



# PRODUCT CATALOG

SMART INSPECTION AND  
DIAGNOSTIC SOLUTIONS

[www.ofilsystems.com](http://www.ofilsystems.com)



# SMART INSPECTION AND DIAGNOSTIC SOLUTIONS

## About OFIL - the solution:

Founded in 1993, OFIL Systems has been a leading provider of solar-blind UV (daytime) inspection systems in the high-voltage markets. We stand at the forefront of tackling the growing challenges in electricity. Our pioneering innovation, solar-blind UV technology, introduced a new era of predictive maintenance, enabling precise and real-time detection of corona partial discharges in full daylight.

## Inspection Solutions:

OFIL's UV technology is specifically engineered for early fault detection in electrical infrastructure. Our cameras, available on multiple platforms including handheld, UAV-mounted, robot-mounted, and and vehicle-mounted systems, serve a wide range of industries.

### DayCor® Technology Inside

Experience unmatched clarity and performance with OFIL's proprietary DayCor® technology. This camera sees the unseen by detecting corona PD and arcing, utilizing solar blind UV technology that operates in full daylight, unaffected by solar radiation. It captures a spectral range of UVC 240-280nm, ensuring superior detection capabilities.



## Diagnostic Solutions:



### Grid Reliability through Image Intelligence

Gridnostic, advanced diagnostic software that leverages multi-sensor technologies and converts complex imagery data into clear numeric severity scores we further enhance the precision of Grid maintenance and lower operational costs.

Gridnostic was developed based on research and guidelines from the electric power Research Institute (EPRI)



## Industries we Serve:

### Electrical Utilities



### Rotating Machines



### Industrial Domains

Mines, Heavy Industries, Plants, Data Centers



### Manufacturers

Transformers, HV cables, Insulators ,etc



### Railways



# DayCor® Luminar HD



Precise. Powerful. Reliable.

**DayCor® Luminar HD** Solar Blind UV Camera is a handheld solution specifically designed to detect and pinpoint corona PD and arcing - a major but often unseen hazard to electrical equipment. It offers unparalleled sensitivity, precise fault pinpointing, HD imaging, and powerful zoom. With its functions and advanced algorithms, it excels in a wide range of applications and delivers top-notch performance.

## Product Key Features



### High Sensitivity:

Best-in-class sensitivity to PD detection at 1pC @ 15m, certified by Eurotest lab.



### Powerful Zoom:

Powerful zoom capabilities for detailed fault analysis.



### Non-Destructive Testing:

Allows for safe inspections from a distance of up to 150-200 meters\*



### Built in GPS:

For accurate data geotagging.



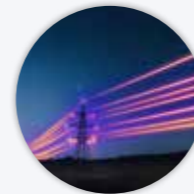
### HD Resolution:

720p video for detailed imaging.

\*The inspection distance can vary according to environmental conditions and corona PD intensity



## Applications



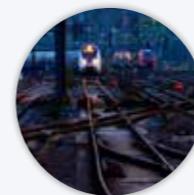
### Handheld Inspection of **Transmission, Distribution, Substations and Generation**

Commissioning | Periodic Inspections & Maintenance | Fault Investigation & Repair | Washing of Powerlines & Substations | Locating Sources of RFI/AN



### Handheld Inspection of **Rotating Machines, Transformers, Cables, and other HV Components**

Design | Manufacturing | QA | Field Service



### Handheld Inspection of **Traction Substations for Railways**



### Handheld Inspection of **Substations and Power Lines in Mines, Data Centers, and Heavy Industries**



### HV Research Labs

# DayCor® UVollé



**Reliable, Compact,  
and User – Friendly**

**DayCor® UVollé** Solar Blind UV Camera is a handheld solution specifically designed to detect and pinpoint corona partial discharge - a major but often unseen hazard to electrical equipment. It offers an ideal blend of affordability and utility, with its light weight, easy use and precise fault pinpointing, it can tackle most corona partial discharge detection tasks with ease.

## Product Key Features



### High Sensitivity:

High sensitivity to PD detection at 1pC @ 12m, certified by Eurotest lab.



