



DayCor® UVollé

SX/VX models | In/outdoors | Video & Stills Camera | Value for Price

DayCor® UVollé-X compact handheld UV corona cameras for daytime inspections of electrical apparatuses in/outdoors, with special emphasis on ergonomic design and ease of operation. UVollé family incorporates Ofil's solar blind bi-spectral UV-Visible DayCor® technology having the highest sensitivity to corona signals as well as perfect signals positioning and a large Sun Readable WVGA LCD. UVollé cameras are used for remote non-destructive testing of high & medium voltage apparatuses, for seeing pinpointed information about corona partial discharge, and for recording videos with corona discharge. UVollé corona cameras reveal and display, in real time on-the fly, existing voltage related faults.

Ofil offers two variants UVollé- SX & UVollé- VX. These variants differ in their ability to take videos or stills. All other characteristics remain similar.

Fit for predictive maintenance in electrical utilities, metal fabricators (FAB), heavy industries, mines, refineries, data centers, workshops, electrical contractors and owners of high and medium voltage assets.

A CAMERA TO FIND FAULTS WITH

Discover unexpected faults and pinpoint their location. Find out in real time existing corona, known as the source for corrosive processes in insulation, metal fittings, concrete etc., radio interferences, audio noise and ultraviolet radiation

SEE TO FORESEE - PREDICTIVE MAINTENANCE

Inspecting with UVollé supports predictive maintenance. UVollé scores corona severity and indicates it on the output. The recorded corona blobs and their count together with narration, ambient conditions and GPS that are added by a dedicated GTRH sensor are the results of inspections. Aggregates of corona occurrences constitute the history of inspections and the base for trending analysis.

SMART CAMERA

Multiple options are available onboard such as controlling sensitivity in order to focus on the corona source; changing the color of corona in order to make it stand out against the background; count corona events; select focus mode and zoom; or change the camera default settings. Optional accessories include lenses, remote controls, GTRH sensor and external monitors.

- » Hi sensitivity to corona
- » Hi resolution TFT LCD
- » Recording & playback
- » Visible & UV zoom
- » Manual and auto focus
- » Light weight, slim
- » LED & Backlit keyboard
- » Extended battery run time
- » Temp. & humidity sensor
- » Indoors and outdoors camera

DAYCOR® TECHNOLOGY INSIDE

UVollé is a solar blind bi-spectral UV-Visible camera that incorporates Ofil's exclusive proprietary DayCor® technology [Registered Patent EP1112459B1]. UVollé provides reliable accurate data, showing the original occurrences of corona anchored to the emitters, operating continuously without overheating.

PRACTICAL AND TECHNICAL

Inspectors expect to get more, fast, simple and clear. UVollé is built for inspectors, offering simple intuitive operation, user friendly interface, fast response, clear results of corona events. Turn on, aim, shoot and store. No calibrations nor any further adjustments are needed throughout its life.

INDOORS AND OUTDOORS

A sun readable spacious LCD with brightness control supports outdoor operation, while backlit keyboard and a powerful LED flashlight fit indoors shady conditions. Dynamic FOV with manual and auto focus match indoors inspections of nearby objects as well as outdoor inspection of remote objects. Long battery runtime support outdoor activity and AC/DC inlet is handy for indoors. Ongoing operation without overheating supports both indoors and outdoors, ensuring stable availability.

