



# DayCor® ROM



Rom is the most sensitive airborne corona and arcing detection system in a gyro stabilized gimbaled payload. Rom is specially designed to provide high resolution video output of remotely inspected objects with high signal to background ratio. Rom enables safe and high speed flight inspection to streamline maintenance tasks of long overhead lines. Rom's reporting software renders flexible customized professional reports.

- **Corona detection highest sensitivity**
- **Rapid X25 optical zoom of the visible channel**
- **Auto focus of the UV and Visible channels**
- **Control & display unit (CDU)**
- **Set for hyper spectral inspection**

- **Digital video recording and storage**
- **High resolution 10" LCD**
- **UV events counter**
- **Reporting software - multilingual**
- **GPS built-in**

## ROM Fast Flying Inspection

UV sensitivity of  $3 \times 10^{-18}$  watt/cm<sup>2</sup> enables detection and capture of distant corona discharge during high speed flight of 100 km/h or higher without smearing the output image and without missing corona events.

## ROM Easy to Operate

Keyboard controls with immediate direct operation and on-screen indications of selected controls. Switching between controls is instantaneous and seamless.

## ROM Stabilized Payload

A laser gyro with four-axis digital stabilization gimbaled system offers easy tracking and data acquisition independent of aircraft movements. Payload is fit for nose or belie installation or any other desired configuration.

## ROM Cutting Edge Optics

Rom's exclusive lenses provide high pinpointing resolution that enables corona detection of distant objects to ensure safety flight.

## ROM Video Recording & Storing

Recording of high resolution video clips. NTSC/PAL compatible output. Built in GPS, date & time indications and optional text comments additions.

## ROM Reporting Software

Off's reporting database software for easy and straightforward sorting, analyzing, storing and automatic report generation capabilities.

## ROM Easy Installation & Low Weight

Minimalist installation kit is required. Composite design ensures low system weight and extended mission endurance.

## ROM for Hyper Spectral Inspection

Rom is set to incorporate the prominent inspection technologies such as IR, UV, Visible etc, to provide, with selected top quality brands, a comprehensive diagnostics tool and cut labor and flight costs.

<b>Type</b>	<b>Four-axis gyro-stabilized gimbal</b>
<b>Stabilization</b>	<b>35 / 100 <math>\mu</math>Rad</b>
<b>Dimensions</b>	<b><math>\varnothing</math> 300 / <math>\varnothing</math> 400 mm</b>
<b>Weight</b>	<b>25 kg (55 lbs.)</b>
<b>Power Requirements</b>	<b>24-28 VDC, Fuse 10A</b>
<b>Environmental Spec</b>	<b>RTCA – 160 D</b>

<b>Minimum UV Sensitivity</b>	<b><math>3 \times 10^{-18}</math> watt/cm<sup>2</sup></b>
<b>Field of View H x V</b>	<b>5° x 3.75°</b>
<b>Detector Life Span</b>	<b>No degradation</b>
<b>Focus</b>	<b>Full auto focus for UV and visible channels Simultaneous manual focus adjustment for both channels</b>
<b>Focus Distance</b>	<b>3m to infinity</b>
<b>UV/Visible Overlay Accuracy</b>	<b>Better than 1 mRad</b>
<b>Video Standard</b>	<b>Full PAL or NTSC standards</b>
<b>Rapid Visible Zoom</b>	<b>25x optical 12x digital Max Visible zoom reached within 1 sec on button push Return to normal value within 1 sec on button release</b>
<b>Control &amp; Operation</b>	<b>Keyboard via remote control</b>
<b>Functions Activation</b>	<b>One touch button</b>
<b>Storage and Operation Temp</b>	<b>-20°C up to +55°C</b>

## Proposal:

<b>FOV:</b>	<b>12°x 9°</b>
<b>Array Size:</b>	<b>320 x 240 pixels</b>
<b>Spatial Res. (IFOV):</b>	<b>0.65mRad</b>
<b>Thermal Sensitivity:</b>	<b>0.08°C at 30°C</b>
<b>Spectral Range:</b>	<b>7.5-13<math>\mu</math>m</b>
<b>Focus:</b>	<b>Manual</b>
<b>Electrical Zoom:</b>	<b>2x</b>
<b>Temp. Range:</b>	<b>-40°C to +500°C (in 2 ranges)</b>
<b>Temp. Accuracy of Reading:</b>	<b><math>\pm 2^\circ\text{C}</math>, <math>\pm 2\%</math></b>

<b>TV Camera:</b>	<b>High Definition Color Camera</b>
<b>Image Sensor:</b>	<b>1/3 " type CMOS</b>
<b>Picture Elements:</b>	<b>Approx 2.000.000 effective pixels</b>
<b>Lens:</b>	<b>10x optical zoom (Approx 50° to 5°)</b>
<b>Minimum Illumination:</b>	<b>1.0 lx (ICR-On Mode)</b>

## Standard Configuration Composite Video

- \* Configuration and cameras type may be adapted to customer's demand
- \*\* Accommodated to customer's design



**P.O.Box 4016, Nes Ziona, Israel 74140**  
**Tel +972-8-9407953 • Fax +972-8-9407873**  
**www.OfilSystems.com • info@OfilSystems.com**  
**USA telefax messages 1-888-9505557**