

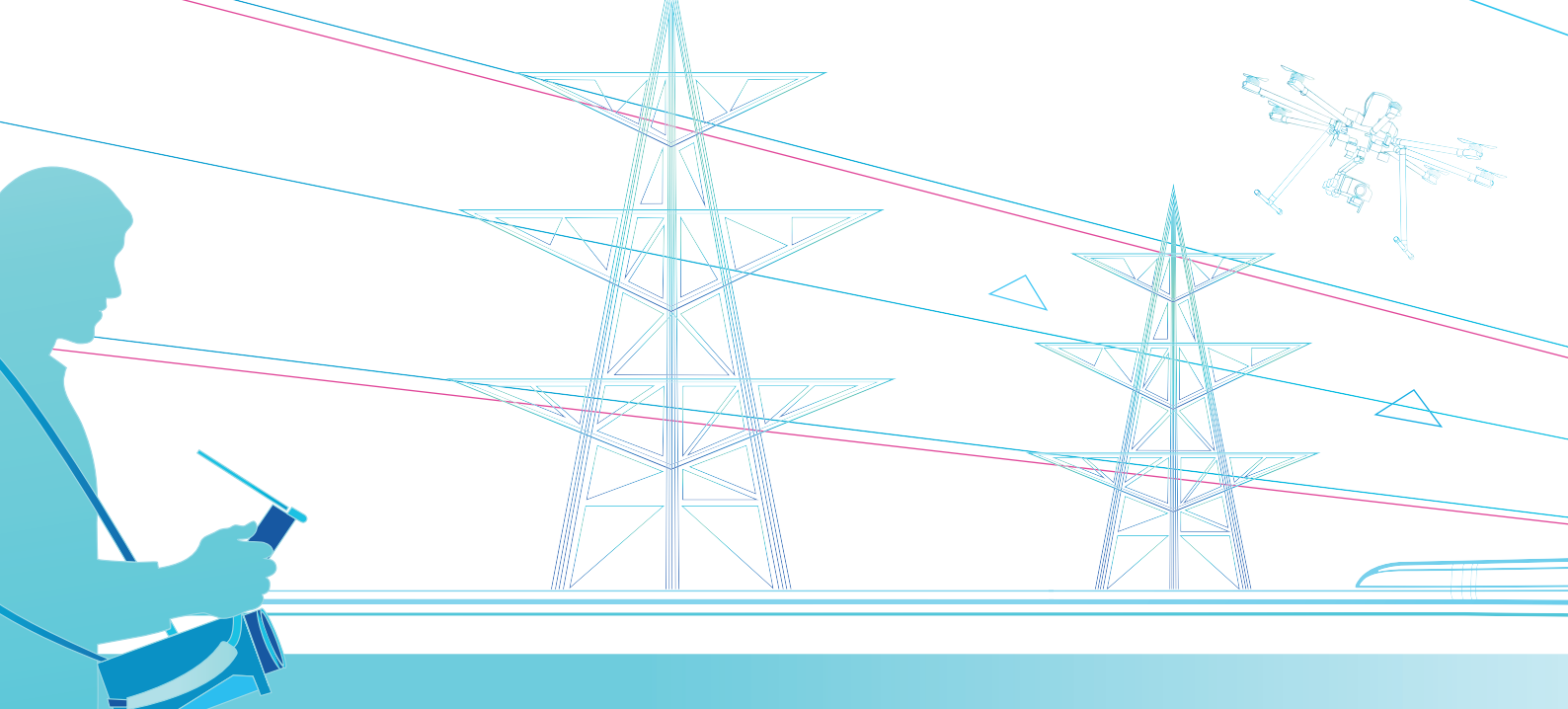


# DayCor<sup>®</sup>

See to foresee



CORONA DETECTION SYSTEMS

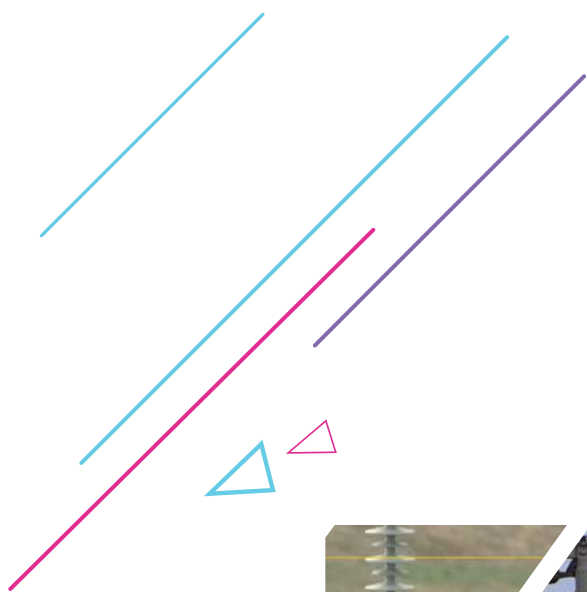


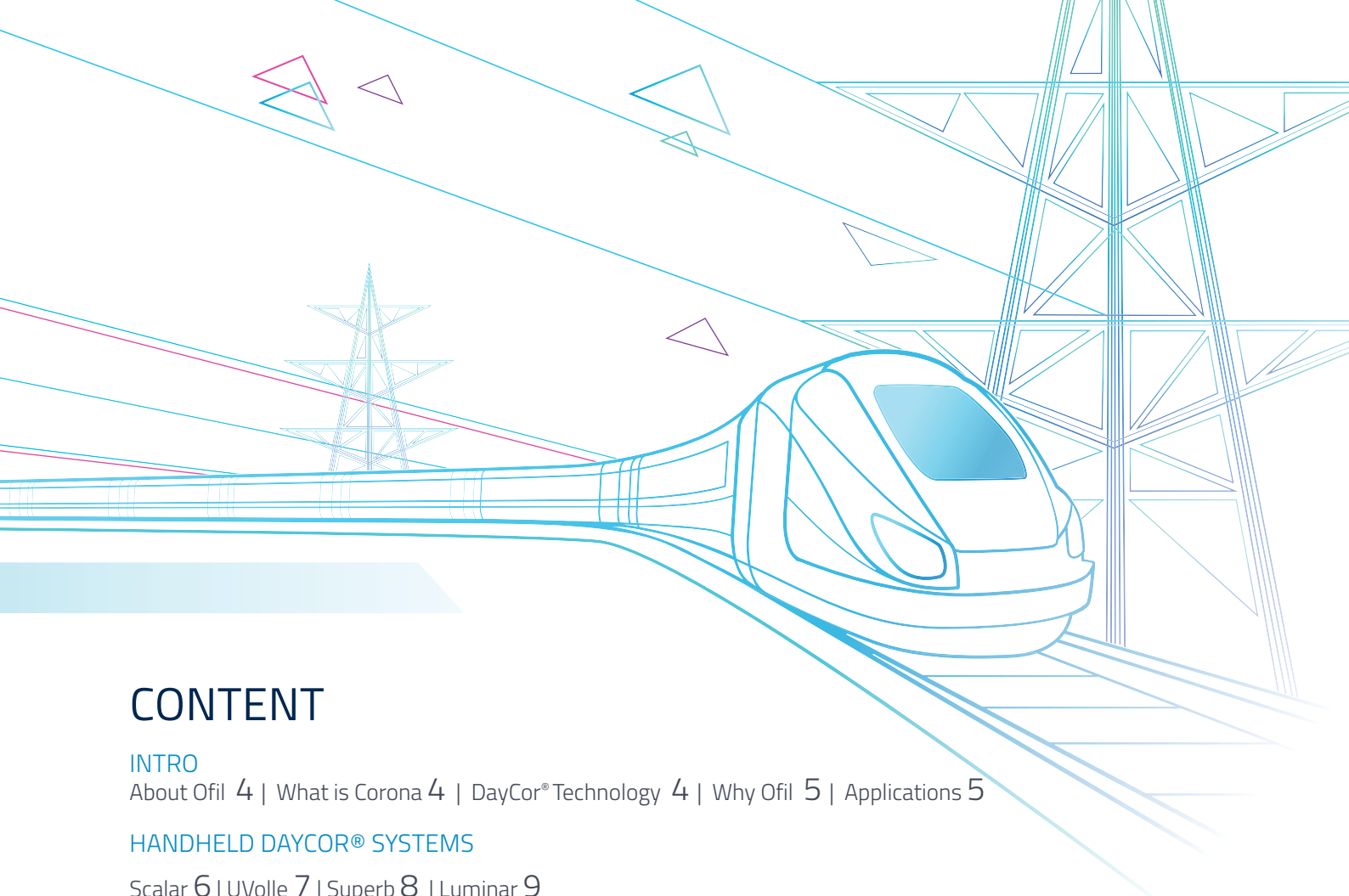
# eXtend Your Senses

We use our own senses to perceive, but sometimes this is not enough. We seek tools to rely on. Tools that take us far beyond what our own senses can take in.

DayCor® extends our visual abilities and lets us see corona UV in daytime.

Reveal hidden faults to foresee failures before they happen





## CONTENT

### INTRO

About Ofil 4 | What is Corona 4 | DayCor® Technology 4 | Why Ofil 5 | Applications 5

### HANDHELD DAYCOR® SYSTEMS

Scalar 6 | UVolle 7 | Superb 8 | Luminar 9

### MOUNTED DAYCOR® SYSTEMS

Rail 10 | Ranger 11

### UAS & AIRBORNE DAYCOR® SYSTEMS

ROM 12 | ROMpact 13 | micROM 14

### CAMERA CORE MODULES

ROM-eye 15 | Rail-eye 15 | Ranger-eye 15 | Compact-eye 15

### ACCESSORIES

Lenses 16 | Remote Control 17 | Software 18

### EDUCATION

CITI - corona inspection training institute 19





## ABOUT OFIL

Ofil was established in 1993 to explore, implement and develop its proprietary patented solar blind UV filters. In 2000 through collaboration with EPRI USA, Ofil developed the first daytime corona camera, based on these outstanding optical filters and named it DayCor®. Ever since, Ofil is the world leader in the design, manufacture & marketing of UV imaging systems for a variety of commercial, industrial and research applications. DayCor® Systems are sold worldwide through a network of distributors.

## BEYOND ULTRAVIOLET SPECTRUM

Ofil is committed to provide corona detection solutions that stretch beyond the sheer ability to see ultraviolet. We are committed to provide innovative systems to match the changing electrical industry realm. Optical, mechanical, electronic and algorithm engineers keep on developing new ideas implementing them into our systems, constantly improving them. All of our products undergo strict laboratory testing as well as field tests to ensure their accuracy and reliability so that users will enjoy powerful and reliable cameras that increase work productivity and efficiency.

## KNOWLEDGE IS POWER

DayCor® cameras are very user-friendly. Operating them is intuitive and simple, yet, there is a lot more to know and understand when recording video clips of corona. OFIL founded the corona inspection training institute CITI as a separate business unit to educate and train inspectors. CITI qualifies UViGrapahers, provides them a UViGrapaher diploma and puts UV theory into practice.