SX	VX	TECHNICAL SPECIFICATIONS	
UV - OPTICAL PROPERTIES			
✓	✓	Minimum Discharge Detection	1 pC @ 12m (tested by Innogy SE-Eurotest Germany: IEC 60270:2000)
✓	✓	Minimum RIV Sensitivity	3.6 dBµV @ 1MHz @ 10m (tested by Innogy SE-Eurotest : NEMA107-1987)
✓	✓	Minimum UV Sensitivity	2.6x10 ⁻¹⁸ watt/cm²
✓	✓	Spectral Range	240-280nm
✓	✓	Detector Life Span	No degradation
✓	✓	UV Frames Integration	On Off
✓	✓	Focus type	Slaved to visible
VISIBLE - OPTICAL PROPERTIES			
✓	✓	Minimum Visible Light Sensitivity	0.1 Lux
✓	✓	Spectral Range	Visible range, Full color
✓	✓	Focus Range and Type	0.9m 1.9ft to infinity, manual & auto (0.5m 1.6ft w/ close-up lens)
✓	✓	Zoom	10x Optical, 12x Digital
IMAGING PERFORMANCE			
✓	✓	Field of View (HxV)	6.4º x 4.8º
✓	✓	Focus	Full manual and auto focus for UV and visible channels
✓	✓	UV Zoom	3 steps
DISPLAY			
✓	✓	Image Modes	Visible/UV/Combine
✓	✓	UV/Visible Overlay Accuracy	Deviation < 1 miliradian
✓	✓	Display	5" Color sun readable TFT LCD WVGA (800X480 pixels) 1000 cd/m²
✓	✓	Status Indicators	Battery, Memory, Gain, Counting, Date, Selected functions, Focus, Inspection mode , corona color, GPS (access.), Temp & Humidity(access.)
✓	✓	User Configuration Settings	Corona color (White, Red , Green, Yellow, Purple) Time, Sleep Mode, LI, LCD Parameters
CONTROL & OPERATION			
✓	✓	Working Modes	Real time, standby, off
✓	✓	Continuous Operation	Unlimited. No overheating
✓	✓	Control Inputs	Keypad hot keys & menu
✓	✓	Mounting Point	Standard 1/4" x20 thread tripod mount
✓	✓	Flashlight	Built-in, LED 2 steps
MEDIA CAPTURE & STORAGE			
	✓	Video Capture & Playback	
✓	✓	Stills Capture & Playback	
✓	✓	Digital Storage	Removable SD card
	✓	Video Format	AVI
✓	✓	Stills Format	BMP
	✓	Audio	External microphone
OUTPUT INTERFACES			
✓	✓	Video Out (NTSC, Standard), GPS, Temp & Rel Humidity Meter	
POWER SUPPLY			
✓	✓	Battery type	Li-Ion
✓	✓	Battery Run Time	4 hours
✓	✓	External Supply	DC 9V
✓	✓	Nominal Power Consumption	6.5-10.5VDC, 10 Watts
COMMUNICATION			
✓	✓	Interface	RS232
PHYSICAL CHARACTERISTICS			
✓	✓	Size (LxWxH)	29x13.6x8.5 cm 11.4"x5.4"x3.3"
✓	✓	Weight	1.39Kg 3lb
ENVIRONMENT			
✓	✓	Operating & Storage Temp Range	-20°C up to +55°C -4°F up to +131°F
✓	✓	Encapsulation	IP54
ACCESSORIES			
Close-up & Wide FOV Lenses; CoronaWise SW; Temp.& Rel Humidity Meter; GPS; Wired Remote control; Insepction Guide			

Specifications are subject to changes without notice. Imagery used for illustration purposes only. Copyright 2019, Ofil Ltd. Ver: 19.2



DayCor® LUMINAR HD

Handheld high definition corona camera

Luminar^{HD} is a handheld corona camera enhanced with features that guarantee the highest sensitivity to UV, highest resolution and high quality recording. Luminar^{HD} provides pinpointed and comprehensive data with information about the ambient conditions, fault location and corona strength. Findings are available in real time and displayed on a high definition LCD. Luminar^{HD} assists inspectors investigate electrical faults and get a wider understanding of the asset condition. Luminar^{HD} supports corona management and includes an interface to coronaWise software with auto-detect and data transfer. By using this camera, engineers benefit from immediate access to active faults. Additionally, the collected media can be used for analysis and trending. Luminar^{HD} incorporates Ofil's benchmarked DayCor® proprietary technology ensuring daytime operation with the highest sensitivity to UV radiation of corona. Luminar^{HD} is ergonomically designed and built for extended uninterrupted operation.

- » Highest sensitivity
- » Powerful zoom
- » Hi resolution TFT LCD
- » Recording & playback
- » HD 720p videos
- » Built-In GPS
- » Wi-Fi hot spot
- » LED & Backlit keyboard
- » Signals amplification
- » Noise reduction control

SENSITIVITY IS THE KEY FACTOR

Corona can only be seen in daytime by a solar blind imager, but to be able to see UV photons, the corona elements, from afar and not miss any occurrence of corona, a hyper sensitive camera such as Luminar^{HD} is required. To ascertain the performance of Luminar^{HD} the camera has been tested and certified having a sensitivity of detecting as low as 1pC from a distance of 15 meters. Signal amplification and noise reduction contribute to better resolution and performance.

SEE TO FORESEE - PREDICTIVE MAINTENANCE

Luminar^{HD} is a HD video and stills recorder of corona events superimposed on visible imaging of their sources. The camera scores corona severity and indicates it on the output together with narration, ambient conditions and GPS. Luminar^{HD} output is valuable to predictive maintenance, which relies on past performance evidence and documentation.

DAYCOR® TECHNOLOGY INSIDE

Luminar^{HD} is a high fidelity bi-spectral solar blind camera implementing Ofil's proprietary DayCor® technology [Registered Patent EP1112459B1]. Luminar^{HD} offers over 3 hours ongoing continuous battery run time operation without overheating.

PERFECTION IN EVERY DETAIL

Spanning from the spacious onboard function buttons with on/off backlight, through a pictorial menu, large adjustable TFT LCD, powerful LED flash light, preset profiles and more, up to the most elaborated detector, Luminar^{HD} is dedicated to perfection. By achieving extremely ergonomic design and fortified detection power, Ofil enables you to enjoy a notably reliable product with excellent results.