### Non-Destructive Testing:

Allows for safe inspections from a distance of up to 50-70 meters\*



### Easy to Use:

Remarkably intuitive and effortlessly easy to use.



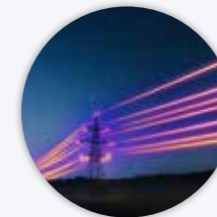
### Compact and Light-weight:

Designed to be comfortably used and held with just one hand.



\*The inspection distance can vary according to environmental conditions and corona PD intensity

## Applications



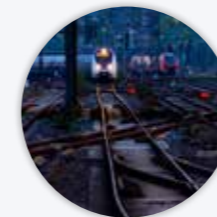
### Handheld Inspection of **Distribution, Substations and Generation**

Commissioning | Periodic Inspections & Maintenance | Fault Investigation & Repair | Washing of Powerlines & Substations | Locating Sources of RFI/AN



### Handheld Inspection of **Rotating Machines, Transformers, Cables, and other HV Components**

Design | Manufacturing | QA | Field Service



### Handheld Inspection of **Traction Substations for Railways**



### Handheld Inspection of **Substations and Power Lines in Mines, Data Centers, and Heavy Industries**

# DayCor® micROM HD



**Compact, Advanced,  
UAV-Integrated Solution**

**DayCor® micROM HD** Solar Blind UV Camera is a UAV solution specifically designed to detect and pinpoint corona PD and arcing - a major but often unseen hazard to electrical equipment. It's compact, lightweight, features a wide field of view and high - definition imaging. With its electromagnetic shielding, it ensures optimal performance even in the most demanding conditions. Its easy integration on UAVs, combined with the ability to integrate with various gimbals enhances its practicality and versatility.

## Product Key Features



### High Sensitivity:

Best-in-class sensitivity to PD detection at 1pC @ 8m, certified by Eurotest lab.



### Light Weight, Small Size:

Lightweight camera with energy-efficient usage, allowing longer and faster flights scanning power lines.



### Remote Inspection Capability:

Perform safe inspections from up to 40 meters\*



### Control Protocols:

Supports a variety of UAV control protocols including PWM, MAVLINK, Ethernet, and UART.



### HD Resolution:

720p video for detailed imaging.



### Easy Integration on UAVs:

Offers multiple integration and gimbal choices, including kits for DJI M300/M350 and RtRobotics HERA.

\*The inspection distance can vary according to environmental conditions and corona PD intensity



## Applications



### UAV Inspection of Transmission, Distribution, Substations and Generation

Commissioning | Periodic Inspections & Maintenance | Fault Investigation & Repair | Washing of Powerlines & Substations | Locating Sources of RFI/AN

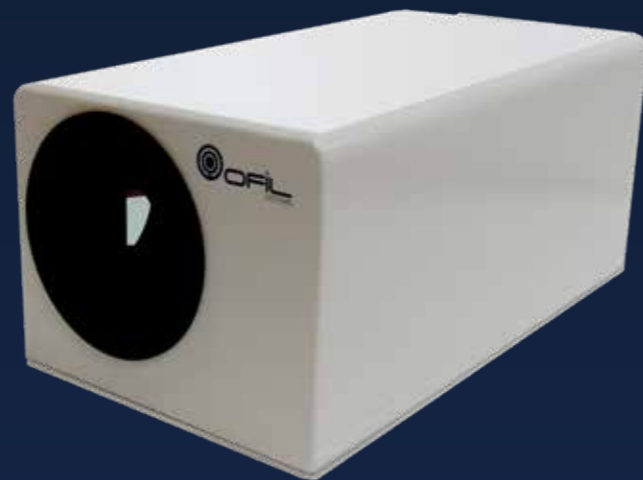


### UAV Inspection of Railways Overhead Lines and Traction Substations



### UAV Inspection of Substations and Power Lines in Mines, Data Centers, and Heavy Industries

DayCor®  
UV Eye



DayCor®  
UV Eyelite



DayCor®  
UV EyeScope



**DayCor® UV EYES Family** are Solar Blind UV Camera cores for OEM integration, specifically designed to detect and pinpoint corona partial discharge - a major but often unseen hazard to electrical equipment. The cameras offer high sensitivity, precise fault pinpointing and high-definition imaging. With an IP65 environmental protection rating, the cameras are built to withstand challenging weather conditions, ensuring optimal performance regardless of the environment. Ease of integration is ensured through their API.