## WHAT IS CORONA

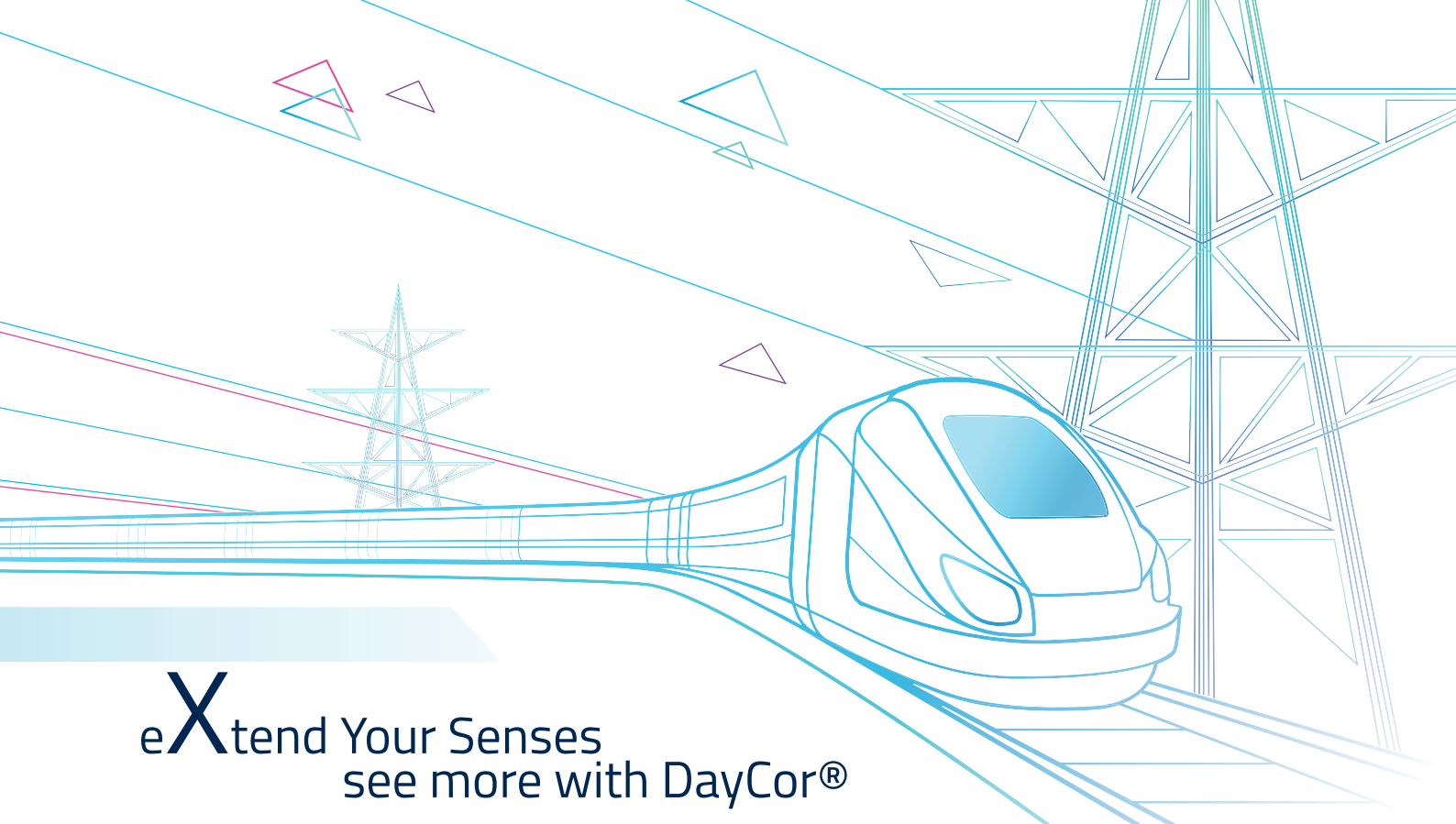
Corona is referred to the local glow on a conductor that is subjected to sufficiently high voltage. A local electrical field that exceeds a threshold of about 20-30 kV/cm<sup>2</sup>, under normal atmospheric conditions, ionizes air molecules releasing electrons and anions. Electrons that gain energy from the electric field tend to revert to their original stable state while releasing that energy in the form of light. The glowing is found locally around the source because of the insulation barrier and due to the fact that the electrical field decays rapidly with distance.

Corona triggers many modes of degradation, all at once, and therefore should be monitored. Corona creates: audible noise, acids both organic (oxalic) and inorganic (nitric) in the presence of moisture, ozone, radio and TV reception interferences, drills holes in material, leads to energy loss and emits UV light. Corona is a destructive factor of the electrical grid and a highly reactive degrading agent leading to erosion and decomposition of insulators and affecting their mechanical and electrical properties.

## DAYCOR® TECHNOLOGY

Ofil's systems implement bi-spectral imaging that consists of merging accurately UV & visible channels. To achieve pinpointed display of Ofil's systems implement bi-spectral imaging that consists of merging accurately UV & visible channels. To achieve pinpointed display of UV radiation and the radiating objects Ofil deploys its proprietary development - DayCor Technology - that includes:

- » UV filters – have the highest UV transmission rate
- » UV optics – with high efficiency + adaptive FOV
- » Precise mechanics – with corresponding responsive engines
- » Electronics and algorithms – signals processing and functions
- » Solar blind | Visible blind systems – have the highest absorption index



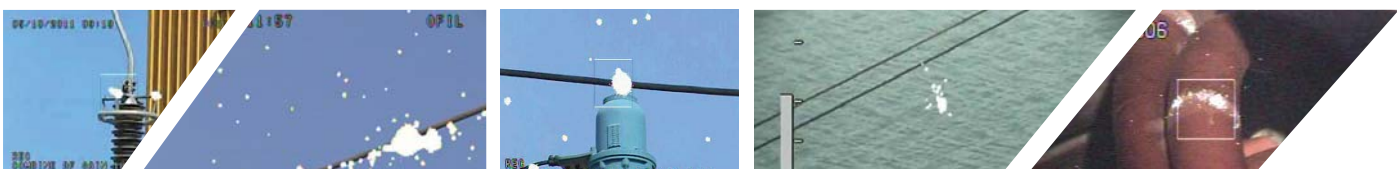
# eXtend Your Senses see more with DayCor®

## WHY OFIL CORONA CAMERAS

- » Since 2000 Ofil maintains its reputation as the market leader, the reliable, stable and accountable manufacturer of corona detection systems. Thousands of gratifying customers prove it.
- » User experience is our guideline and therefore DayCor® Systems have a rewarding combination of efficiency and comfort. Built exactly to accomplish corona detection missions. Cameras consist of smart features that contribute to productivity.
- » High quality information is the underlying argument for selecting a DayCor®: accurate, complete, consistent, distinctive, and in real time.
- » Knowledge and education are the pillar of strength for any inspector. While operating a DayCor® is as easy as point-and-shoot, utilizing the output information for predicting and planning is a proficiency. Ofil initiated CITI the institute for corona information technology to multiply the value added by using corona cameras..

## OUR CUSTOMERS

- » **Electrical Utilities** routinely inspect high & medium (Hi/Med) voltage installations, see and foresee faults
- » **Heavy Industries** maintaining reliability of their own substations & Hi/Med voltage installations
- » **Manufacturing Industries** performing QA and compliance assessment of products for the elec. grid
- » **HV Laboratories** testing failure & aging processes
- » **Service Contractors** providing inspection services
- » **Workshops** performing conformance testing of rotating machines and other
- » **Data Centers** ensuring uninterrupted ongoing electricity supply
- » **Mines & Refineries** ensuring uninterrupted electricity supply and sparks free conditions
- » **High Speed Electrical Trains** inspecting H/M Voltage installations to ensure mass transportation safety and operation





# HANDHELD

DayCor®

## SCALAR

For indoors | Built-in video recorder | Work under light



A compact handheld UV testing equipment for illuminated indoors. Point-and-shoot with built in recorder for convenient and safe testing in regularly lit workshops. Efficient in revealing and pinpointing PD in rotating machines and any indoors Hi/Med voltage installations

**APPLICATIONS:** Electrical cabinets | Rotating machine workshops | Manufacturers & workshops Factory Acceptance and QA tests | Mines and more

### VIDEO & STILLS

MPEG4 video clips and BMP still pictures. Stored on a removable flash card.

### PLAYBACK

Preview the stored media either on the camera's LCD or on an external monitor via mini USB drive.

### FIELD OF VIEW

Wide field of view 15° enables inspection wide sectors from short distance, typical to indoor conditions.

### LCD

A wide deluxe transmissive LCD, delivers high resolution sharp and vivid imaging of the inspected scenes.