ALL IN ONE

Luminar^{HD} is an outstanding testing equipment to enjoy under multiple conditions: whether indoors or outdoors, nearby or afar inspections, as a handheld unit or mounted, controlled locally or remotely. All features in one equipment, all requirements equally met. The powerful onboard LED takes care of dimmed working compartments, while full solar blind filter ensures full operation under sunny conditions. Powerful zoom, 1000 nits TFT LCD and HD video support resolving details of remote objects. Wi-Fi and Ethernet support controlling the camera remotely getting the output imaging onto an external monitor. Continuous operation without overheating and a rechargeable battery with extended lifetime helps accomplish efficient outdoor inspection.

HANDHELD

TECHNICAL SPECIFICATIONS

UV - OPTICAL PROPERTIES

Minimum Discharge Detection	1pC @ 15 m Tested & certified by Innogy SE-Eurotest Germany: IEC 60270:2000
Minimum RIV Detection	3.6dB μ V (RIV) @1MHz@10m Tested & certified by Innogy SE-Eurotest : NEMA107-1987
Minimum UV Sensitivity	2.2x10 ⁻¹⁸ watt/cm ²
Fields of View	H: 10° - 1.6° V: 5.6°-0.9° Synchronized with visible channel, optic & digital, continuous
Focus	Full manual and auto focus for both channels
UV Zoom	2x Optical 6.25x Digital, Slaved to the visible channel
Spectral Range	240-280nm
UV Frames Integration	ON/OFF ON: [Snapshot only Amplification False elimination filter]
UV Display Colors	Polychromatic: Red, Green, White, Black, Yellow

VISIBLE - OPTICAL PROPERTIES

UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Minimum Visible Light Sensitivity	0.07 Lux
Video Standard	HD, 720p ,1280X720px
Fields of View	H: 10° - 1.6° V: 5.6°-0.9° Synchronized with UV channel, optic & digital, continuous
Focus Range	0.6m 1.96ft Automatic & manual
Visible Zoom	12x Optical, 12x Digital, continuous
UV & Visible Channels Display Modes	Combine UV & Visible, UV only, visible only

DISPLAY

Type	Color, sun readable, TFT LCD
Brightness	1000 cd/m ² , adjustable backlight
Resolution	WVGA, 800 x 480 pixels RGB
Size	5"
Tilting	Adjustable angles

I/O & CONTROLS

Input	Audio, temperature & humidity sensor, Mini USB, Ethernet
Output	HDMI, Aux, 1GB Ethernet, Wi-Fi, Mini USB
Functions Activation	Keypad buttons with adjustable backlight, featured menu, remote control
GPS	Built-in, internal antenna
Text Editor	Built-in
Data Export	Ethernet, Video-out, micro SD card
Flashlight	Built-in, LED, 2 steps

ENVIRONMENTAL

Storage and Operation Temp	-20°C up to +55°C -4°F up to +131°F, fanless
IP Rating	IP 54

MEDIA CAPTURE & DATA STORAGE

Video & Stills Capture & Playback	Internal, gallery display & playback video, audio & still pictures
Video Format	MOV res. 720p
Stills Format	JPG
Audio	M4A\1099
Digital Storage	Memory flash card Micro SD

PHYSICAL CHARACTERISTICS & POWER SOURCE

Weight	2.2 Kg 4.85 lb
Dimensions L x W x H	L29 x W13 x H11.7cm 11.4" x 5.1" x 4.6"
Nominal Power Consumption	15 Watts
Power Source	Rechargeable (int & ext) battery run time >3 hours, Universal AC/DC 9.5V adapter
Mounting Point	Standard 1/4" X20 thread tripod mount
LED Indicators	On\Off, sleep mode, recording mode, power source

ACCESSORIES

Close-up Lens; coronaWise Software; Temp & Humidity Meter plug, Remote Control wired or wireless
--

Specifications are subject to changes without notice. Imagery used for illustration purposes only. Copyright 2020, Ofil Ltd. Ver. 20.1

Ofil USA LTD | Ofil LTD

www.OfilSystems.com | ofil@ofilsystems.com | +1.888.950.5557



DayCor® MiCROM HD

Ultra light corona camera for UAV | HD - High Definition

DayCor® micROM is a compact HD corona camera designed for use on UAVs or inside small gimbals. It is light in weight, has low power consumption, supports most commonly used communication protocols, and is electromagnetically shielded. micROM is a dual sensors camera comprising of a highly sensitive Solar Blind UV and a visible light sensor. As a result, micROM is capable of detecting, pinpointing, and imaging corona in daylight. The camera offers on-board recording in real time of corona partial discharge as it is emitted. The camera output is used as a means to investigate electrical and mechanical infrastructure faults that are related to corona partial discharge.

micROM camera for drones incorporates the DayCor® technology. Its patented UV filter ensures encompassing every corona signal in the inspected arena, leaving out sporadic distracting noise. HD footage is transmitted live to a remote monitor leading inspectors to faulty locations that call for closer investigation. Interfaces to GPS links the corona imaging with findings' locations. A full integration Plug-N-Play solution package is ready to be used and offered to DJI m300 drone operators as an accessory. micROM is easy to integrate through a set of commands that are supplied with the camera.

