



2014 CATALOGUE



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DayCor® range of imaging systems by Ofil Ltd. [Registered Patent EP1112459B1] are nondestructive (NDT) testing equipment dedicated to detect, pinpoint and display images of corona and arcing discharges. All of Ofil's products exhibit high sensitivity to ultraviolet due to the incorporated proprietary DayCor® technology. Ofil's imaging systems and cameras are appreciated by reliability engineers and assets' management as valuable cost effective tools that provide practical timely information of failure processes in electrical installations.

The incorporated DayCor [®] technology guarantees daytime operation and high UV signals detectivity. Both ultraviolet radiation and radiating objects are perceived and merged into one displayed image that can be recorded in video clips or still pictures. Intensity of the incepted discharge is displayed as the number of UV events per time unit. Recorded video clips and still images are used for predictive maintenance and trend analysis. Ofil's range of products includes aerial, driven and handheld systems. Corona is a voltage dependent phenomenon and its presence reduces the reliability of systems and cause electricity losses. While corona is a low energy process, over time it can substantially degrade insulation material and cause dielectric breakdown. Corona has cumulative & permanent effects: it emits Ultraviolet radiation, creates Ozone, Nitric and other acids, Audio noise and Radio interferences. Additionally, the presence of corona can be an indication of electrical design errors that must be fixed.

High and medium voltage apparatuses should be monitored for presence of corona. Ofil's cameras are built for daytime use to allow safe and streamlined maintenance operations.

The first prototype camera, the DayCor[®] I, was introduced in 1999. DayCor[®] II was released in 2000 as the first commercial model. Ever since, Ofil continues to develop and improve its products, offering elaborated sleek designed solutions, with reduced dimensions weights, and costs and with additional handy features and accessories.

DAYCOR® FAMILY RANGE



HANDHELD



DAYCOR® UVOLLÉ - C

Light weigh handheld corona cameras that should be included by default in inspectors' toolbox. Easily pulled and used in normal and hard to access areas. UVollé displays the corona and its emitter with indications of the corona severity. A built-in flash light assists inspecting dark electrical cabinets, motors and generators and enclosed switchgears. A delux transflective LCD enables working also under bright sunny conditions.

Features include: Rapid optical zoom; video and stills recording and playback; auto focus; corona magnification; corona counting; corona color; flash light; GPS & humidty meter



DAYCOR® LUMINAR

A remarkably sensitive camera with precise detection and display capabilities. Luminar is light in weight and easy to operate with quick access to the main and frequently used operation functions. A large crystal clear color LCD shows both background and inspected components. A supportive butt is offered to relief muscle strains during long inspection sessions.

Features include: videos and stills recording and storing; background noise reduction; rapid optical zoom of the visible channel; digital UV zoom; autofocus; UV events counter; playback; corona color control; GPS data; subtitles; interchangeable FOV



DAYCOR® SUPERB

A sensitive and precise hand held detection system. Superb is a stable and rugged system that can endure laboratory and field conditions. A dedicated harness is used to support foot patrol inspection. A keyboard is used to operate the camera and access the available functions. A large and clear LCD comes handy and safe after long inspection hours in high voltage facilities.

Features include: Rapid optical zoom of the visible channel; digital UV zoom; auto focus; adjustable high resolution LCD; UV events counter; video and stills recording and playback

DRIVEN



DAYCOR® RANGER

A comfortable and safe to operate corona inspection system mounted on a vehicle roof and remotely controlled from inside the vehicle. Fits lengthy and long distances inspections. System is controlled through a precise pan and tilt unit and a monitor that displays in real time the camera's output. Shock absorbers protect the imaging unit when driving in harsh terrain.

Ranger can easily be mounted and dismounted on most vehicle makes. **Features include:** rapid optical zoom; auto focus; UV events counter; video and stills capture and playback; full remote control; saved preset inspection angles.



DAYCOR® RAIL

A fully automatic precise corona detection system customized for electrical trains, trams and street cars, dedicated to generate reports of the detected corona and arcing with integrated geographical position data and corona severity. Endures speeds of up to 200 km/h.

The detected Corona is automatically recorded and processed into reports. It is stored in a DVD-video movie format with positioning, date & time indications. Reports are multilingual and localized.

Features include: Rugged, automatic stand alone operation, automatic report generation, corona counting, GPS

AIRBORNE



DayCor[®] ROM, ROMpact

Corona detection solutions for high speed airborne inspections and remote detection with outstandingly sensitivity and precision. ROM & ROMpact are light in weight, simple to install and configured for gyro stabilized payloads of sizes and mounts locations that match most known helicopters and UAVs. Optional combinations of IR-UV-HD multisystem per customer's preferences.



Features include: Digital video recording and storing; intercom voice annotation recording; rapid zoom; auto focus of the UV and visible channels; UV events counter, GPS data; control & display unit; auto tracking, multilingual localized report software.













Ofil develops, designs, manufactures & markets a range of products and tailor made solutions with incorported proprietary DayCor[®] technology that allows detection of UV signals in daylight, for high & medimum voltage apparatuses.

OFIL'S RANGE OF DAYTIME CORONA CAMERAS

UVollé–SC – light weight handheld stills bi-spectral camera
UVollé–VC– light weight handheld video/stills bi-spectral camera
Luminar – handheld video/stills bi-spectral camera with interchangeable FOVs
Superb – portable video/stills bi-spectral camera
Ranger – video/stills bi-spectral camera & vehicle mount for driven inspections
Rail – fully automatic stand alone corona detection, capture & reporting system for railroads
ROM – a comprehensive aerial inspection solutions with combinations of cameras in gimballed payloads
ROMpact – compact corona detection block camera for OEM, UAV and small installations

MAIN ACCESSORIES

Accessories	UVolle-C	Luminar	Superb	Ranger	Rail	ROM
Close-up lenses	\checkmark	\checkmark	\checkmark	N/A	N/A	N/A
Wide FOV lenses	\checkmark	Built-in	\checkmark	\checkmark	\checkmark	\checkmark
Database Reporting Software		\checkmark		\checkmark	\checkmark	\checkmark
Corona Capture Software					Built-in	
Temperature & Humidity meter	\checkmark	\checkmark	\checkmark			N/A
GPS	\checkmark	Built-in		Built-in	Built-in	Built-in
Remote control				Built-in		Built-in
Flight Table	\checkmark	\checkmark		N/A	N/A	N/A