### Product Key Features



**Environmental Protection IP65:**

Offers robust protection against dust ingress and low-pressure water jets.



**Easy to Integrate:**

Quickly connect and control through API, ONVIF support, customizable UV thresholds for setting alerts.



**Pan & Tilt Compatibility:**

Supports versatile positioning options for optimal coverage and fault detection.

### Applications



**Vehicle Mounted Inspection of Transmission & Distribution Lines**



**Continuous Monitoring of Substations & HV Components**

Robot-Mounted Installations | Fixed Installations | PTZ Systems



**Train mounted inspection of railways overhead lines**



**Integration in OEM systems**

## DayCor® UV Eye

Robust with unmatched sensitivity, DayCor® UV Eye precisely pinpoints faults using high-definition imaging and powerful zoom, ensuring accurate corona PD detection.



### Highest Sensitivity:

Best-in-class sensitivity to PD detection at 1pC @ 15 m, certified by Eurotest lab.



### Non-Destructive Testing:

Allows for safe inspections from a distance of up to 150-200 meters\*



### Powerful Zoom:

Powerful zoom capabilities for detailed fault analysis.

## DayCor® UV Eyelite

Compact, lightweight, and highly sensitive, DayCor® UV Eyelite ensures precise corona PD detection and fault localization through high-definition imaging, ideal for mobile inspections.



### High Sensitivity:

High sensitivity to PD detection at 1pC @ 15m.



### Non-Destructive Testing:

Allows for safe inspections from a distance of up to 100 meters\*

## DayCor® UV EyeScope

Compact, lightweight, and featuring a wide field of view, DayCor® UV EyeScope delivers precise corona PD detection and fault pinpointing through high-definition imaging and powerful zoom capabilities.



### Highest Sensitivity:

High sensitivity to PD detection at 1pC @ 8m, certified by Eurotest lab.



### Non-Destructive Testing:

Allows for safe inspections from a distance of up to 40 meters\*




### Wide Field of View:

Expanding your vision for comprehensive, efficient inspections.

\*The inspection distance can vary according to environmental conditions and corona PD intensity

## Product Accessories

-  **Connect Software:** Windows-compatible software designed for seamless remote control of DayCor® cameras. Offering remote access, multi-camera support, and real-time monitoring directly from your computer.





# Grid Reliability through Image Intelligence



Gridnostic is a software platform that leverages multi-sensor technologies including UV, RGB, and thermal, converts complex imagery data into clear numeric severity scores, and delivers actionable insights for efficient asset health management.

**EPRI** This product was developed based on research and guidelines from the **Electric Power Research Institute (EPRI)** and integrates all inspection data within a geospatial context, offering a strategic, map-based overview of grid performance.

## Key Features



### Diagnostics Capabilities

Our platform converts complex imagery data into clear numeric severity scores, delivering actionable insights for efficient asset health management.



### Multi-sensor Integration

Leverage multi-sensor technology including UV, RGB and Thermal to enhance analysis capabilities.



### GIS-enhanced Platform

Integrates all inspection data within a geospatial context, offering a strategic, map-based overview of grid health.



### Simplifying Complexity - AI Enabled

Transform complex data into clear, actionable insights with AI models enhancing data interpretation.



### Asset-based Data Management & Reporting

Efficiently manage historical data and enhance communication with sharing and reporting capabilities



### Expert Advice & Diagnostics

Backed by years of industry knowledge, receive expert advice and diagnostics to solve problems faster.

### Analysis Interface:

Comprehensive interface for analyzing UV, RGB and Thermal inspection data.



### Map Display:

Pictures are color-coded according to their severity levels, allowing for quick visual assessment of priority areas in T&D networks and substations.



### Automatically Generated Reports:

Detailed reports with severity assessments and actionable insights.



# INSPECTION SOLUTIONS



DayCor® UVollé



DayCor® Luminar HD



DayCor® micROM HD



DayCor® UV Eyes

# DIAGNOSTIC SOLUTION



Gridn<sup>o</sup>stic



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