

# OFIL Systems micROM Product Presentation

DayCor®  
**MICROM**

# 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 partial discharge - 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.



## Applications

- Transmission
- Distribution
- Substations
- Mines and Heavy Industries



# micROM HD

## Product Key Features

- **High Sensitivity**  
Corona partial discharge sensitivity of 1pC @ 8m, as certified by Innogy lab.
- **Completely Solar Blind**  
Unaffected by solar radiation, ensuring reliable operation in daylight.
- **Spectral Range**  
UVC 240 – 280nm
- **Precise Pinpointing**  
Guarantees precise location of faults
- **Easy Integration on UAVs**  
Various integration and gimbal options, including a DJI M300/M350 integration kit
- **Light Weight, Small Size**  
Lightweight camera with energy-efficient usage, allowing longer and faster flights scanning power lines
- **Electromagnetic Shielding**  
Safely and accurately inspect power lines up close, ensuring data integrity and operational safety
- **DayCor Inside**  
Embedded with proprietary DayCor technology for superior performance



# micROM HD

## Product Benefits



**Reduced Maintenance Costs with Aerial Efficiency:**

By deploying UAVs equipped with the DayCor micROM HD, electrical utilities can perform large-scale aerial inspections and minimize the need for extensive ground-based inspections.



**Timely Identification and Rectification: Don't react, act!** Identify potential equipment failures before they cause costly disruptions.



**Seamless UAV Integration:** Designed for UAVs, the camera offers hassle-free integration with various drone models and gimbals. This makes it a versatile companion for aerial inspections, ensuring you get the best view of electrical equipment hazards.

# Specifications

Category	Luminar HD
Usage	Daytime , outdoors & indoors
Recommended inspection distance *	Up to 30m
<b>Key Features</b>	
Sensitivity	1pC @ 8m
Field of View	20° x 11.25°
Video Resolution	HD 720p
Focus range	5m to infinity
Communication Protocols	Ethernet, RS232, PWM
Video Output	HDMI, RTSP
Environmental Protection	IP54
Weight & Size	875g   15.6x11.2x7.1 cm



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

# Integration Kit: DJI M300 / M350

- Compact
- Easy to carry
- Easy to mount
- Plug-N-Play with micROM HD



Gimbal Folded



Gimbal Package



Gimbal

micROM

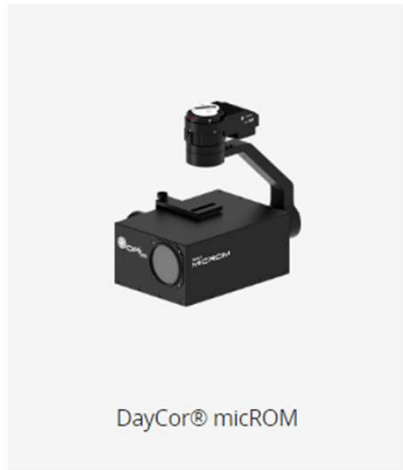
# Integration Kit: DJI M300 / M350



# micROM camera - part of the DJI Ecosystem Solution Catalog

As of January 2024, The micROM camera is a part of the [DJI Ecosystem Solution Catalogue](#).

## Camera



DJI Enterprise Ecosystem Solution Catalogue

Join the DJI Enterprise Ecosystem

## DayCor® micROM

OFIL Systems



# Accessories for DJI M300 / M350 Integration Kit

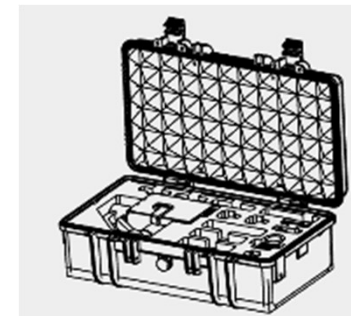
## DJI M300/350 drone leg extensions

- Set of 2 pcs
- Used to lift the drone to enable easier connection of the micROM.



## Ruggedized carrying case for micROM and DJI M300/M350 Gimbal

- Large carrying case that is designed to hold the micROM when it is assembled on the gimbal



# Accessories for DJI M300 / M350 Integration Kit

## Gimbal connector set for DJI M300/350 gimbal

- Set of 2 parts (upper and bottom)
- Eliminates the need to disassemble the original single dampers and replace them with double dampers. Now you can replace this entire assembly.



Gimbal connector set – not assembled



Gimbal connector set – assembled with dampers

# Simultaneous Inspection with IR / High Resolution Visible Cameras with DJI Drones

Use micROM simultaneously with various DJI Cameras:

- DJI Zenmuse H20
- DJI Zenmuse H20T
- DJI Zenmuse P1



- ✓ Multi-Spectral UV, IR and high-resolution visible Inspection
- ✓ Synchronization of the upward and downward gimbals



Matrice 300 Series Upward Gimbal Connector



# Integration on RtRobotics HERA UAV



**RMUS** Unmanned Solutions™

## RMUS Powerline Inspector Drone®

RMUS is proud to present our new RMUS Powerline Inspector Drone®, a collaboration between Realtime Robotics ("RTR"), OFIL Systems and RMUS. This unique NDAA-compliant system enables you to gather high-quality RGB, thermal, LIDAR and Corona inspection data on a single UAS platform.

