



# CoroCAM® 7HD

Professional Solar Blind Corona Camera

The CoroCAM® 7HD makes location of corona discharges fast and effective. Highly zoomed HD imagery allows for the visualisation of the finest details. Easy to use features brings powerful performance. Optimise the camera sensitivity using the adjustable Long Integration, Noise Reduction, UV Threshold Level and Non-Solar Blind Mode (when applicable). Optimise the UV blob display using the UV Blob False Color, Blob Transparency and the adjustable Background Priority. The adjustable viewfinder, LCD display and rotatable grip makes for optimal ergonomics and allows the operator to use the camera in all light conditions from multiple stances, minimising muscle fatigue.

A built-in flashlight and Motorised Non-Solar Blind module makes this the perfect choice for indoor inspections.

# NOTABLE FEATURES:

Adjustable and focusable viewfinder

One handed operation

Onboard microphone and speaker

Rotating LCD Display

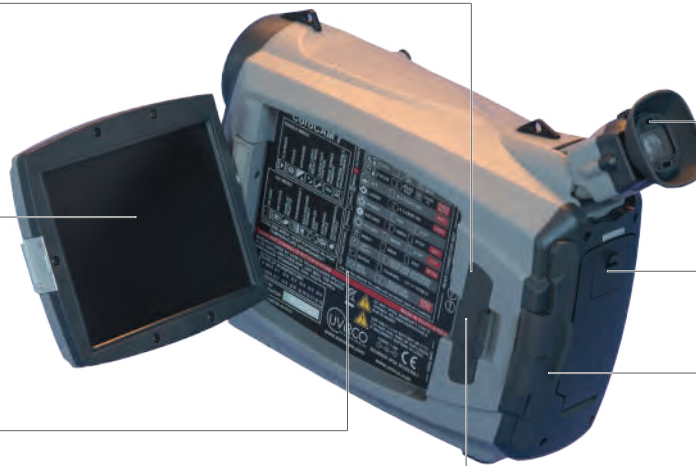
Instruction sticker



GPS booster antenna port

Laserpointer

Integrated high power flashlight with adjustable brightness levels



Ventilated viewfinder

Easily replaceable Li-ion batteries

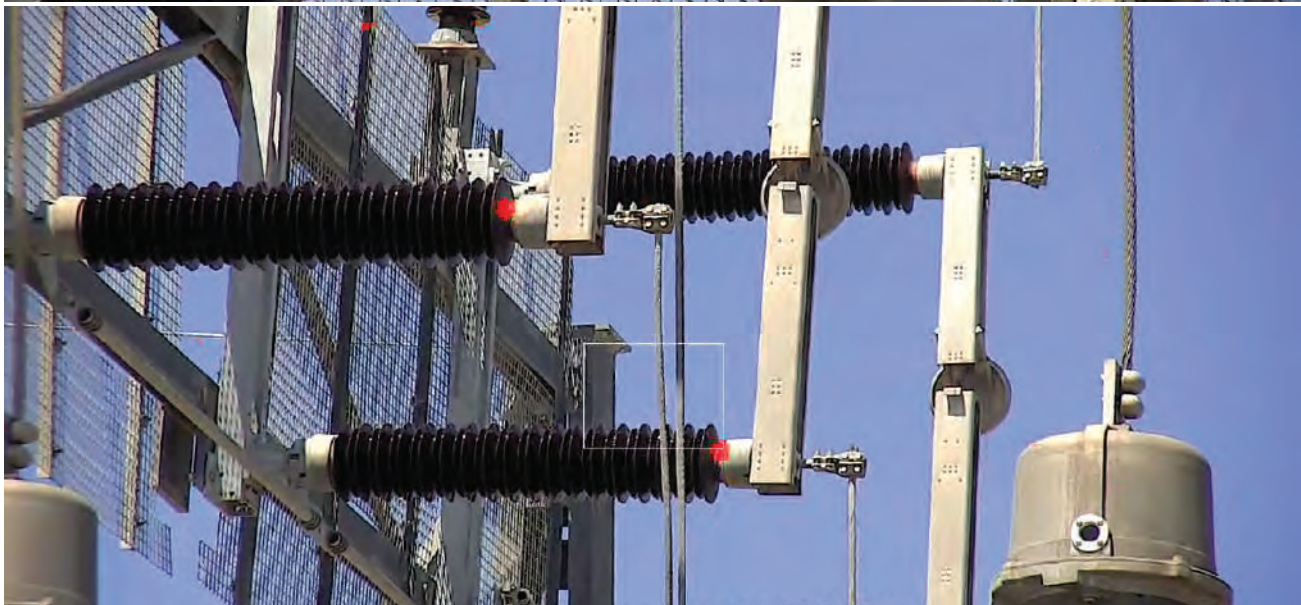
I/O connectors Ethernet, USB, HDMI, Micro SD Card