### LED FLASHLIGHT

Integrated LED flashlight with 2 levels of torch setting improves quality of recorded media. Backlit buttons facilitate maneuvering in poor lit conditions.

### FOCUS & ZOOM

Semi auto and manual focus ranging 0.5m | 1.6ft to infinity. 3 steps UV digital zoom.

### COMPACT & LIGHT WEIGHT

A sleek design, very light weight of 0.95Kg | 2.09lb and small dimensions. Fits a palm grip and working in narrow spaces.

### INTUITIVE OPERATION

On screen menu and swift buttons. Straight forward operation. Preset stored settings.

### LONG BATTERY RUN-TIME

Power sources: a rechargeable Li-Ion battery, run time of over 3 hours or 9V DC. Internal charging.

### COMMUNICATION PORTS

Camera supports RS232 communication protocol.

### HIGH SENSITIVITY TO UV

UVb spectral range: 310-320nm. Minimum UV discharge detected: 15pC @1m, as required for short distances inspections.

**ACCESSORIES:** see pages 16-17

# HANDHELD



DayCor®  
WVollé

In/outdoors | Video & Stills Camera | Value for Price



Slim daylight UV testing corona cameras suitable for nearby and remote, in & outdoors operations. Camera stands out for its bright & large LCD, pleasant user interface and elegant and ergonomic design providing an outstanding user experience. Available models SC, VC, SX, VX models. X series has upgraded LCD  
VX | VC video recorders SX | SC still cameras

**APPLICATIONS:** Electrical cabinets | Rotating machine workshops | Manufacturers & workshops Factory Acceptance and QA tests | Mines| Electrical utilities | HV labs | Academy and more

## VIDEO , STILLS & PLAYBACK

Recorded AVI videos and BMP pictures stored on a removable flash card with: audio annotation, counted UV events, date & time, gain value. Media can be played on the camera's LCD or on an external monitor via BNC jack. NTSC.

## FIELD OF VIEW

6.4° support inspecting longer distances.

## LCD

Supreme WVGA color sun readable TFT LCD with adjustable backlight and ultra high brightness contributes to a pleasant operation experience

## LED FLASHLIGHT

Integrated LED with two levels of torch settings, improves quality of media recorded in dark spaces.

## FOCUS & ZOOM

Manual & auto focus ranging 1.5m | 4.9ft to infinity. Powerful digital visible zoom with additional UV zoom.

## DIMENSION

Slim, light weight of only 1.39Kg (3lb), designed for one hand comfortable operation. Carried by a shoulder side strap.

## INTUITIVE OPERATION

On screen menu and swift buttons. Default settings can be personalized.

## LONG BATTERY RUN-TIME

Power sources: a rechargeable Li-Ion battery with over 4 hours run time. External charging.

## COMMUNICATION PORT

Communication interphases enable controlling the camera remotely via RS232 protocol.

## HIGH SENSITIVITY TO UV

UVC spectral range: 240-280nm. Minimum partial discharge detected: 1 pC @ 10m. Tested & certified officially.

## CONTROLLED FUNCTIONS

Gain; Zoom; Corona color; Focus; UV events counting; Long integration for noise reduction; Sleep mode; Flash light; Recording; Display settings

**ACCESSORIES:** see pages 16-17

# HANDHELD

DayCor®

## SUPERB

High performance | High sensitivity | Robust



Daylight corona imaging & recording camera with sensitivity features that ensure excellent performance. A robust casing provides for testing within high magnetic & electrical fields. Superb offers reliable precise data and is often mentioned in scientific studies. Uniquely operated through a keyboard. Available models OD | XD

OD Professional graded LCD | XD Upgraded LCD

**APPLICABLE TO:** Electrical utilities | Heavy industry | Mines  
| Data centers | HV laboratories | Research institutes |  
Workshops | Academy institutes and other

### VIDEO , STILLS & PLAYBACK

AVI videos and BMP images recorded & stored on a removable flash card with: audio annotations, date&time, counted UV events, gain. Media can be played on the camera's LCD or on external monitor via BNC jack. NTSC

### CONTROLLED FUNCTIONS

Long integration for noise reduction; LCD features; Gain; UV events counting; Auto/manual focus; Optical & UV zoom; Date & time; Display mode; Sleep mode.

### FIELD OF VIEW

A proven selected 50 FOV is fit for remote inspection.

### LCD

Adjustable spacious transfective LCD with brightness control, most appropriate for sunny conditions.

### PERFORMANCE

Robust, built fit for extreme weather conditions.

### FOCUS & ZOOM

Manual/auto focus for both UV & visible channels, ranging 3m | 9ft to infinity. Rapid powerful visible zoom and additional UV zoom.

### DIMENSION

A fitted carrying vest supports holding the camera while performing lengthy inspections and freeing hands to do other tasks.

### INTUITIVE EFFICIENT OPERATION

Ergonomically designed with a keyboard that has large press buttons. Functions are activated directly through one touch keystrokes.

### LONG BATTERY RUN-TIME

Power sources: a rechargeable Li-Ion battery providing over 2.5 hours run time, or 12V DC. External charging.

### COMMUNICATION PORT

Set to be remotely controlled via RS232 protocol.

### HIGH SENSITIVITY TO UV

UVc spectral range: 240-280nm. Minimum partial discharge detected: 1 pC @ 15m, Tested and certified officially.

**ACCESSORIES:** see pages 16-17

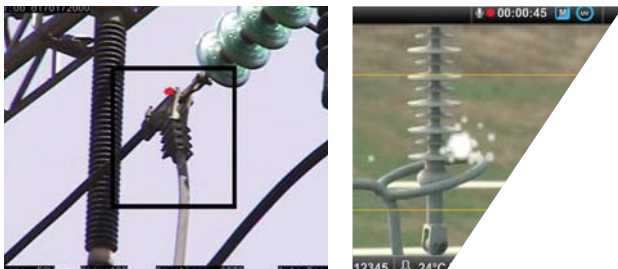




DayCor®

## LUMINAR HD

HD | Unparalleled Performance | Upscale



HD corona camera with features that boost corona detection and visualization. LuminarHD is the optimal choice when asking to streamline monitoring tasks. Outstanding optics and sensitivity to UV ensure unparalleled performance and clear display of pinpointed corona from far away and nearby. High definition recording lets users see more when analyzing the recorded media.

**APPLICABLE TO:** Inspection contractors | Electrical utilities | Heavy industry | Mines | Data centers | HV laboratories | Research institutes | Workshops | Academy institutes and other

### VIDEO , STILLS & PLAYBACK

HD videos & stills are stored on a micro SD flash card with: GPS, date & time, audio/text annotations, temp & humidity, counted UV events & gain values. Stored media can be played on the LCD or on external monitor via HDMI.

