



DayCor® LUMINAR^{HD}

HANDHELD HIGH DEFINITION CORONA CAMERA



Luminar^{HD} is the top line handheld corona camera boosted with features that enhance inspection process. **Luminar^{HD}** implements Ofil's benchmarked DayCor® proprietary technology ensuring accurate detection, recording and displaying of UV radiation emanated by corona. Perceived GPS, text & audio annotations, ambient temp & humidity are marked on captured media and saved as meta data for post processing and reporting. Wi-Fi, LAN and Bluetooth communication protocols support remote control and efficient data transfer. Strict ergonomic design ensures aesthetics and user friendliness. **Luminar^{HD}** has an easy grip; large lit control buttons; pictorial menu, a large bright & adjustable display, powerful zoom, continuous interchangeable wide to narrow fields of view. **Luminar^{HD}** is built for extended uninterrupted operation powered by a rechargeable battery. **Luminar^{HD}** supports corona management systems and includes an interface to **coronaWise** software with auto-detect and automatic data transfer.

- >> Highest sensitivity to corona and RIV sources
- >> Powerful continuous optical & digital zoom
- >> Adjustable high resolution TFT LCD
- >> Uninterrupted continuous operation
- >> HD 720p videos & high resolution images

- >> Built-in GPS with internal antenna
- >> Bluetooth & Wi-Fi communications
- >> Powerful LED flashlight
- >> Temperature & Humidity plug
- >> Interface to **coronaWise** - Corona Management SW

TESTED & CERTIFIED SENSITIVITY TO UV & RIV

Luminar^{HD}, the top line sensitive corona camera, was tested and certified by RWE Germany for detecting 1pC from 15 meters, 3.6dBµV (RIV) @ 1MHz @ 10m in outdoors & indoors. UV photons emanating from corona are counted and presented as values that designate corona severity. Luminar^{HD} enables frames integration as an additional means to enhance detecting corona sources.

PRECISE LOCATION OF EMITTING SOURCES

The concurrently captured UV and visible images are merged accurately portraying a true pinpointed imaging of the electrical fault. Auxiliary data such as GPS, ambient conditions, narrations etc. are embedded and added as meta data.

ERGONOMIC AND PRACTICAL

Spacious and big illuminated control buttons activate the most frequently used functions and accommodate for working-with gloves. A large adjustable TFT LCD guarantees good view in sunny conditions, while a built-in powerful LED flash light enables inspection tasks in darker conditions. A pictorial easy to navigate menu adds multiple operational features such as defining users preset profiles with personalized default settings.

EFFECTIVE POWERFUL ZOOM

A continuous interchangeable optical wide to narrow fields of view of both the visible and UV channels provide powerful zooming. The high definition high resolution video recording adds significant digital magnification enabling excellent post processing possibilities of closer view into imperfections involved with corona discharges.

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.

Wi-Fi, BLUETOOTH, ETHERNET

Luminar^{HD} supports wireless and wired communication through either communication protocol. As such, Luminar can be fully controlled from remote control centers, streaming recording to external monitors.

HD VIDEO & IMAGE RECORDING & PLAYBACK

HD 720p video & stills are stored onto a micro flash card and displayed on the LCD. Media can be exported automatically to Ofil's **coronaWise** software, as plug-N-play.

TECHNICAL SPECIFICATIONS

UV - OPTICAL PROPERTIES

| | |
|-----------------------------|---|
| Minimum Discharge Detection | 1pC @ 15 m Tested & certified by RWE: IEC 60270:2000. Real results |
| Minimum RIV Detection | 3.6dBµV (RIV) @1MHz@10m Tested & certified by RWE: NEMA107-1987. Real results |
| 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 | Optical & digital, slaved to the visible channel |
| Spectral Range | 240-280nm |
| UV Frames Integration | On Off |
| UV Display Colors | Polychromatic: Red, Green, White, Black, Yellow |

VISIBLE - OPTICAL PROPERTIES

| | |
|-------------------------------------|--|
| UV/Visible Overlay Accuracy | Deviation < 1 miliradian |
| Minimum Visible Light Sensitivity | 0.1 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 | 0.5m 1.6ft automatic & manual |
| Rapid Visible Zoom | 12x optical, 12x digital (144 optical X digital) attained within 1 sec |
| UV & Visible Channels Display Modes | Combine (UV & Visible), UV only, visible only |

DISPLAY

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|------------|---|
| 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 | Keypad, menu, automatic feed, mic, GPS, temperature & humidity |
| Output | HDMI, Aux, 1GB Ethernet, Bluetooth, Wi-Fi, Mini USB, speaker (int. + ext.) |
| Functions Activation | Buttons & menu |
| GPS | Built-in, internal antenna |
| Text Editor | Built-in |
| Data Export | Auto detect, auto transfer interface to coronaWise software |
| 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 | AVI \ 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

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