### Package Features

**Complete Package**

This is a complete solution with aircraft, remote, spare propellers, spare batteries, rugged travel case and other related accessories that is "mission-ready" upon receipt.

**Support**

The RMUS Tech Support Team will provide support for aircraft and the payloads.

**Maintenance/Repair**

The HERA platform is modular and can be repaired and maintained remotely once the customer is properly trained.



**Training**

RMUS Training Team has created curriculum for the Hera aircraft, software, and payloads, all stored in our easy-to-access RMUS Training Hub.

**RTR Hera Platform**

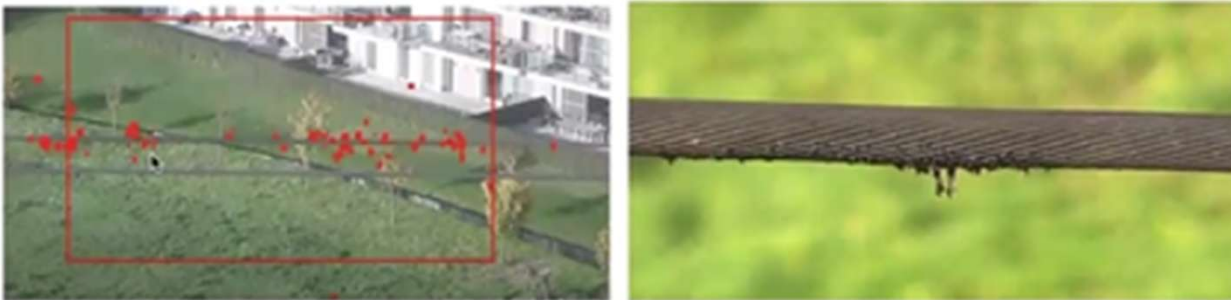
- Can fit into a backpack despite its large "in flight" size
- 33 lb/15 kg payload capability
- Flight time of 46+ minutes with 5.7 lb/2.6 kg payload
- All components NDAA compliant, including radio system

RMUS offers the NDAA compliant Hera aircraft integrated with the OFIL DayCor® micROM HD.



# Simultaneous Inspection with IR / High Resolution Visible Cameras

Corona PD Detection – Contamination on Conductor



Conductor Broken Strands



# Simultaneous Inspection with IR / High Resolution Visible Cameras

Corona PD Detection – Bushing



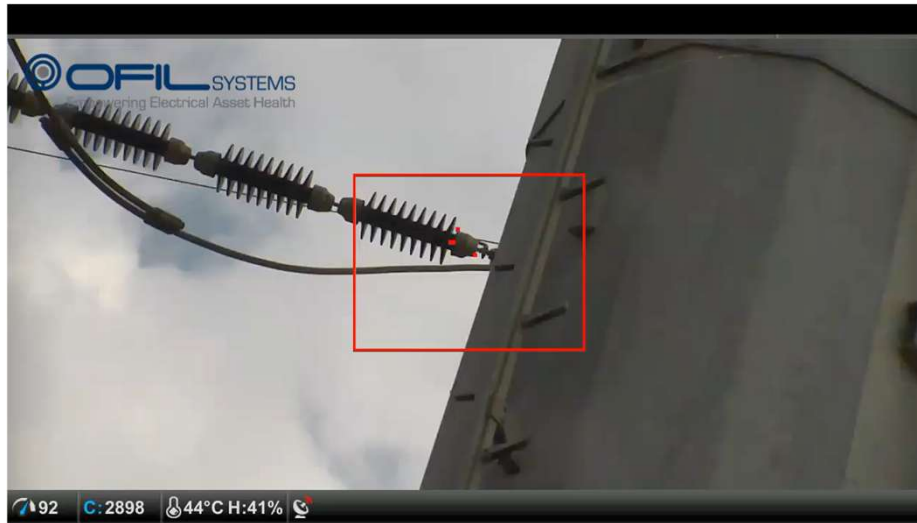
Corona PD Detection – Corona rings



# Images - Examples



# Videos - Examples



Thank you

The background features a dark blue gradient with a faint, stylized wireframe illustration of several high-voltage power transmission towers and their associated power lines. The towers are arranged in a perspective from left to right, with the largest and most detailed one on the far right. Small blue dots are scattered along the lines and towers, suggesting data points or sensor locations. The overall aesthetic is technical and modern.