- » HD video & stills camera
- » Light weight, small size
- » Wide FOV
- » Low power consumption
- » Communication protocols
- » UV noise reduction
- » Optical & digital zoom
- » Electromagnetic shielding
- » Easy integration on UAS
- » Gimbal options w/integration support

MAXIMIZE FLIGHT DURATION, SPEED & FLEXIBILITY

In order to maximize flexibility, duration and velocity, weight must be kept to a minimum. micROM HD is a lightweight camera with energy-efficient usage, allowing longer, higher and faster flights scanning power lines. micROM HD silhouette simplifies the outline of gimbals design requirements.

SEE MORE GET MORE

micROM outputs & records HD videos providing a clear view of the inspected scenes, allows reading name plates & catalogue numbers of equipment for maintenance referencing. Videos can include corona events count, date & time, GPS, temperature and humidity (optional). Hence, higher resolution ends in more detailed data

MANAGE TIME EFFICIENTLY

micROM HD provides in real time the representation of corona as it is emitted, displaying both the discharge and the faults. Imagery, which is clear and sharp even while on the move, is used to determine fault location and level of severity.

EASILY INTEGRATED WITH YOUR UAV

micROM HD is controlled through a set of communication commands, using interfaces such as RS232, MAVlink, S. BUS, CAN BUS and MFIO-PWM. Gimbals for various UAVs with integration support are available as optional accessories.

INCREASE SAFETY AND PRODUCTIVITY

Unparalleled corona detection precision is attained through the implementation of Ofil proprietary solar blind DayCor® technology [Registered Patent EP1112459B1]. Absolute solar blindness ensures effective operability in daytime and guarantees highest sensitivity to corona UVc radiation. Enhance your productivity by referring to true corona occurrences without missing any.

MATCH YOUR DIMENSIONS

micROMHD is offered either as a camera core to be incorporated in gimbals or any other enclosure, or as an encapsulated micro corona camera. Possible to switch between profiles and select the most appropriate one.

TECHNICAL SPECIFICATIONS

ULTRA VIOLET (UV) - OPTICAL PROPERTIES

Sunlight Rejection	Absolute – at all sunlight and all weather conditions, target can be inspected with the sun in the field of view
Minimum Discharge Detection	1pC @ 8 m (tested by Innogy SE-Eurotest : NEMA107-1987)
Minimum UV Sensitivity	7.8×10^{-18} watt/cm ²
Minimum RIV Detection	30dB μ V (RIV) @1MHz@10m
Field of View H x V	H: 20° x V:11.25°
Focus	Manual and auto focus, UV & Visible channels synchronized
UV Zoom	3x digital continuous zoom; UV & Visible channels synchronized
UV Frames Integration	On, selectable from a range Off
UV Display Colors	Selectable from a range of colors
Spectral Range	240-280nm
UV Blobs Count	UV events per minute, 3 FOV sizes

VISIBLE - OPTICAL CONFIGURATION

UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Minimum Visible Light Sensitivity	0.03Lux
Field of View	H: 20° x V:11.25°, UV & visible channels synchronized
Visible Zoom	3x optical
Noise Reduction	Yes
Focus Range	5m to infinity, automatic & manual

DATA STORAGE

Video Out Standard	HD 720p 60fps
Video Format	MOV
Image Format	JPG
Storage	FAT-32, exFAT

I/O CONTROLS AND OPERATION

Video Interface	HDMI, RTSP
Communication Protocol	micROM-Protocol, GPS-NMEA, MAVlink, S. BUS
Interfaces	RS232, CAN BUS, MFIO-PWM, UART
Connectors	microHDMI, RJ45, Power, AUX, MFIO, miniUSB, JST
UV & Visible Output Combination Modes	Combine (UV & Visible), UV only, visible only

PHYSICAL CHARACTERISTICS & POWER SOURCE

Storage and Operation Temperatures	-20°C up to +55°C -4°F up to +131°F
Weight	Camera core: 675 gr [1.48lb] Block Camera: 875gr [1.92lb]
Dimensions	L156 x W112 x H71mm L6.14" x W4.4"x H2.79"
Power Source & Consumption	7-28V DC, 12 Watts
Sealing, Vibration and Shock	IP 42
Mounting	Precision mounting threads

ACCESSORIES

Installation kits, Adaptors & Gimbals for various UAVs with and integration support

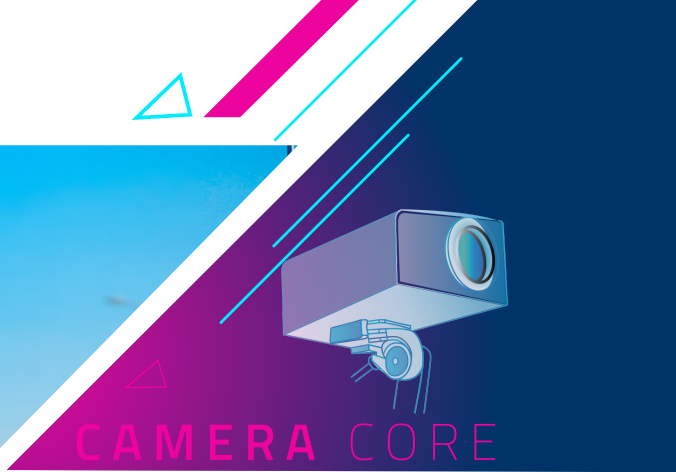
GPS

CoronaWise - Corona Management Software

Li-Po rechargeable batteries: med range for 90 min | long range for 4 hours

Specifications are subject to changes without notice. Imagery used for illustration purposes only. Copyright 2020, Ofil Ltd. Ver. 22.1

