COROCAM

8UAV

The CoroCAM is a combination of thermal IR, blind solar corona and video camera, sized and balanced to fit a standard commercial drone.

amperis

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REMARKABLE FEATURES:

- High-sensitivity UV detector, which can detect UVc light at 2.05×10-18 Watt/cm2, this allows detection of the smallest corona discharges.

- 9Hz (or 25Hz optional) IR radiometric camera module

- Control of a limited number of camera functions from a standard RC controller using PWM or SBUS.

- Remote control of all camera functions from the laptop via an Ethernet link.

- Soft sync or staggered zoom of the 3 channel cameras. The IR and UV channels are digitally zoomed in, which is visible...optically zoomed in to the minimum FOV, and then digitally zoomed out.

- Manual or automatic focus for the visible channel, UV and IR channels have manual focus or can be synchronized with the visible channel.

- On-board still images, video and radiometric data recording in high quality formats.

- Fast setup and startup avoids the need for power-saving modes.

- The On Screen Display (OSD) shows all relevant data information.

- Easy operation of the camera via a multi-function keypad.

- Manual or automatic exposure of visible and IR (level) cameras, UV (gain) is manually adjusted.

- Integrated GPS with internal and external booster antenna

- Metadata recording of camera settings and measurements in addition to manually entered environmental variables: distance, air temperature, air pressure, ambient humidity and wind speed.

- Ultraviolet ray intensity sampling box.

- The UV overlay colors have 6 presets or 255 selectable tone levels.

- Control of translucency of the UV overlay.

- UV threshold, integration control and noise reduction

- 14 IR color palettes with contrast isotherms.

- Auto or Manual IR Span.

- Integrated LED flashlight and optional laser pointer

- Updating the camera software by downloading to the SD card.

- USB port for media download and Ethernet port for remote control.

- 15 months warranty.

SYSTEM SPECIFICATIONS

ZOOM
Visible Camera Zoom: 28x optical, 12x digital : **LWIR Optical Camera Zoom:** 1x optical, 8x digital
Camera UV zoom: 8x

FIELD OF VISION
Optical Wide Zoom: 16° | **Tele Optical Zoom:** 2° | **UV & IR Zoom Channel:** Digital to match visible FOV - up to 4x zoom |
FOV with UV overlay: All optical FOV | **Digital zoom / magnification:** 12x from minimum optical FOV | **Focus:** Automatic or manual on IR and visible channels, UV linked to visible/IR or independent manually |
Minimum focusing distance: UV 0.7m, VIS 0.7m, IR 2.3m

SENSITIVITY (TYPICAL)
Ultraviolet: (Solar Blind mode) 2.05 x 10-18 Watt/cm2 | (Non Solar Blind mode) ~1 x 10-18
W/cm2 : **Infrared (NEdT): <50mk :** Visible: **0.4** lx (F1.35, 50 % IRE, ICR off), normal 0.01
lx (F1.35, 50 % IRE, ICR on), automatic low light

RESOLUTION
Ultraviolet: 640 x 480 pixels | **Infrared:** 640 x 512 pixels | **Visible:** 768 x 576 pixels

IMAGE IMPROVEMENTS
Ultraviolet: Averaging and integration : **Infrared:** Automatic flat field correction (0.5s) Auto level and
length : **Visible:** Automatic low light, manual exposure

DISPLAY SPECIFICATIONS
Fusion Channel: Threshold mask, variable translucency : **Fusion accuracy:** better than 1
miliradian : **IR & UV palettes:** Standard IR + UV Rainbow

INTERFACE
Keyboard: Multi-function buttons | **Menu:** Icon-based menu system | **Remote control:** Via Ethernet, SBUS, PPM

I/O CHAMBER
USB: Auto USB 2.0 connection | **Ethernet:** Video streaming & remote control |
Composite video: PAL formats

IMAGE&DATA STORAGE
Image Format: Images saved as JPEG or AVI (H.264 compression) | **UCF radiometric file contains:** Displayed image, UV raw image, LWIR
radiometric values and Meta-data | **Meta-data contains:** Camera settings, GPS location, range to object | **Storage:** SD Card (Up to 64GB)

FIRMWARE FEATURES
Image Series Numbering: Allows automatic sorting of images when downloading to PC for reporting **Gallery & Viewing:** Viewing recordings :
Upgradeable field: Download latest firmware
Quick start: Power on to record capable in 60 s

FOOD
Battery: Watson Li-ion, Type L| **Operating time:** 4hrs maximum

PHYSICAL SPECIFICATIONS
Weight: 1.6 Kg | **Dimensions:** 188 mm L x 156 mm W x 129 mm H |
Operating temperature: -15 °C to 55 °C | **Storage temperature:** -20 °C to 60 °C

PROTECTION
Storage / Carrying case: Pelican style hard plastic case : **Camera housing:** IP 43 tested
Physical protection: Shock-absorbing covers : **Safety standards:** CE, IEC1010-1

AXIS COMPATIBILITY
Includes: Gremsy T3, DJI Ronin, and more