### FIELDS OF VIEW

A continuous interchangeable optical wide to narrow fields of view 100 to 1.6° simultaneously for both the visible and UV channels.

### LCD

A wide high resolution & high brightness sun readable VGA LCD. Adjustable. Delivers sharp and vivid imaging of the inspected scenes.

### FOCUS & ZOOM

Powerful zoom, continuous interchangeable optical FOV of visible & UV channels. HD high resolution recording enable excellent view of imperfections during inspection and during back office processing.

### DIMENSION

Suitable for easy going monitoring held with fitted straps and supported by a neck padded strap

### INTUITIVE OPERATION

Pictorial menu and swift buttons to frequently used functions. Personal default profiles can be defined.

### LONG BATTERY RUN-TIME

Power sources: a rechargeable Li-Ion battery with over 2.5 hours run time, or 12V DC. External charging.

### COMMUNICATION PORT

Multiple interfaces to the most popular communication protocols including Ethernet, Bluetooth, Wi-Fi.

### HIGH SENSITIVITY TO UV

UVC spectral range: 240-280nm. Minimum discharge detected: 1 pC @ 15m. Certified officially.

### ERGONOMIC EXTRA CARE

Spacious and extra big illuminated control buttons designed for working-with gloves. A built-in powerful LED flash light enables inspection in darker conditions. A pictorial easy to read menu adds multiple operational features.

**ACCESSORIES:** see pages 16-17

# MOUNTED

DayCor®

**RAIL** HD

Automatic Detecting Recording & Reporting | HD



A proprietary automatic corona & arcing monitoring system for overhead railways electrical lines. DayCor® Rail system consists of a high-end detector with a HD recorder, a Corona-Catch processor and a control & display unit. Corona-Catch distinguishes between UV noise and corona, referring only to corona events, thereby streamlining post analysis. Pinpointed corona directs maintenance to suspected faults, reducing inspection workload and making it easier to perform.

Also available: RAIL- eye camera core see p. 15

**APPLICABLE TO:** Railways operating on medium/high voltages

## VIDEO , STILLS & PLAYBACK

Non-stop recording through rides. Video clips are stored on a removable hard disc. Recognized corona events are stored in dedicated separate folders sorted chronologically to be used in reports.

## EASY INSTALLATION

Easy and fast installation. All components match standard racks. Supplied with detailed installation instructions.

## FIELD OF VIEW

FOV can be pre set to match inspection scenes.

## PERFORMANCE

Rail is a heavy-duty sturdy system fit for jerky rides and extreme weather ,shock and vibration conditions.

## FOCUS

Fixed, ranging 3 meters (9.8 feet) to infinity.

## CUSTOMIZING OPTIONS

DayCor® Rail can be customized and tailor made to match specific needs, architectures, platforms, languages and general preferences.

## AUTONOMOUS OPERATION

Autonomous standalone. Turned on at the beginning of a cruise and off upon arriving to final destination stop.

## AUTOMATIC REPORTS

CoronaCatch, Ofil's proprietary software, distinguishes between noise and corona signals. Only corona events are evaluated and used in the reports.

## HIGH SENSITIVITY TO UV

UVc spectral range: 240-280nm. Minimum partial discharge detected: 1 pC @ 15m. Tested & officially certified.

## SYSTEM PACKAGE

RAILeye detector - also available as a camera core  
CPU intel latest core  
Hard drives SSD  
LCD & Keyboard - mil spec  
Mount  
Cables

**ACCESSORIES:** see pages 16-17

# MOUNTED



DayCor®

## RANGER HD

For long distance | Safe | Comfortable | Efficient



Designed for vehicle roof mount, DayCor® Ranger is an attractive solution for OHTL located in terrain corridors. Ranger offers a combination of premium imaging sensing technologies such as UV, IR & TV that guarantee efficient collection of qualitative data while driving. Ranger is controlled from within the vehicle, and therefore is a safe and efficient practical solution with clear operational advantages during extreme weather conditions. Available systems: UV | MS

Ranger UV - UV sensor | Ranger MS - multiple sensors

Also available: RANGER-eye camera core see p. 15

APPLICABLE TO: Utilities OH transmission & distribution,  
Can replace aerial inspection, Works well in combination with  
drones

### VIDEO, STILLS & PLAYBACK

AVI videos & JPG pictures stored on a removable flash card with audio annotations, radiometric readings, GPS, date & time. Playback on the control notebook or on external optional monitor.

### EASY INSTALLATION

Easy installation, fits most vehicle makes & sizes. Supplied with an installation kit & instructions.

### FIELDS OF VIEW

Wide FOV of the UV sensor and of all other selected sensors, provide a panoramic view of the roads and of the installations along the roads.

### PERFORMANCE

Heavy-duty, performs smoothly in windy and icy conditions. Allows precise positioning. Rugged extreme-fit laptop fit for bumpy roads. IP67

### FOCUS & ZOOM

Auto focus ranging 3m | 9.8ft to infinity 3X optical zoom

### PHYSICAL PROPERTIES

Pan & Tilt made of composite material, strong & light weight. Notebook with a HD display, outdoors readable, with resistive touch screen.

### SIMPLE INTUITIVE OPERATION

A joystick controls the Pan & Tilt unit. Pan operating angles can be pre programmed and automatically activated. Camera functions are controlled by a laptop.

### MULTI SENSORS

Accommodates for combinations of multiple premium sensors selected by customers. All cameras are remotely controlled.

### HIGH SENSITIVITY

High detectivity is gained by using the most sensitive detectors for all selected sensing technologies. The implemented DayCor® technology guarantees maximal detection of 1pC @ 15 m in day light conditions. Tested & officially certified.

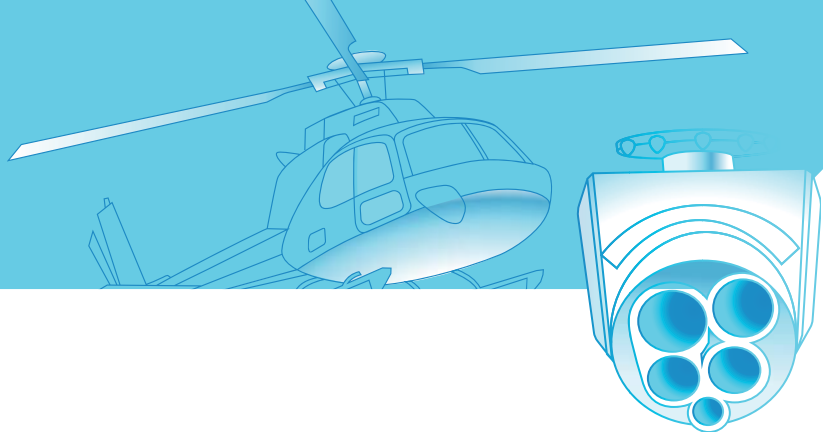
### HIGH SPEED INSPECTION

DayCor® Ranger performs well capturing smooth video clips of corona while on the move at speeds of up to 100 km/hour.