RS232/485



# NOTABLE FEATURES:

- High sensitivity detector, which can detect UVC emissions down to  $2.05 \times 10^{-18} \text{ W/cm}^2$ , this allows for the detection of the smallest corona discharges.
- Motorized Solar Blind (SB) filter removal in Non-Solar Blind (NSB) 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 visible camera with a resolution of  $1920 \times 1080$  pixels, recorded at 720p.
- Image Enhancements - Wide Dynamic Range and De-fog
- improves visible image quality in challenging conditions.
- Synchronized UV & Visible Zoom from 1x (defined as  $8^\circ \times 6^\circ / 10^\circ$  Diagonal) up 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.
- Fast boot up avoids the need for power saving modes.
- User profile setup, save and restore.
- Camera software update via download to Micro SD card.
- 18 Month warranty, extendable to 36 months.



## ULTRAVIOLET CHANNEL

Typical Sensitivity:	SB (240 - 280 nm) 2.05x10 <sup>-18</sup> Watt/cm <sup>2</sup> , IEC 60270:2000: 3pC @ 20m (Korea Electrotechnology Research Institute) & 1.8pC @ 10m (Innogy)   NEMA107-1987: 13.16dBµV(RIV) @ 1MHZ @ 10m (Korea Electrotechnology Research Institute) NSB (240-300 nm) ~ 1 x 10 <sup>-18</sup> Watt/cm <sup>2</sup> , 0.8pC @ 10 m Tested & certified by Innogy SE-Eurotest Germany: IEC 60270:2000
Field of view:	8° Horizontal x 6° Vertical ~ 10° Diagonal   Zoom Range (optical): 1x   Zoom Range (digital): 16° to 2°, in 4 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

## VISIBLE CHANNEL

Resolution:	1920 x 1080 pixels
Sensitivity Day Mode:	0.1 lx (F1.6, 50 % IRE, ICR off)
Sensitivity Night Mode:	0.05 lx (F1.6, 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:	30x Optical zoom, 58.9° to 2,11°
Zoom type:	Stepped and Smooth
Zoom Range (digital):	4x, 6x, 8x, 12x
Maximum IFOV:	0,01917 mRAD / 52.1629

## IO & OS

OS Features:	Icon based menu system, 10x User Profile. 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:	HDMI & Composite Video ; Onboard speaker
Bi-Directional:	Mini USB, RS-232 ; Optional Wi-Fi
Firmware:	Internal GPS, with external hotplug booster antenna LED Flashlight (Adjustable Brightness, 10-100% usable range)
Software Update:	Via files downloaded from website to Mirco SD card

## MEDIA & DATA STORAGE

Storage Medium:	Micro SD card (32 GB supplied with camera)
Storage Format Video:	AVI, 720p (H.264 compression)
Storage Format Still:	JPG, AVI, UCF
Media Download:	Via Card Reader or USB

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+Vis, VIS only, UV only, UV Priority
UV Overlay Accuracy:	<1 milirad deviation
On Screen Display:	Gain, zoom, count, active functions

POWER	
Battery:	Sony Li-ion, Type L compatible
Battery Location:	Internal, quickly replaceable
Operating Time:	>3hrs maximum, 2.5hrs typical
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

PHYSICAL SPECIFICATION	
Ergonomics:	Rotatable grip w/ one handed keypad
Weight:	2.2 Kg including battery
Dimensions:	275 mm L x 135 mm W x 190 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

PROTECTION	
Storage / Transport Case:	Pelican style plastic hard case
Environmental Protection:	IP55
Safety Standard:	CE, IEC61010-1
Warranty:	18 months

ACCESSORIES	
Carrying:	Neckstrap
	Camera Harness