

Corona Cameras Selection Guide



Ofil's 2014 range of corona cameras allows companies to select systems that: fit budget constraints; maintenance needs; types of installations; geographical, topographical and environmental characteristics, property dimension; proficiency and availability of operators, etc. A short orientating overview of Ofil's 2014 range of products with outstanding features might be handy, yet it should be noted that in all of Ofil's systems the proprietary DayCor® Technology is embedded.

DayCor® technology

- o **UV filters -** Highest UV transmission
- UV optics High efficiency + adaptive FOV
- o **Precise mechanics** Corresponding responsive engines
- Electronics and algorithms Signals processing and functions
- Solar blind | Visible blind systems Highest absorption

Handheld Systems

Ofil's handheld systems are designed for multipurpose use. These systems are specially designed to be conveniently carried and operated, are fit for foot patrol, can be mounted on tripods and be used from within helicopters and vehicles. Systems differ in their physical properties, dimensions, mode of operation, sensitivity to UV sources, price etc. Each product is presented with its prominent features and a price indication. Additional information can be found in Ofil's website: www.ofilsystems.com/products



DAYCOR® SCALAR



Ofil's 2014 innovation: visible-blind corona camera that is dedicated to indoor inspections. Scalar is offered at a very attractive low price and is affordable to small, medium or big companies with installations inside buildings, laboratories, underground spaces, mines, motor workshops, factories, data centers, electrical distribution companies etc.

Scalar is an efficient, affordable, very reasonably priced tool that provides instant imaging of existing corona or arcing and high quality recordings.

FUNCTIONALITY - Scalar provides a clear view of corona and arcing on motors, switchgears, electrical cabinets etc., and has a powerful LED flashlight that enables inspecting very dark compartments. DayCor® Scalar captures corona events, stores video clips and still images with playback.

PHYSICAL PROPERTIES – a sleek design, palm grip, carried by a shoulder strap, 0.95Kg (2.09lb) 28 x 12 x 9 cm (11 x 4.7 x 3.5")

MODE OF OPERATION – Manual; On screen menu + swift buttons; Very simple straight forward operation; Preset stored settings variations can be provoked at any time streamlining operation and assist getting to the desired results; Backlit buttons facilitate maneuvering in poor lit conditions. A rechargeable battery provides extralong operation duration. Camera can also be operated when plugged into the wall.

SENSITIVITY TO UV SOURCES - 15pC @1m, as required for short distance inspection

FIELD OF VIEW – 15⁰x11⁰

SPECTRAL RANGE	SENSITIVITY	RECOMMENDED WORKING DISTANCES	FOV	LCD	WEIGHT	LED	PRESET PROFILES	RECORD & PLAY
310-320 Visible Blind	15 pC @ 1 m	0.5-5m	15º x 11º	4.3"	0.95Kg	Built- in	4	Video & Stills



DAYCOR® UVOLLÉ



UVollé-C corona cameras series is a light weight handheld solar blind UV corona detection solution for in/outdoors working environments of distances up to 30 m (33 ft). UVollé cameras appeal to maintenance teams due to the outstanding clear large LCD, easy operation, extended run time battery, pinpointed accurate provided information, at an affordable reasonable price. UVollé series is being used by electrical utilities; manufacturing companies that maintain their privately

owned substations and high voltage installations, motor workshops, services providers, manufacturers of components for the electrical grid that need to perform quality tests, high voltage laboratories and more. 2 offered variants with a price difference: VC – enables video capturing, SC – enables stills capturing.

Moderately priced, UVollé is an optimal selection of an affordable professional solar blind tool providing instant accurate imaging of existing corona or arcing and high quality recordings that are used for creating inspection and trending reports.

FUNCTIONALITY — UVollé displays corona signals and the emitting sources with indications of the corona severity. Zooming, long integration, gain control, manual & auto focus, and changing corona color assist operators during investigating cases of faulty grid components. A protecting hood supports sunny working conditions while a powerful LED flashlight and backlit buttons support working in dark spaces. DayCor® UVollé captures corona events with additional overlaid information such as GPS temperature & humidity conditions and audio annotations, stores video clips and still images and provide for their playback.

PHYSICAL PROPERTIES – an elegant design, comfortable hand grip, carried by a shoulder strap, 1.3 Kg (3 lb) 29 x 12 x 8.5 cm (11.4 x 4.7 x 3.3"

MODE OF OPERATION – Manually or remotely controlled; On screen menu + swift buttons; Very simple straight forward operation; Backlit buttons facilitate maneuvering in poor lit conditions. A rechargeable battery provides extra-long operation duration. Camera can be mounted on a tripod and remotely controlled.

SENSITIVITY TO UV SOURCES – 2.7pC from a distance of 10m (33 ft) enables seeing corona from distances of 1.5 m (4.9ft) up to 30 m (98.5 ft).

