DAYLIGHT CORONA CAMERA FOR FIXED MOUNTING

CoroCAM 6DF

The CoroCAM 6DF is a variant of the CoroCAM 6D Corona Camera and has been optimised for fixed installations.

CoroCAM's are used to inspect HV & MV equipment for corona and arcing activity.

Enclosure:
The CoroCAM 6D internals are mounted into a rigid aluminium body designed to be weather proof. The body parts have been anodised silver and white to minimise solar heating.
The body has mounting points for easy attachment to brackets, pan and tilt systems or attachment of an optional weather-shields.
Custom weather-shields and brackets available on request.

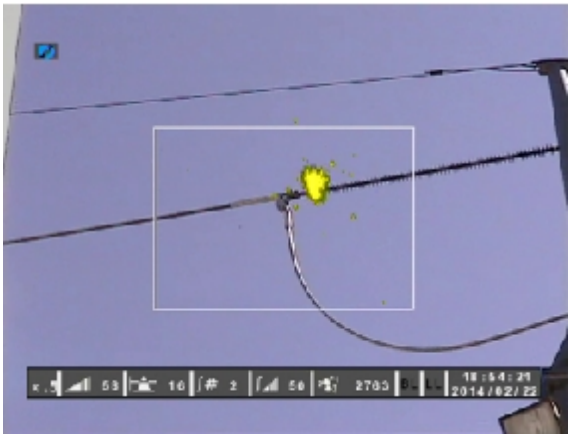
Remote Control and video streaming
The video stream and camera control commands are communicated via an Ethernet connection to a stand-alone (if used in a vehicle) or Networked (if remote tower mounted) PC.

The video stream can be viewed and recorded on the PC, using the CoroBASE Remote Control Module. Alternatively customers can integrate the control protocols into their own control software.

Quick Startup
60 seconds after application of power the video stream starts and the camera will accept commands from the remote PC.

Connections
- 12V DC
- GPS Antenna
- RS 485
- RJ 45 (Ethernet)
- BNC (Composite Video Output)

CoroCAM 6DF shown with optional weather shield and tilt bracket



CoroCAM 6DF monitoring critical equipment

Features:
- High sensitivity to UV signals from corona and arcing
- Solar blindness
- Excellent visible camera sensitivity
- Video streaming
- Rugged enclosure
- Remote controlled

Applications:
- Pole mounted for critical equipment monitoring.
- Pan & Tilt mounted for vehicle based inspection.
- Installed on UAV for aerial survey.
- Laboratory experiment monitoring.
- QA Work station for Generator / Motor or electronic assembly.
- Railway car installed for overhead line survey.

UVIRCO TECHNOLOGIES

SYSTEM SPECIFICATIONS

Brochure Version: 1
Specifications subject to change without notice.

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Ultraviolet Channel

Image type	Monochrome video
Sensitivity (Light)	$2.05x10^{-18}$ Watt/cm^2 Typical
(pC)	3 pC@ 20m (~ 0.75pC @ 10m) (Korea Electrotechnology Research Institute - IEC 60270:2000)
(RIV)	13.16dBμV(RIV)@1MHZ @ 10m (Korea Electrotechnology Research Institute - NEMA107-1987)
Spectrum	UV 240 – 280 nm
Field of View	8° Horizontal x 6° Vertical ~10° Diagonal = 1x system zoom
Zoom Range (optical)	1x System Zoom (SZ)
Zoom Range (digital)	16° (0.5x SZ) to 4° (2x SZ)
Focus type	Slaved to Visible with manual override

Visible Channel

Image Type	Colour video
Sensitivity (typical Max)(Lux)	0.0004 (F1.8, 50 IRE) @ 4fps & ICR on.
Sensitivity (typical)(Lux)	0.25 (F1.8, 50 IRE) @ 60fps.
Exposure	Auto or Manual Backlight compensation
Field of View	Synchronised with UV channel
Focus Type	Automatic with manual override
Focus Range	<0.7m to Infinity
Zoom Range (optical)	16° (0.5x SZ) to 4° (2x SZ)
Zoom Range (digital)	4x, 6x, 8x, 12x from SZ

Control Interfaces

Control Inputs	Via Ethernet / RS485
Status Indicator	LED On/Off
GPS	External module on bracket

Data Display

Display	External Monitor or PC
Display Brightness	UV on Visible /Visible only / UV only
On Screen Display	UV count Camera Settings Gain (0-100%), Threshold Focus (UV & Visible) Date/Time Corona Overlay Colour Integration / Averaging Control Menu System
UV / Visible Overlay Accuracy	<1 miliradian

Data I/O

Video Output	PAL (768x576) or NTSC (640x480), user selectable
Output Screen	User Interface or Report View

Data Storage

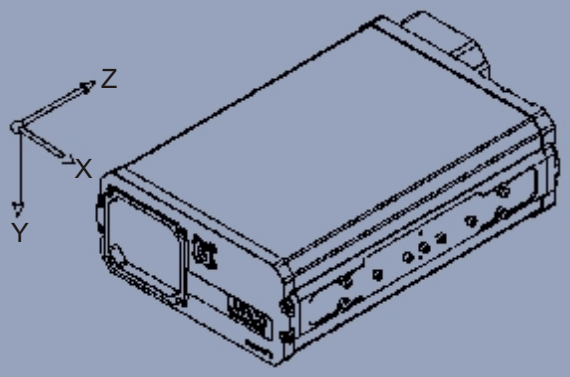
Storage Media	On PC
Image Format	JPEG
Video Format	AVI (H.264 compression)
Storage Capacity	Depends on PC capacity, 1GB/hour
Software Update	Via files downloaded from website to SD card.

Power System

Power Consumption	9 watt
External Supply	9-16V 12VA
Mains Adaptor	110-240Vac 50-60Hz / 12Vdc 3A
Protection	Reverse polarity, over current, Under voltage

Physical Dimensions

Size (Excl GPS bracket):	
X	165mm
Y	92.6mm
Z	257.9mm
Center of Mass (from top front corner):	
X	83.7mm
Y	38.7mm
Z	130.6mm



Weight	2.1 kg, excl sun shield
Window aperture	Ø= 62 mm
Mounting Points	¼" Thread tripod mount Mounting holes on sides

Environmental

Operating Temp	-15°C to 55°C
Storage Temp	-25°C to 60°C
Humidity	Up to 90%, non condensating
IP rating	Tested to IP 65
Physical Protection	Aluminium body panels
Safety standard	CE,IEC1010-1

Standard System

- CoroCAM 6DF DAYLIGHT UV IMAGER
- SD CARD
- CoroBASE SOFTWARE WITH REMOTE CONTROL MODULE
- POWER TRANSFORMER & MAINS CABLE (FOR TESTING)
- ETHERNET CABLE (2m, for testing)
- EXTERNAL GPS ANTENNA
- STICKER SET
- OPERATING MANUAL

Optional Accessories

- SUN SHIELD AND TILT BRACKET