ACCESSORIES: see pages 16-17



# AIRBORN



## DayCor® ROM HD

Advanced fiber optic gyro stabilization | Mutisensors



Fly high, fly fast as far as needed DayCor® ROM fits all. Ofil offers combinations of high end remote sensing technologies with best performance cameras and software architecture as brilliant solutions for aerial scanning. ROM is compatible with FAA/EASA STC certification, it is light in weight, simple to install and matches most helicopters

Also available: ROM-eye camera core see p. 15

**APPLICABLE TO:** Contractors that own helicopters, contractors that supply inspections using their own gimbals on hired helicopters, Utilities

### VIDEO RECORDING & STORING

Simultaneous recording of 3 separate channels - UV- HD, IR, TV-HD with radiometric data taken by each sensor.

### MULTI SENSORS

Designed from ground up to support various cameras and sensors combinations corresponding to inspectors' requirements and mission characteristics. A system that provides a comprehensive detailed examination of assets' condition. Each sensor uses its relative advantage and contributes its unique data.

### EASY INSTALLATION

Ultra-light, designed with extra aerodynamic considerations, allowing for changing payload in minimal rigging time, even in the field. Standard installation on multiple types of helicopters and positions.

### SYSTEM BUILDING BLOCKS

Basic package includes a turret camera unit, a control unit, 4 top quality sensors, a monitor, GPS, a recorder. Alternative or/and additional upgrading components are available.

### STABILIZED PAYLOAD

5-axis gyro stabilized head for unshakable stability for smooth stable imaging and recording. Advanced fiber optic gyro stabilization for ultra-low noise and drift.

### COMPATIBLE

Compatible with most FAA & EASA approved aircraft mounts

### PHYSICAL PROPERTIES

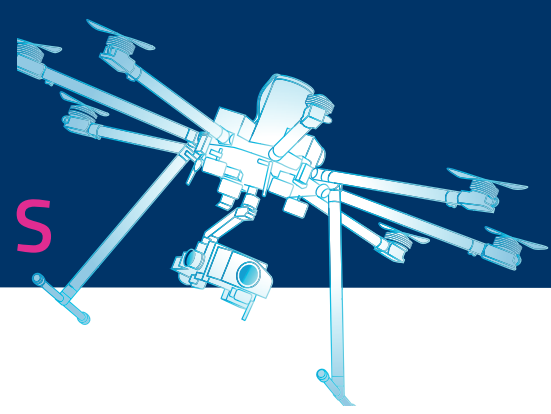
Full hardened fit for and helicopter fixed-wing operation. Dimensions vary to accommodate for the selected sensors. approx 32.5kg (71.6lb)

### HIGH SENSITIVITY & RESOLUTION

Provides in real time superior long range HD imaging by all sensors, with precise data and meta data. ROM provides the expected concrete and precise awareness of existing faults.



UAS



DayCor®

# ROMPACT

Corona camera for UAV | Portable block camera



Compact daylight corona block cameras with advanced UV sensitivity and an outstanding lightweight robust protective housing. Remotely controlled with onboard video recording and storage. UAS operators must be aware of existing corona because corona conditions can be detrimental to electronics and can cause severe damage to UAV up to a crash.

ROMpact, a multipurpose camera that can be installed in payloads, on UAS or on fixed mounts.

Also available: ROMpact-eye camera core see p. 15

**APPLICABLE TO:** airborne inspections on UAS and helicopters, Surveillance using fixed mounts, Combined inspection footpatrol + UAV

## VIDEO RECORDING & TRANSMITTING

ROMpact transmits video throughout its operation letting the operator decide when to record. Recorded videos are stored onto a SD card.

## CONTROL & OPERATION

The camera comes with a set of commands for all functions. Can be remotely controlled wirelessly or through a wired notepad using RS-232.

## STABILIZING PLATE

A rigid stabilizing plate keeps the camera securely attached to its seat.

## HIGH SPEED INSPECTION

ROMpact transmits sharp videos with pinpointed information of corona and physical faults. The quality of the videos and clarity of corona location are kept even during fast flight because, by default, the camera does not use long integration and image processing is not required.

## FIELDS OF VIEW

ROMpact has a field of view of 8° for both visible and UV channels. Synchronized.

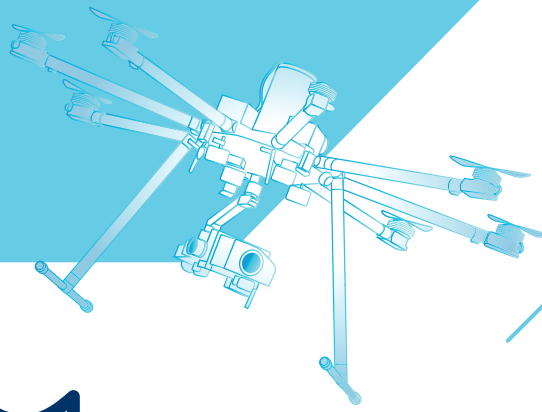
## DIMENSIONS

With a weight of 1.4 kg | 2.6lb ROMpact can be applicable to most commercial off-the-shelf (COTS) UAS that are used for heavy duty inspection.

## HIGH SENSITIVITY TO UV

UVc spectral range: 240-280nm. Minimum PD detected: 1 pC @ 15m. Tested & officially certified.