Ofil USA LTD | Ofil LTD | Ofil China
www.OfilSystems.com | ofil@ofilsystems.com | +1.888.950.5557



DayCor® UV-EYE HD

OEM Multipurpose Block HD Corona Camera

DayCor® UV-Eye is a bi-spectral UVc-Visible solar blind block camera for OEM integrations. The UV-Eye is a daytime corona & arcing imager. It incorporates an ultraviolet detector and an HD visible camera to enable detecting, seeing and pinpointing UVc radiation sources. A proprietary embedded SBUV filter ensures perceiving UVc traces under daylight without being obscured by the sun.

DayCor® UV-Eye can be integrated on helicopters, vehicles, trains, robots, ATVs or as a stationary camera and more. Organizations use UV-Eyes to perform inspections on the move.

- » HD camera
- » Rugged & Light weight
- » Highest sensitivity to UV
- » HDMI & Ethernet interfaces
- » Bi-Spectral UV-Visible
- » Fit for speedy inspections
- » Corona events counting
- » Powerful optical zoom
- » Block camera

CRITICAL INFORMATION ON DEFICIENCIES

DayCor® UV-Eye HD camera core adds critical information on deficiencies in high/medium voltage systems caused either by bad design, structural & mechanical problems, contamination, eroded insulation, loss of hydrophobicity and other voltage related issues.

HIGH SPEED LONG DISTANCE INSPECTION

Users of DayCor® EyeHD benefit from fast results in real time, high resolution videos, pinpointed visual display of multiple existing discharges on remote and nearby components. Throughout the inspection, HD video is transmitted to a remote LCD. Videos are sharp and clear.

EASY INSTALLATION & MOUNTING

DayCor® Eye HD is enclosed in a rugged durable electromagnetically shielded housing and has a socket for standard 1/4" thread mount.

ENHANCED INSPECTION FEATURES

DayCor® Eye HD has a powerful optical and digital zoom for both visible & ultraviolet spectral ranges, and a wide FOV for scanning larger areas.

SHARING IN REAL TIME

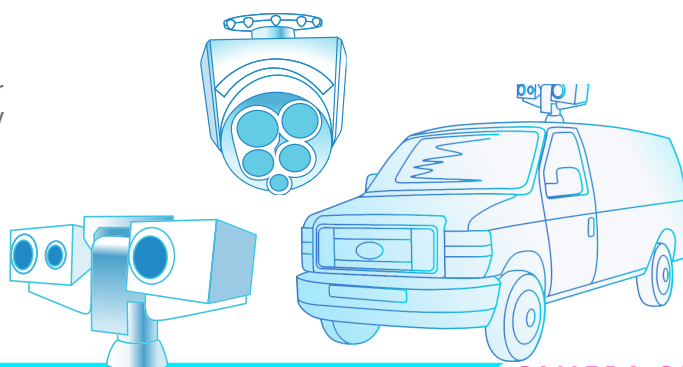
HDMI interface streams out H.264 digital video ensuring the delivery of high quality video at very low data rates. The streamed video is useful for computerized machine learning (ML), fault recognition, diagnostic, trending and more. Corona events count can be added to the transmitted media.

REMOTELY CONTROLLED

DayCor® UV-Eye HD is controlled through a set of communication commands using a bi-directional RS232 1GB Ethernet interface.

DAYCOR® TECHNOLOGY INSIDE

DayCor® UV-Eye HD incorporates Ofil's exclusive proprietary DayCor® technology [Registered Patent EP112459B1].



CAMERA CORE

TECHNICAL SPECIFICATIONS

ULTRA VIOLET (UV) - OPTICAL PROPERTIES

Sunlight Rejection	Absolute – at all sunlight and all weather conditions, target can be inspected with the sun in the field of view
Minimum Discharge Detection	1pC @ 15 m, Innogy SE - Eurotest, Test Regulation IEC 60270:2000 PD Measurement
Minimum UV Sensitivity	1.9×10^{-18} watt/cm ²
Minimum RIV Detection	3.6dB μ V (RIV) @1MHz@10m
Fields of View H x V	H: 10° - 1.6° V: 5.6°-0.9° Continuous. UV & visible channels synchronized
Focus	Full manual and auto focus for both UV & Visible channels
UV Zoom	2x (Opt.), 6.25x (Dig.), Synchronized with the visible channel, continuous
UV Frames Integration	On Off
UV Display Colors	Multiple shades: Red, Green, White, Black, Yellow
Spectral Range	240-280nm

