

DayCor® LUMINAR HD

Handheld high definition corona camera

Luminar^{HD} is a handheld corona camera enhanced with features that guarantee the highest sensitivity to UV, highest resolution and high quality recording. Luminar^{HD} provides pinpointed and comprehensive data with information about the ambient conditions, fault location and corona strength. Findings are available in real time and displayed on a high definition LCD. Luminar^{HD} assists inspectors investigate electrical faults and get a wider understanding of the asset condition. Luminar^{HD} supports corona management and includes an interface to coronaWise software with auto-detect and data transfer. By using this camera, engineers benefit from immediate access to active faults. Additionally, the collected media can be used for analysis and trending. Luminar^{HD} incorporates Ofil's benchmarked DayCor® proprietary technology ensuring daytime operation with the highest sensitivity to UV radiation of corona. Luminar^{HD} is ergonomically designed and built for extended uninterrupted operation.

- Highest sensitivity
- Powerful zoom
- Hi resolution TFT LCD
- Recording & playback
- HD 720p videos
- Built-In GPS
- Wi-Fi hot spot
- LED & Backlit keyboard
- Signals amplification
- Noise reduction control

SENSITIVITY IS THE KEY FACTOR

Corona can only be seen in daytime by a solar blind imager, but to be able to see UV photons, the corona elements, from afar and not miss any occurence of corona, a hyper sensitive camera such as Luminar^{HD} is required. To ascertain the performance of Luminar^{HD} the camera has been tested and certified having a sensitivity of detecting as low as1pC from a distance of 15 meters. Signal amplification and noise reduction contribute to better resolution and performance.

SEE TO FORESEE - PREDICTIVE MAINTENANCE

Luminar^{HD} is a HD video and stills recorder of corona events superimposed on visible imaging of their sources. The camera scores corona severity and indicates it on the output together with narration, ambient conditions and GPS. Luminar^{HD} output is valuable to predictive maintenance, which relies on past performance evidence and documentation.

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.

PERFECTION IN EVERY DETAIL

Spanning from the spacious onboard function buttons with on/off backlight, through a pictorial menu, large adjustable TFT LCD, powerful LED flash light, preset profiles and more, up to the most elaborated detector, Luminar^{HD} is dedicated to perfection. By achieving extremely ergonomic design and fortified detection power, Ofil enables you to enjoy a notably reliable product with excellent results.

ALL IN ONE

Luminar^{HD} is an outstanding testing equipment to enjoy under multiple conditions: whether indoors or outdoors, nearby or afar inspections, as a handheld unit or mounted, controlled locally or remotely. All features in one equipment, all requirements equally met. The powerful onboard LED takes care of dimmed working compartments, while full solar blind filter ensures full operation under sunny conditions. Powerful zoom, 1000 nits TFT LCD and HD video support resolving details of remote objects. Wi-Fi and Ethernet support controlling the camera remotely getting the output imaging onto an external monitor. Continuous operation without overheating and a rechargeable battery with extended lifetime helps accomplish efficient outdoor inspection.

TECHNICAL SPECIFICATIONS

UV - OPTICAL PROPERTIES	
Minimum Discharge Detection	1pC @ 15 m Tested & certified by Innogy SE-Eurotest Germany: IEC 60270:2000
Minimum RIV Detection	3.6dBµV (RIV) @1MHz@10m Tested & certified by Innogy SE-Eurotest : NEMA107-1987
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	2x Optical 6.25x Digital, Slaved to the visible channel
Spectral Range	240-280nm
UV Frames Integration	ON/OFF | ON: [Snapshot only | Amplification | False elimination filter]
UV Display Colors	Polychromatic: Red, Green. White, Black, Yellow
VISIBLE - OPTICAL PROPERTIES	
UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Minimum Visible Light Sensitivity	0.07 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	0.6m | 1.96ft Automatic & manual
Visible Zoom	12x Optical, 12x Digital, continuous
UV & Visible Channels Display Modes	Combine UV & Visible, UV only, visible only
DISPLAY	
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	Audio, temperature & humidity sensor, Mini USB, Ethernet
Output	HDMI, Aux, 1GB Ethernet, Wi-Fi, Mini USB
Functions Activation	Keypad buttons with adjustable backlight, featured menu, remote control
GPS	Built-in, internal antenna
Text Editor	Built-in
Data Export	Ethernet, Video-out, micro SD card
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	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	
Close-up Lens; coronaWise Software; Temp & Humidity Meter plug, Remote Control wired or wireless	

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