FIELD OF VIEW - 6.4° x 4.8°

SPECTRAL RANGE	SENSITIVITY	RECOMMENDED WORKING DISTANCES	FOV	LCD	WEIGHT	LED	ANNOTATION	ZOOM
240-280 Solar Blind	2.7 pC @ 10 m	1.5-30m & 0.5-1.5 with close-up lens	6.4° x 4.8° & 10° x 7.5° w/ext lens	4.3"	1.39Kg	Built- in	Audio	Visible & UV



DAYCOR® LUMINAR



Luminar corona cameras are Ofil's prominent solar blind UV imagers with outstanding detecting capabilities. Luminar is fit for multiple working conditions of both outdoors and indoors, inspecting remote and nearby objects, with interchangeable narrow and wide fields of view. Luminar cameras appeal to maintenance teams due to the outstanding detection performance and versatility. Operating the camera is simple with self-explanatory menu. Luminar has an extended run time battery, a built in GPS, text & voice annotations, powerful zoom, counting, gain control, and

can be remotely controlled. Luminar is being used by all kinds of electrical utilities, manufacturing companies either for QA or to maintain their privately owned substations and high voltage installations. Motor workshops use Luminar to test refurbished or new motors before handing them to end users. Services providers use Luminar to generate detailed reports with findings. High voltage laboratories use Luminar for their research.

Appropriately priced, Luminar is the number one selection of a sensitive reliable professional corona detection system. Luminar is offered to companies that appreciate high end products and wish to own a top quality corona camera.

FUNCTIONALITY – Provides instant accurate information about the condition of the inspected asset. Luminar displays corona signals and the discharging sources with indications of the discharge severity. Powerful zooming, gain control, corona magnification, manual & auto focus, rainbow corona selection colors are handy during inspecting very distant objects trying to identify faults that relate to corona. The captured video clips and still images of corona include photon counting values, GPS data, ambient measured conditions, and text subtitles added by inspectors.

PHYSICAL PROPERTIES – a robust design that fits professional extensive working hours, comfortable hands grip, carried by a shoulder strap and supported by a retractable stock, Luminar's dimensions: 2.2 Kg (4.5 lb), 29 x 12 x 8.5 cm (11.4 x 4.7 x 3.3")

MODE OF OPERATION – Manual and remotely controlled; On screen menu + swift buttons; Multiple functions presented on screen using clear icons; simple straight forward operation. Interchangeable fields of view; Rechargeable battery provides extralong operation duration. Camera can be mounted on a tripod and remotely controlled.

SENSITIVITY TO UV SOURCES –1pC from a distance of 10m (33 ft) enables seeing corona from distances of 3m (9.8 ft) up to 100 m (328 ft).

FIELDS OF VIEW – 5°x3.75° & 10°x7.5°, built-in, interchangeable

SPECTRAL RANGE	SENSITIVITY	RECOMMENDED WORKING DISTANCES	FOV	LCD	WEIG HT	GPS	ANNOTATIONS	ZOOM
240-280 Solar Blind	1 pC @ 10 m	3-100m & 0.6m with close-up lenses	5º x 3.75º & 10º x 7.5º	5" Folding	2.2Kg	Built- in	Text + Audio	Visible & UV



DAYCOR® SUPERB



Superb is Ofil's trouper model that has been used by worldwide companies for almost a decade. Its stability and robust operation makes it still attractive. DayCor® Superb is a solar blind UV imager with excellent detecting capabilities and is fit for almost any light and weather conditions. Superb cameras appeal to in particular to research institutions and workshops that are using the camera on a tripod or by using a carrying supporting harness. Camera is operated through push buttons. Simple, intuitive and easy to control functions. Superb is equipped with a powerful zoom, counting, gain control, and can be

remotely controlled. Superb is being used by all types of electrical utilities; manufacturing companies either for QA or to maintain their privately owned substations and high voltage installations, motor workshops use Superb to test refurbished or new motors before handing them to end users, services providers use Superb to provide detailed reports with findings, high voltage laboratories use Luminar for their researches and academies for new studies on corona.

Moderately priced, Superb is a proven high performing corona detection camera that is being still highly demanded by research, workshops and testing laboratories. Superb is renowned for is high sensitivity, reliable on going operation and high quality captured media.

FUNCTIONALITY – Superb displays corona signals and the discharging sources with indications of the discharge severity. Powerful zooming, gain control, corona magnification, manual & auto focus, audio annotation are handy functions during inspecting very distant objects trying to catch, identify and capture faults that relate to corona. A folding LCD and a hood enable working in sunny conditions. The captured video clips and still images of corona include photon counting values, GPS data, ambient measured conditions, and text subtitles added by inspectors

PHYSICAL PROPERTIES – a robust design that fits extensive working hours under tough conditions, carried by a supportive harness or mounted on a tripod. Dimensions: 3.2 Kg (7.3 lb), $23 \times 18 \times 15 \text{ cm}$ ($9.1 \times 7.1 \times 5.9$ ")

MODE OF OPERATION – Manually and remotely controlled; Keypad; Simple straight forward operation. Narrow field of view that can be changed into wide using an external auxiliary lens (accessory); Rechargeable battery provides long operation duration.

SENSITIVITY TO UV SOURCES –1pC from a distance of 10m (33 ft) enables seeing corona from distances of 3m (9.8 ft) up to 100 m (328 ft).

FIELDS OF VIEW - 5°x3.75°

SPECTRAL RANGE	SENSITIVITY	RECOMMEND- ED WORKING DISTANCES	FOV	LCD	WEIGHT	GPS	ANNOTATIONS	ZOOM
240-280 Solar Blind	1pC @ 10 m	3-100m 0.5m with close- up lenses	5º x 3.75º & 10ºx7.5º w/ext lens	5" Folding	2.2Kg	Built- in	Text + Audio	Visible & UV