VISIBLE - OPTICAL CONFIGURATION

UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Minimum Visible Light Sensitivity	0.07Lux
Fields of View	H: 10° - 1.6° V: 5.6°-0.9° Continuous. UV & visible channels synchronized
Visible Zoom	12x optical & 12x digital, continuous
Noise Suppression	Yes
Focus Range	0.6m 1.96ft to infinity, automatic & manual

DATA OUTPUT

Video Out Standard	HD 720p
Streaming Format	Real Time Streaming Protocol - RTSP
Video Compression Standard	H.264

I/O CONTROLS AND OPERATION

I/O Interfaces	HDMI, 1GB Ethernet bi-directional
UV & Visible Output Combination Modes	Combine (UV & Visible), UV only, visible only

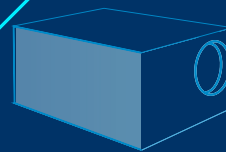
PHYSICAL CHARACTERISTICS & POWER SOURCE

Storage and Operation Temp	-20°C up to +55°C -4°F up to +131°F
Weight	3.6 Kg 7.9lb
Dimensions L x W x H	32.5 cm x 18.5 cm x 15 cm L12.7" x W7.28" x H5.9"
IP Rating	IP65
Nominal Power Supply & Consumption	12V DC, 36 Watts
Vibration and Shock	ETSI EN 300 019-2-5 V3.0.0 (2002-12), IEC 60068-2-64

ACCESSORIES

ConecTOP - Remote control Desktop Software

Specifications are subject to changes without notice. Imagery used for illustration purposes only. Copyright 2023 Ofil Ltd. Ver. 23.1



CAMERA CORE

DayCor

UV-EYELITE HD

OEM Multipurpose Block HD Corona Camera

DayCor® UV-Eyelite is a compact bi-spectral UVc-Visible solar blind block camera for OEM integrations. The UV-Eyelite serves as a corona and arcing detector and can be integrated on vehicles, trains, robots, ATVs etc., to perform inspections on the move during daylight.

- » Block camera
- » Compact dimensions
- » HD video
- » Highest sensitivity to UV
- » Bi-Spectral UV-Visible
- » For inspections on the move
- » Corona events counting
- » Ethernet communication
- » Wide FOV
- » Weather protected

Vehicles | Trains | ATVs | Stationary | Robots

EXPANDING HUMAN EYE VISUAL SPECTRUM

The UVc optical channel enables seeing only the invisible corona radiation, while the visible channel complements the image of the location and objects. Both channels are merged letting inspectors get a pinpointed clear view of the corona and the emitting source.

THE BENEFITS TO INSPECTORS

DayCor® UV-Eyelite, not only expands the human eye visual spectrum, it also reveals the grid hidden secrets of faulty design, improper installations, mismatching components, contamination, broken conductors, insulation issues, and other which deteriorate the grid reliability, accelerate aging and other, and alerts of safety conditions. UV-Eyelite highlights the weak spots that need attention and cuts investigation duration.

HIGH SPEED INSPECTION

UV-Eyelite transmits HD video on-the-fly, without image processing nor frames integration. The resulted videos are sharp, showing pinpointed information without smearing, even during high-speed motion.

EASY INSTALLATION & CONTROL

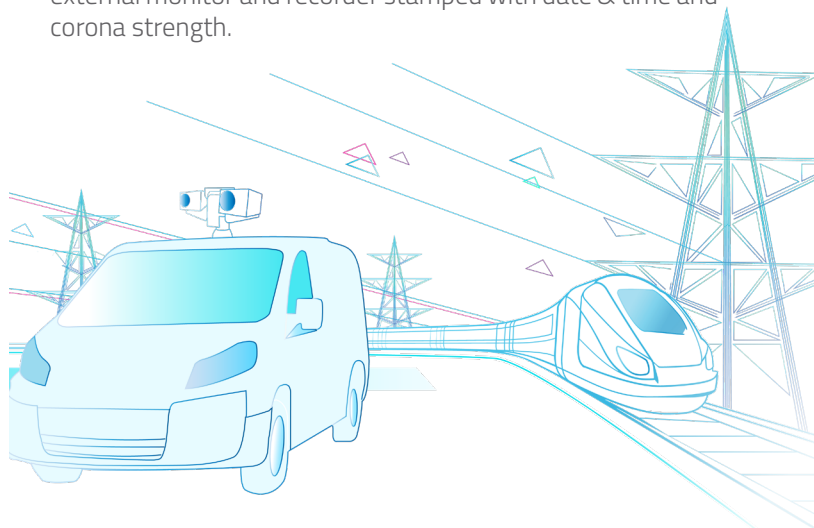
UV-Eyelite fits into narrow compartments and can be easily mounted in brackets, pan and tilt systems or weather shields. The module can be remotely controlled using a provided set of commands or Ofil's ConecTOP software.

DAYCOR® TECHNOLOGY INSIDE

UV-Eyelite incorporates Ofil's exclusive proprietary DayCor® technology [Registered Patent EP1112459B1]. UV-Eyelite features high sensitivity to UVc and provides a qualitative indication of the corona strength.