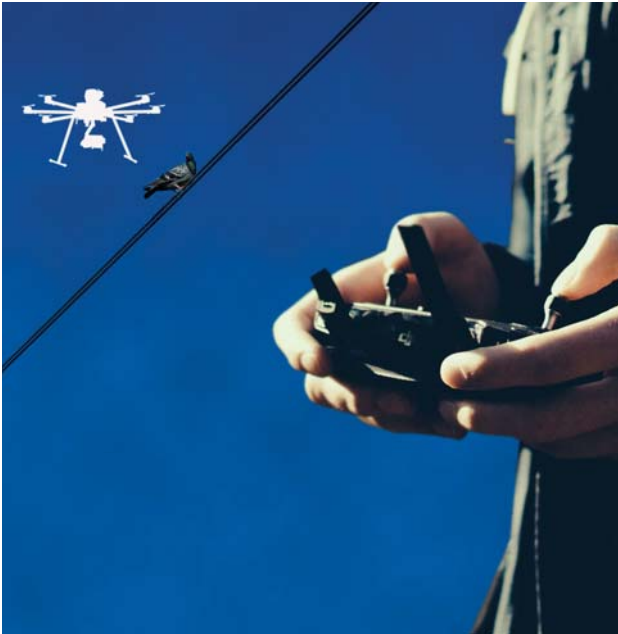
# UAS



DayCor®

## MiCROM HD

Ultralight corona camera for UAV | HD High Definition



### HD VIDEO TRANSMITTING & RECORDING

micROM<sup>HD</sup> features on-board recording and transmits in real time HD videos of the inspected scenes. Imaging helps determine if more data is needed or where the drone should fly. HD assists in reading name plates & ID numbers of equipment for maintenance referencing. Hence, higher resolution ends in more detailed data

### DAYCOR® TECHNOLOGY

The implemented DayCor® technology ensures absolute solar blindness, enables operability during daylight without any reflection concerns. [Registered Patent EP1112459B1]. With DayCor® inside the highest sensitivity to UVc radiation is guaranteed. Furthermore, this advanced technology enables counting corona events as a base for comparing and assessing condition.

### EASY INTEGRATION

micROM<sup>HD</sup> is ready to be integrated in most popular UAS, and remotely controlled over PWM and other additional protocols.

### ADVANCED OPTICS

The advanced optics consists on proprietary UV lenses with wide FOV and optical zoom. These features contribute to accomplish the main mission of inspecting with drones, namely, seeing well, collecting better and recording the best.

### ULTRALIGHT WEIGHT

micROM<sup>HD</sup> is a lightweight camera for energy-efficient operation, allowing better UAV maneuvering flexibility, longer flight duration and faster flights. This contributes to making scanning power lines effective and economical.

### UNIQUE CAPABILITY

micROM<sup>HD</sup> is a corona camera and has unique capabilities of showing the exact location of corona emission. Besides revealing signals that indicate electrical faults, micROM<sup>HD</sup> can save drones from crashing because corona is a RIV source and can interfere the communication with drones.

### ELECTROMAGNETIC SHIELDING

micROM<sup>HD</sup> is built with electromagnetic shielding, to withstand the effects of high electrical or magnetic fields on communications and control.



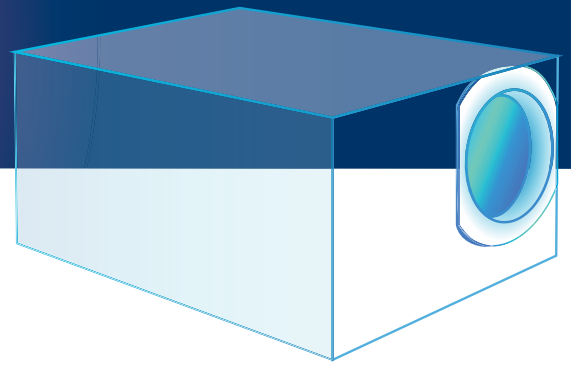
micROM<sup>HD</sup> is a state-of-the-art HD corona camera for UAS that sends in real time footage and data to maintenance teams. micROM<sup>HD</sup> provides both visual and UV video and images. Seeing corona is important to find voltage related faults and identify problems that cannot be seen with thermal imaging. The acquired data is used to fix, assess risks and troubleshoot systems. micROM<sup>HD</sup> is a perfect match for UAS, making UV imaging from air easier than ever.

Also available: ROM-eye camera core see p. 15

APPLICABLE TO: UAS operators, Utilities, small gimbals

# DayCor® EYE HD

A minor addition can turn into a major benefit



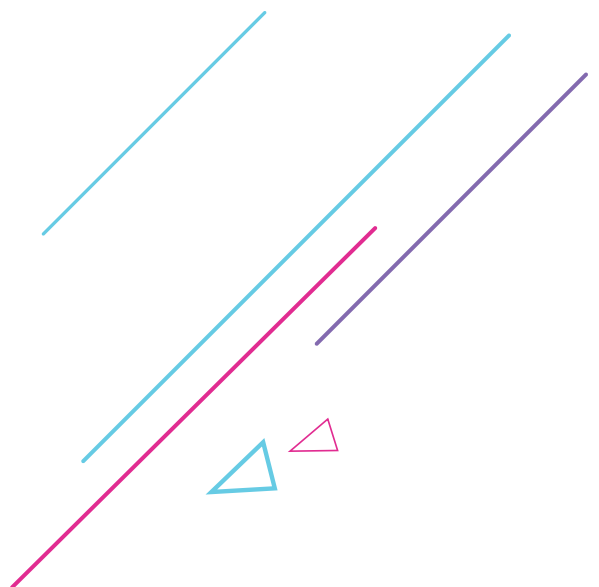
DayCor® Eyes are ready to be integrated into various housings, assemblies or platforms.

Each core module has unique specifications to match the intended mission and share the same features of:

- » High sensitivity to UV
- » Absolute solar blindness
- » Flawless operation in a vast range of temperatures
- » Continuous operation without overheating
- » Real time video production
- » HD recording
- » Multiple communication interphases.

DayCor® Eyes are ideal for OEM and to those who wish to integrate compact & reliable core modules into their own branded systems.

- » ROM-eye<sup>HD</sup> to airborne systems
- » RAIL-eye<sup>HD</sup> to railways systems
- » RANGER-eye<sup>HD</sup> to mounted systems
- » ROMPACT-eye to stationary systems
- » MICROM-eye<sup>HD</sup> to small gimbals



# ACCESSORIES



## CLOSE-UP LENSES

Easily mounted, replacing camera's default lenses. Close-up lenses provide macro examination of the inspected installations. Close up lenses are handy to document and record detailed view of failures and defects related to corona.

### SUPERB



Range

0.5-3m | 1.5-3m

### LUMINAR<sup>HD</sup>



Range

0.6-1m | 1-3m

### UVOLLÉ



Range

0.5-0.8m | 0.7-1.5m

## WIDE FIELD OF VIEW (FOV)

Clip on lenses that support inspections of nearby installations in enclosed indoor spaces or in congested areas.

### UVOLLÉ



FOV

12.8° x 9.6°

### SUPERB



FOV

10° x 7.5°

## STANDARD & EXTENDED RUN-TIME BATTERIES

Rechargeable Li-Ion battery for all cameras. Extended run time of over 7 hours for Scalar





# ACCESSORIES

## GTRH & TRH SENSORS PLUGS

GTRH adds GPS, Temperature & humidity data to UVollé. TRH adds temperature & humidity data to Scalar, UVollé & Luminar. Data is added as metadata and appears on recorded media.

