Luminar is an outstanding NDT - Non Destructive Testing equipment that pinpoints corona and arcing emitting sources in full daylight and denotes discharge severity. Luminar is designed to maximize the efficiency of reliability-based maintenance and productivity of predictive maintenance engineers by providing exact and relevant information output. It is a powerful tool with DayCor® technology embedded and enhanced optical and display features. Luminar brings an innovative approach to corona detection.

SUPREME SENSITIVITY TO UV SIGNALS
With detection of at least 1pC from a distance of 10 meters and 7.7dBμV (RIV) @ 1MHz Luminar makes the faintest corona perceivable and displayed clearly. UV events counter supported by a dedicated algorithm designate detected corona severity.

DAYCOR® TECHNOLOGY INSIDE
Luminar is a high fidelity bi-spectral solar blind camera implementing Ofil’s DayCor® technology [Registered Patent EP1112459B1]. Luminar, as such, allows operation in full daylight, capturing nearby and remote faint UV signals and displaying real corona images.

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.

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

EFFECTIVE POWERFUL ZOOM
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 and makes Luminar’s operation more intuitive and user friendly.

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

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 @ 10 meters (RWE certified: IEC 60270:2000)
- **Minimum RIV Detection**: 7.7dBμV (RIV) @1MHz (RWE certified: NEMA107-1987)
- **Minimum UV Sensitivity**: 2.2x10^-18 watt/cm²
- **Fields of View H x V**: 5º x 3.75º and 10º x 7.5º
- **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)
- **Spectral Range**: 240-280nm

### 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/m² 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
- **Text Editor**: Built-in
- **Mounting Point**: Standard 1/4” thread tripod mount

### ENVIRONMENTAL
- **Storage and Operation Temp**: -20°C up to +55°C | -4°F up to +131°F
- **Encapsulation**: IP 54, Certified

### MEDIA CAPTURE & DATA STORAGE
- **Video & Stills Capture**: Internal
- **Video Format**: AVI (MPEG4 AVC)
- **Still 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 - Database Reporting Software; Stock; Temp & Humidity Meter plugin

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