HD DATA TRANSFER | VIDEO RECORDING | STORING

The visual HD information is ready to be communicated to an external monitor and recorder stamped with date & time and corona strength.



CAMERA CORE

TECHNICAL SPECIFICATIONS

ULTRA VIOLET (UV) - OPTICAL PROPERTIES

Sunlight Rejection	Absolute – at all sunlight and all weather conditions, target can be inspected with the sun in the field of view
Minimum Discharge Detection	1pC @ 15 m, Innogy SE - Eurotest, Test Regulation IEC 60270:2000 PD Measurement
Minimum UV Sensitivity	2.05 x 10 ⁻¹⁸ watt/cm ²
Fields of View H x V	8° x 6°
Focus	Full manual and auto focus for both UV & Visible channels
UV Frames Integration	On Off
UV Display Colors	UV color in the combined view 8 colors: red, orange, yellow, green, light blue, blue, purple, pink. In the UV Only view: white
Spectral Range	240-280nm

VISIBLE - OPTICAL CONFIGURATION

UV/Visible Overlay Accuracy	Deviation < 1 milliradian
Minimum Visible Light Sensitivity	0.25 Lux
Fields of View	8° x 6°
Focus Range	1m 3.28ft to infinity, automatic & manual

DATA FORMAT

Video Out Standard	HD 720p
Stream Format	RTSP
Video Format	H.264

I/O CONTROLS AND OPERATION

Interface	1GB Ethernet bi-directional for commands & video streaming
UV & Visible Output	Combine UV & Visible

PHYSICAL CHARACTERISTICS & POWER SOURCE

Storage and Operation Temp	-20°C up to +55°C -4°F up to +131°F
Block Camera Weight	2.1 Kg 4.6 lbs
Camera with Enclosure Dimensions L x W x H	L281 mm x W166mm x H92 mm L11" x W6.5" x 3.6"
Nominal Power Supply & Consumption	12V DC, 36 Watts
Vibration and Shock	ETSI EN 300 019-2-5 V3.0.0 (2002-12), IEC 60068-2-64
IP Rating	IP65

ACCESSORIES

ConecTOP Desktop Application SW

Specifications are subject to changes without notice. Imagery used for illustration purposes only. Copyright 2023, Ofil Ltd. Ver. 23.1 R2

Ofil USA LTD | Ofil LTD | OFIL CHINA

www.ofilsystems.com | ofil@ofilsystems.com | +1.888.950.555



Gridnostic

Advanced Diagnostics, Intelligent Solutions

In an era overflowing with information, the true challenge is transforming vast amounts of grid data into actionable insights that drive informed decision-making. OFIL Systems' Gridnostic is a cutting-edge grid diagnostics platform that seamlessly aggregates all data sources to deliver comprehensive, actionable insights. It is designed to revolutionize how you manage and maintain your electrical assets. Whether you seek a holistic overview or detailed diagnostics, Gridnostic ensures reliability, efficiency, and safety in the high-voltage electricity sector.



Developed based on research and guidelines from the Electric Power Research Institute **EPRI**

Key Features



Diagnostics Capabilities

Our platform converts complex imagery data into clear numeric severity scores, delivering actionable insights for efficient asset health management.



Multi-sensor Integration

Leverage multi-sensor technology including UV, RGB and Thermal to enhance analysis capabilities.



GIS-enhanced Platform

Integrates all inspection data within a geospatial context, offering a strategic, map-based overview of grid health.



Simplifying Complexity - AI Enabled

Transform complex data into clear, actionable insights with AI models enhancing data interpretation.



Asset-based Data Management & Reporting

Efficiently manage historical data and enhance communication with sharing and reporting capabilities



Expert Advice & Diagnostics

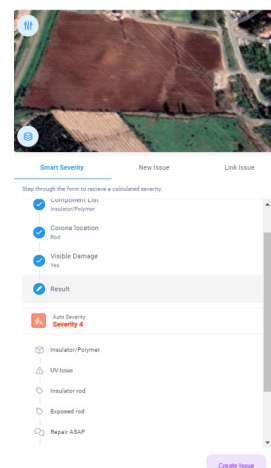
Backed by years of industry knowledge, receive expert advice and diagnostics to solve problems faster.