### UVOLLÉ\LUMINAR\MICROM



Humidity
± 4.5 %
Temperature
±0.5 °C

### UVOLLÉ\MICROM\ROMPACT



Accuracy
2.5m
Velocity
500m/s

## REMOTE CONTROL

Wireless & wired remote controls to operate Superb & Luminar handheld cameras, ROMpact and Swift. Access to all functions

### SUPERB

15m shielded cable



### LUMINAR\ROMPACT-EYE

Wired\wireless notepad



## FLIGHT TABLE

A padded sturdy lap mount with adjustable pan and tilt chassis that holds the corona camera enabling manual corona inspection from within a helicopter.

## EXTERNAL ANTENNA FOR WIFI

Extended antenna to enable wi-fi communication with Luminar<sup>HD</sup> and COMPACT-Eye

### HANDHELD MODELS



### LUMINAR\ROMPACT-EYE



# SOFTWARE

## CORONAWISE

corona management software

CoronaWise is a database software for electrical engineers that perform inspections with corona cameras and manage the collected data. CoronaWise provides an easy-to-use all-in-one environment to handle information about the condition of assets. With CoronaWise it is easy to document inspections,

store findings, follow up cases, look-up components' history, generate report and analyze trends.

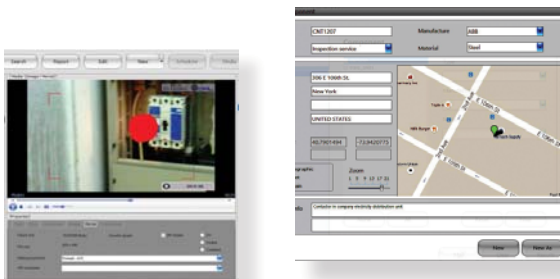
CoronaWise is an effective means to process the massive data that being collected during inspections turning into actual recommendations and reliable reports.

- » FRIENDLY INTERFACE
- » DATA RETRIEVAL & SORTING
- » STORE VIDEOS AND PICTURES
- » AUTOMATIC REPORTS
- » STORE INSPECTION SESSIONS
- » MAINTAIN DATA CONSISTENCY
- » LANGUAGE LOCALIZATION



### INSPECTION SESSIONS

CoronaWise stores detailed inspection sessions with related imagery attached. Sessions are the building blocks of reports and include all fields that can provide a comprehensive view.



Single user version is installed on a single computer. The enterprise version has a server/client configuration, creates a central databank and allows access to permitted users. Sharing a repository assists reducing storage needs and reduces redundancy.

### REPORTS GENERATION

CoronaWise includes pre-defined system reports that match common management preferences and allows building personal reports. Generated reports are in portable html format, compatible with most existing browsers, and include embedded/linked media of the captured findings, analysis and recommendations.

### DATA INTEGRITY

To maintain data integrity clarity and consistency, CoronaWise uses dictionaries. Each organization builds its own dictionary of terminology, components' names etc. Language localization is provided.

### DATA RETRIEVAL

CoronaWise facilitates retrieving records by existing fields. Queries are easily created. Results are displayed sorted by a requested order.

### DECISION MAKING

CoronaWise complies with Ofil's decision-chart methodology. Ambient conditions, material, distances, gain & counting arguments are used to predict and decide upon the needed maintenance steps.

### SINGLE USER OR ENTERPRISE VERSIONS



## CITI - CORONA INSPECTION TRAINING INSTITUTE

« This has been one of the most interesting courses taken in my working career. In no small part this was because of the knowledge and experience the instructor shared as the course progressed. I highly recommend this course with this instructor. Thanks CITI! »



UViGraphers are skilled corona-camera operators that are involved with predictive maintenance. Predictive maintenance is based on data collection and analysis and is considered to be the most cost effective and reliability-oriented approach. UViGraphers contribute to achieve this strategy since they collect data. They can see signals that help foresee failures. Decisions are based on their reports. Awareness and proficiency are key factors to their success. Awareness is the outcome of

using corona cameras, and proficiency is the outcome of experience and knowledge. CITI is where knowledge is obtained from experienced professional instructors.

**EARN 20 PDHS & UVIGRAPHER DIPLOMA**

### BENEFITS

- » Learn from UV authoritative professionals
- » Become a qualified certified UV inspectors
- » Get practical and theoretical training on using UV inspection for predictive maintenance
- » Make the most of your existing equipment
- » Let go of "trial and error" education and decrease maintenance costs
- » Tune up with the latest technological innovations

DO YOU HAVE THE NECESSARY SKILLS TO OPERATE CORONA CAMERAS AND BENEFIT THEIR OUTPUT?

HOW DO YOU MAKE SURE THAT YOUR CORONA CAMERAS ARE BEING USED PROPERLY AND PROVIDE THE EXPECTED RESULTS?

ARE YOU SATISFIED WITH THE INSPECTION REPORTS ?

### WHO SHOULD ATTEND?

- » All levels Inspectors
- » PdM Managers
- » Maintenance Technicians
- » Maintenance Engineers
- » DayCor® or other corona camera owners

### TOPICS

- » The essence and theory of UV technology
- » Implementing inspection with UV technology
- » What is corona?
- » Inspection Methodology
- » Applications
- » UV & complementary technologies
- » Reports
- » The principles of corona camera
- » Using corona cameras and more.

### DURATION, LOCATION

- » Three days
- » Atlanta GA USA

### LOCATIONS

- » Atlanta GA, USA
- » Hosted classes, worldwide

### REGISTRATION

- » online  
[www.citi-training.com](http://www.citi-training.com)
- » Fax: +1.888.95557\
- » email:  
[info@citi-training.com](mailto:info@citi-training.com)



## SEE CORONA TO FORESEE BREAK DOWN

Ofil designs, develops, manufactures and markets DayCor® imaging technologies that make UV visible and electrical faults noticeable. Ofil is appreciated by the electrical industry for supplying innovative remote sensing optical systems that help increase productivity, manage assets reliability, reduce downtime cost, foresee critical faults and maintain safety.

This catalog lists Ofil's off-the-shelf products that are offered to organizations that maintain medium/high voltage assets. Products are classified according to their mode of operation: handheld, mounted on vehicles and airborne systems. Additional products which are not mentioned here are tailor made, customized to meet our customers' needs.

## CONTACT US

### Ofil Ltd.

T/F 888.950.5557

### Ofil USA Ltd.

5435 Sugarloaf Pkwy Suites 2200

Lawrenceville, GA 30043 USA

© All rights reserved to Ofil Ltd.

[www.OfilSystems.com](http://www.OfilSystems.com)