



With Optional Thermal  
Module

## CoroCAM<sup>®</sup> UVS

Specialist UAV Corona Camera

The CoroCAM UVS is a designed for UAV combination of the successful CoroCAM Solar Blind corona sensor and a HD visible camera in a lightweight package able to fit into smaller gimbals. In addition the CoroCAM UVS can be equipped with an optional LWIR thermal module to allow for thermal inspection. The resulting system gives excellent UV sensitivity, a wide FOV for close up inspection and good resolving power.

Setup via bluetooth, with video and still recordings onto an onboard  $\mu$ SD card, downlink the HDMI or composite output and input remote control commands via CANBUS / PWM / RS232 / Ethernet.

## FEATURES:

Optional Thermal  
Module

Custom Pixy-C  
Gimbal Attachment

Mounting Points

Power, Record &  
Bluetooth buttons

Activity LED

Lens

Top Plate Can Be  
Customized For  
Mounting  
Requirement

MCX Connector,  
Remote Control,  
Analogue video &  
Power

HDMI Port

Auxiliary MCX  
Connector

Ethernet Port

SD Card Slot

USB Port



# SYSTEM SPECIFICATIONS:

CoroCAM UVS Brochure Version: 2024/1  
Specifications subject to change without notice

ULTRAVIOLET CHANNEL	
Typical Sensitivity:	SB (240 - 280 nm) $5 \times 10^{-18}$ Watt/cm <sup>2</sup> , 3.6pC @ 20m
Field of view:	18° Horizontal x 13.5° Vertical   Zoom Range (optical): 1x   Zoom Range (digital): 4x
Focus type:	Linked to Visible with manual override
Focus Range:	3m 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:	4 presets with 100 user selectable hues
UV Integration:	Adjustable period, Summation or Noise Reduction

VISIBLE CHANNEL	
Resolution:	1920 x 1080 pixels
Sensitivity Day Mode:	0.05 Lux F 1.6
Sensitivity Night Mode:	0.03 Lux F 1.6
Exposure / Image Enhancements:	Auto or Manual / Wide Dynamic Range
Focus Type:	Automatic with manual override
Focus Range:	3m to Infinity
Useful Zoom Range (optical):	24° (0.5x) to 4.5° (4x)
Camera Module Zoom Range:	10x, 53° to 4.9°
Zoom type:	Stepped
Zoom Range (digital):	4x, 6x, 8x, 12x
Maximum IFOV:	0.0445 mRAD

## WITH OPTIONAL THERMAL MODULES:

THERMAL CHANNEL	FLIR TAU 2	FLIR BOSON
Spectral Band:	7.5 - 13.5 $\mu$ m	8 $\mu$ m - 14 $\mu$ m
Sensitivity:	<50 mK	<50 mK
Resolution:	640 × 512	640 × 512
Field of View:	32° x 26°	24° x 19.2°
Level & Span:	Auto or Manual	Auto or Manual

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:	SBUS, (CAN or RS232 option), Ethernet; ON/OFF Switch (Always ON Selection via Jumper), Bluetooth Pairing, Record Start/Stop
Output:	HDMI via port or Ethernet / Wi-Fi (optional) & Composite Video (10 pin accessory port) Optional Wi-Fi - deactivates ethernet & adds 100g
Firmware:	Internal GPS, with external antenna via MCX connector
Software Update:	Via files downloaded from website to Mirco SD card

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## 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
Media Download:	Via Card Reader or USB

## DISPLAY

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

## POWER

Battery:	N/A
Power Consumption:	12 Watt
Operating Time:	Depending on Power supply (External or UAV battery) Typical 3hrs on 40W battery
Continuous Operation:	No overheating
Charging:	N/A
External Power Supply:	9-60 V 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

Useage:	Mounted horizontal (standard) or mounted vertical (optional)
Weight:	740 g without the brackets 800 g with Boson Module 1.25 Kg with the Pixy - C gimbal, brackets and thermal
Dimensions:	110 mm L x 143 mm W x 67 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 at bottom, M3 mounts bottom and right side
Center of Gravity	70 - 64 mm from rear (Depending on Options)

## PROTECTION

Storage / Transport Case:	Pelican style plastic hard case
Environmental Protection:	IP44 (Optional IP65)
Safety Standard:	CE, IEC1010-1
Warranty:	12 months



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