Noise Reduction

## THERMAL

Detector Type:	VOx Microbolometer
Spectral Band:	7.5 - 13.5 $\mu$ m
Temperature Range:	-40°C to 160°C
Sensitivity:	Infrared (NE $\Delta$ T): <62.5mK @ f1.25
Focus Range:	2.3m to Infinity
Resolution:	640 x 512
Field of View:	10.4° x 8.3°
Zoom:	8x digital
IFOV:	0.283 mRAD
Readout:	<9 or 25Hz
IR Palettes	15x palettes / Isotherms
Level & Span	Auto or Manual

## VISIBLE CHANNEL

Resolution:	1920 x 1080 pixels
Sensitivity Day Mode:	0.4 lx (F1.35, 50 % IRE, ICR off)
Sensitivity Night Mode:	0.01 lx (F1.35, 50 % IRE, ICR on)
Exposure / Image Enhancements:	Auto or Manual
Focus Type:	Automatic with manual override
Focus Range:	<1.5m to Infinity
Useful Zoom Range (optical):	16° (0.5x) to 2° (2x)
Camera Module Zoom Range:	28x Optical zoom, 55.8° to 2,1°
Zoom type:	Stepped and Smooth
Zoom Range (digital):	4x, 6x, 8x, 12x
Maximum IFOV:	0.0477 mRAD

## DISPLAY

Type:	5.7" LCD, 640 x 480 pixels, color, manual or auto brightness up to 450cd/m <sup>2</sup> , variable angle
	Viewfinder, 800x600, Focusable, Adjustable Angle, Ventilated rubber eye piece
Display Modes:	UV+Visible, UV+LWIR, Visible only, LWIR only, UV only, UV Priority
UV Overlay Accuracy:	<1 milirad deviation
On Screen Display:	Gain, zoom, count, active functions

# SYSTEM SPECIFICATIONS:

Brochure Version: 2021/1  
Specifications subject to change without notice

IO & OS	
OS Features:	Icon based menu system 10x User Profiles
	Boot to inspection capable in 6s, to record capable in 60s.
	Image Sort Numbering
	Video list and playback
Input:	Keypad (right hand), Onboard & External Microphone
Output:	Composite Video
	Onboard speaker
Bi-Directional:	Micro USB, RS-232
Firmware:	Internal GPS, with external hotplug booster antenna
	LED Flashlight (Adjustable brightness , 10-100% usable range)
Software Update:	Via files downloaded from website to Micro SD card

MEDIA & DATA STORAGE	
Storage Medium:	Micro SD card (>= 64 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
Storage Format Radiometric Still:	UCF
Media Download:	Via Card Reader or USB

POWER	
Battery:	Sony Li-ion, Type L compatible
Battery Location:	Internal, quickly replaceable
Operating Time:	3hrs maximum
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

PROTECTION	
Storage / Transport Case:	Pelican style plastic hard case
Environmental Protection:	IP43
Safety Standard:	CE, IEC61010 - 1
Warranty:	12 months

PHYSICAL SPECIFICATION	
Ergonomics:	Rotatable grip w/ one handed keypad
Weight:	2.5 Kg including battery
Dimensions:	215 mm L x 200 mm W x 155 mm H
Window aperture:	Ø = 62 mm
Operating Temp:	-15 °C to 55 °C
Storage Temp:	-20 °C to 60 °C
Humidity:	Up to 90 %, non condensating
Mounting Point	Standard 1/4" X20 thread tripod mount

ACCESSORIES	
Reporting Software:	CoroBASE
Carrying:	Neckstrap & Camera Harness



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