![OFIL Systems logo] OFIL SYSTEMS >>*Makes UVisible*

DayCor®
LUMINAR

DAYCOR® INSIDE

HANDHELD CORONA CAMERA

Luminar is an outstanding NDT - Non Destructive Testing equipment that pinpoints corona & arcing emitting sources in full daylight and denotes severity. Luminar is designed to maximize the efficiency of predictive maintenance providing fast & exact information about existing partial discharges as indicators of electrical and mechanical faults. Luminar implements Ofil's DayCor® exclusive technological developments, ensuring the highest sensitivity to UV signals. Luminar has a sensitivity certificate issued by an independent reputable laboratory based on real testing. Luminar operates continuously without overheating, as mandatory during inspections. Ofil ensures its products are kept technologically updated with special attention to excellent user experience.

>> Supreme proven sensitivity to UV signals

>> Precise location of corona emitting sources

>> Interchangeable fields of view & powerful zoom

>> High resolution color LCD

>> Uninterrupted continuous operation

>> Videos & images capturing and playback

>> Built-in GPS with internal antenna

>> Voice narration and text annotation

>> Light and ergonomic

>> Hot keys to functions

SUPREME SENSITIVITY TO UV SIGNALS
Based on real testing by a reputable laboratory, Luminar detects 1pC from a distance of 15 meters and 3.6dBµV (RIV) @ 1MHz . Luminar makes the faintest corona perceivable and displayed clearly. UV events counter supported by a dedicated algorithm designate detected corona severity. Frame integration is also optional as a way to enhance signals.

DAYCOR® TECHNOLOGY INSIDE
Luminar is a high fidelity bi-spectral solar blind camera implementing Ofil's DayCor® technology [Registered Patent EP1112459B1]. Luminar allows uninterrupted operation in full daylight, without overheating, capturing nearby and remote faint UV signals.

PRECISE LOCATION OF EMITTING SOURCES
Luminar displays in real time and accurately both corona and the emitting sources. Luminar portrays the real condition of the inspected object with embedded GPS data, ambient conditions, narrations and annotations.

LIGHT AND ERGONOMIC
Luminar is light in weight and compact in size. Hot keys provide direct access to favorite frequently used functions. and an easy to navigate setup menu

INTERCHANGEABLE FIELDS OF VIEW
Luminar enables adjusting fields of views (FOV) to the inspection conditions. Wide FOV is handy in congested areas and for inspecting nearby installations. Narrow FOV is handy in open areas and for remote objects.

EFFECTIVE POWERFUL ZOOM
UV optical zoom x2 and Visible optical zoom x25. Powerful rapid zoom enables a close view of the emitting sources to reveal imperfections that create corona. A rapid response to zooming in/out saves operation time.

BUILT-IN VIDEO & IMAGE RECORDING AND PLAYBACK
Recorded video clips and stills are internally stored on a removable flash memory card and displayed as a gallery with playback option.

COMPATIBLE WITH OFIL'S REPORTING SOFTWARE
Luminar is compatible with Ofil's reporting software. Stored images, videos and the auxiliary data of date, location, titles and ambient conditions are used in the database as references to findings, and displayed in reports.

TECHNICAL SPECIFICATIONS

UV - OPTICAL PROPERTIES	
Minimum Discharge Detection	1pC @ 15 m (~0.44 pC@ 10 m) (tested by RWE certified: IEC 60270:2000)
Minimum RIV Detection	3.6dBμV (RIV) @1MHz (real testing by RWE certified: NEMA107-1987)
Minimum UV Sensitivity	2.2×10^{-18} watt/cm^2
Fields of View H x V	5º x 3.75º and 10º x 7.5º Synchronized with UV channel
Detector Life Span	No degradation
Focus	Full manual and auto focus for both channels
Focus Range	3m | 9.10ft - infinity (0.6m | 1.96ft with close up lens)
UV Zoom	Optical, x2
Spectral Range	240-280nm
UV Frames Integration	On | Off
VISIBLE - OPTICAL PROPERTIES	
UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Minimum Visible Light Sensitivity	0.1 Lux
Video Standard	NTSC
Rapid Visible Zoom	25 optical x 12 digital attained within 1 sec
DISPLAY	
Type	Adjustable integral color Transflective-Sunlight-Readable LCD,
Brightness	450 cd/m^2 reflective, adjustable backlight
Resolution	640x480 pixels, color
Size	5"
Modes	Combine (UV & Visible), UV only, Visible only
External Display	Composite NTSC via RCA jack
Corona Colors	Red, Green. White, Black, Yellow
CONTROLS & OPERATION	
Method	Hot keys & on screen menu
Functions Activation	One touch button & menu selection
GPS	Built-in, internal antenna
Text Editor	Built-in
Mounting Point	Standard 1/4" thread tripod mount
Continuous Operation	Unlimited. No overheating
ENVIRONMENTAL	
Storage and Operation Temp	-20^{0}C up to +55^{0}C | -4ºF up to +131ºF
Encapsulation	IP 54, Certified
MEDIA CAPTURE & DATA STORAGE	
Video & Stills Capture	Internal
Video Format	AVI (MPEG4 AVC)
Stills Format	BMP
Audio	Internal speaker, External microphone
Playback	Video, audio & still pictures
Digital Storage	Memory flash card
PHYSICAL CHARACTERISTICS & POWER SOURCE	
Weight	2.2 Kg | 4.8 lb
Dimensions L x W x H	L29 x W13 x H12 cm | 11.4" x 5.1" x 4.7"
Nominal Power Consumption	15 Watts
Power Source	Rechargeable battery for over 3 hours, Universal AC/DC 5V Adapter
COMMUNICATION	
Interface	Temperature & Humidity meter, RS232, Mic
ACCESSORIES	

Close-up Lens; Corona Base Software; Retractable Supportive Stock;Temp & Humidity Meter plugin; Inspection Guide; Remote Control