



Ofil develops, designs, manufactures and markets a range of high-tech products and tailor made solutions, using proprietary UV Bandpass technology that allows detection of UV signals in full daylight, for high voltage assets.

#### OFIL'S RANGE OF DAYTIME CORONA CAMERAS

**Luminar** - portable corona enhanced detection system with versatile fields of view

**UVollé-Vi** - compact portable handy and ready video and stills bi-spectral camera

**UVollé - S** - compact portable handy and ready stills bi-spectral camera

**Superb** - bi-spectral camera fits outdoor inspections, laboratories, academies and research institutes

**Ranger** - corona systems for driven inspections

**Rail** - fully automatic corona detection & reporting system

**ROM** - aerial solutions adaptive for multi systems

**ROMpact** - aerial solution for UAV, various gimbaled payloads and small installations

#### MAIN ACCESSORIES

Accessories	Luminar	UVolle S, Vi	Superb	Ranger	Rail	ROM
Close-up lenses	√	√	√	N/A	N/A	N/A
Wide FOV lenses	Built-in	√	√	√	√	√
Database Reporting Software	√	√	√	√	Built-in	√
Temperature & Humidity meter	√	√	√	√	Built-in	N/A
GPS	Built-in	N/A	√	√	Built-in	Built-in
Remote control	√	√	√	Built-in	√	Built-in
Flight Table	√	√	√	N/A	N/A	



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# 2013 CATALOGUE



**Ofil's corona cameras are based on DayCor® technology and used as NDT – non destructive testing & non intrusive equipment for inspecting in-service power systems.**

The essence of Ofil's outstandingly sensitive corona cameras is the DayCor® bi-spectral solar blind imaging technology. Ofil's cameras can pinpoint corona during the daytime from remote objects and indicate the severity of the discharge. The cameras' outputs assist utilities anticipate failures and take corrective actions on time. Systems are adapted to aerial, driven and foot patrol inspections. Ofil cameras are appreciated as valuable cost effective predictive maintenance tools.

Corona from overhead lines is a problem for companies that use/possess high voltage equipment. Not only does corona cause audible noise, radio interferences problems and insulation degradation, it may indicate the presence of faulty components and ongoing decaying processes. As a result, identifying sources of corona is an industry priority. Corona is impossible to see with bare eyes during the day, and night viewing is difficult, unsafe,

inefficient and expensive therefore daytime imagers are in needed.

The DayCor® technology works by splitting the observed image into two spectral channels. One channel blocks out sunlight and lets through only the UV signals of corona while the other channel sends the image of the object under investigation to a regular video camera. Both channels are eventually fused producing a final image of the corona exactly as it appears on the insulator, conductor, or other line component.

The first prototype camera, the DayCor® I, was introduced in 1999. It was cumbersome, heavy, big but constituted a breakthrough. DayCor® II, released in 2000, was the first commercial model. It was lighter, smaller and ergonomically improved. Ofil continues developing new solutions based on DayCor® technology that match customers' requirements for comfort and performance. Today Ofil offers a range of products for electrical utilities, mines, heavy industry, petro chemical industries, laboratories, academies, manufacturers and data centers needs.

## DAYCOR® FAMILY RANGE



### HANDHELD



#### 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® UVOLLÉ - S, Vi

Small and compact hand held corona cameras that fit technicians' 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. Used by industries that rely on med/high voltage supply and own privately owned substations, switchgears, transformers etc., as well as power utilities to inspect substations, distribution lines, switchgears, motors, generators, transformers etc.

**Features include:** Rapid optical zoom; video and stills recording and playback; auto focus; corona magnification; corona counting; corona color control.



#### 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 dismantled 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 100 km/h (60 mph).

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 and stabilized with shock absorbers and vibration dampers, automatic operation, automatic report generation, stand alone, 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. Adaptable to combinations of IR-UV-HD multisystem options.

**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.