Severity Diagnostic Tool

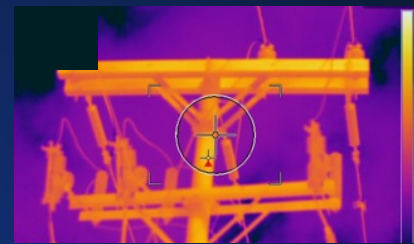
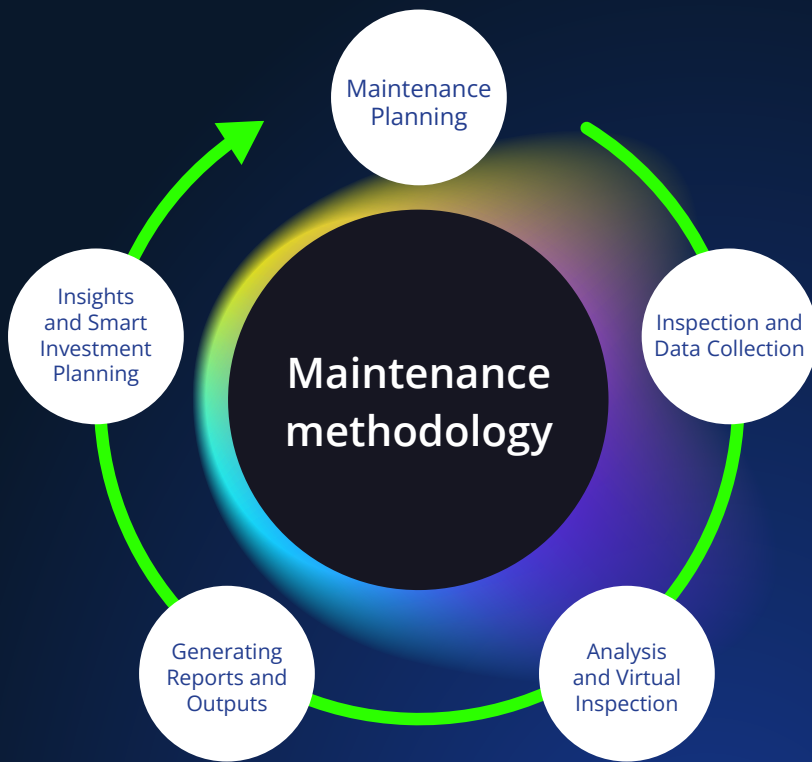
Evaluate images and videos captured by RGB cameras, as well as specialized thermal and UV sensors, using a dynamic, interactive evaluation interface that guides the determination of numerical severity scores.

- Reduces subjective interpretation, translating qualitative assessments into quantitative severity scores.
- Contextual Integration: Adjusts severity scores based on geographical and infrastructural parameters, aligning diagnostics with real-world impact considerations.

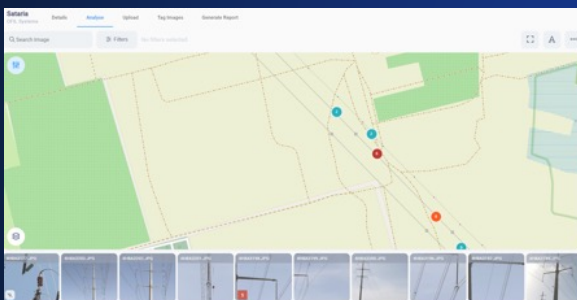
Fast • Reduced Subjectivity • Simple • Multiple Sensors integration • Consistent Results



Severity Diagnostic Tool

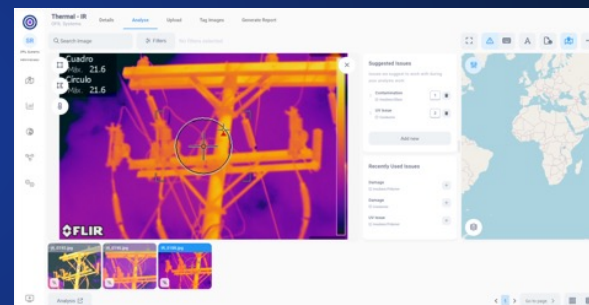


Multi-sensor integration



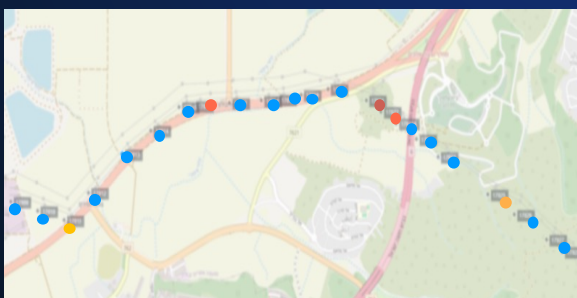
Map Display

Pictures are color-coded according to their severity levels, allowing for quick visual assessment of priority areas in T&D networks and substations.



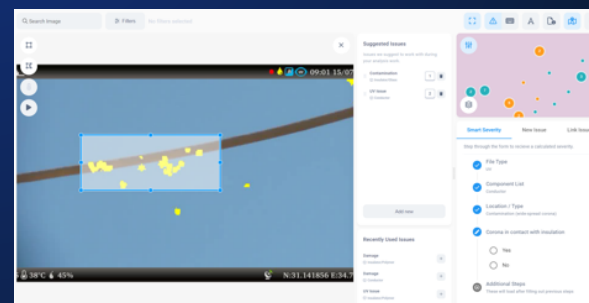
Analysis Interface

Comprehensive interface for analyzing the inspection data.



Asset Overview

Dashboard that offers a comprehensive view of all electrical assets and their health levels.



Severity Diagnostic Tool

Dynamic, interactive evaluation interface that guides the determination of numerical severity scores.