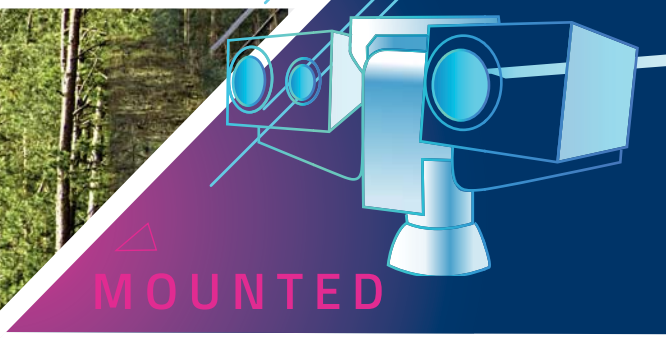




# DayCor®
# RANGER HD

Long distance safe inspection | Mutisensors

- » Preset profiles & angles
- » High sensitivity to corona
- » Long distance detection
- » Set for harsh terrain
- » Rugged encasement
- » HD video & stills
- » Radiometric readings
- » Fast Pan & Tilt
- » Incorporated GPS
- » Stabilized mount

DayCor® Ranger HD is a premium inspection solution for driven practices with a selection of optical sensors in a stabilized pan & tilt mount. Ranger offers a great inspection solution for lengthy overhead lines, with long distance sharp detection, preset inspection angles and users' profiles and HD video footage recording. DayCor® Ranger features a rugged encasement on a stabilizing mount, a most sensitive UV camera core, a high-speed pan & tilt unit, a high resolution monitor, an ergonomic remote control, and an internal recorder. The system accommodates for additional optical sensors and for temperature & humidity sensor. The stabilizing mount guarantees smooth and sharp recorded video clips with corona severity indications. Ranger is a high end reliable scanning system that provides pinpointed display of corona and its emitting sources.

APPLICATIONS: Overhead transmission & distribution lines

## LONG DISTANCE UV INSPECTION

High sensitivity to UV enables the detection and capture of distant corona discharge during while on the move without smearing the output footage and without missing corona events.

## STABILIZED MOUNT

Designed for driven inspections, the system is encapsulated in a rugged durable housing and mounted on a stabilized pan & tilt system with fast response to commands. Special care is taken to ensure noise-free, crystal clear image streaming Fit for most roof mounts,

## REMOTE CONTROL

Ergonomically designed with integrated high resolution (HR) screen and an intuitive menu to control both the sensors and the pan & tilt. Pre set saved angles automate the system pivot. Extra fine tuning add flexibility and agility

## SUPERIOR PERFORMANCE

With high accuracy, excellent image quality and long wave solar reflection immunity Ranger provides an outstanding detection results. The system is customized per specific customers' needs and can include alternative combinations of optical sensing technologies.

## EASY INSTALLATION & LOW WEIGHT

Mounts are made of a lightweight structure and composite covers. Installation is simple and standard.

## VIDEO RECORDING & STORING

Throughout the drive videos from the installed sensors are streamed to and displayed on a high resolution monitor and can be recorded and stored onto a portable memory. Recordings may include radiometric readings, GPS, date & time, pressure gauge and humidity. Audio narration & annotations can also be added.

## DATA MANAGEMENT SYSTEM

Optional Data Management System provides information about the scanned grid such as identity of each installation, past performance, past recorded events, failures, route, etc. Data is retrieved during drive and displayed synchronized with geographical and/or topographical maps.

## DAYCOR® TECHNOLOGY INSIDE

With DayCor® inside, the UV camera is fully solar blinded allowing operation under all daylight conditions [Registered Patent EP1112459B1].

# TECHNICAL SPECIFICATIONS (ACCOMMODATED TO CUSTOMERS' REQUIREMENTS)

| | |
|---|---|
| **PAN & TILT SYSTEM** | |
| Stabilization | Shock absorbers |
| Interface Connector | According to MIL-C-26482 standard |
| Power Consumption | <15 Watts (nominal) |
| Power Input | 9-14 V DC or 110/220 V AC |
| Preset Position | Multiple programmable position |
| Operating Angles | Pan: 360° continuous (with slip-ring option) \| Tilt: -90° to +90° |
| Speed [°/Sec] | Pan: 0.005° to 50°/sec @ 24VDC \| Tilt: 0.005° |
| Standard | IP67 |
| Communication Ports to Payload | 4 configurable serial, 2 TTL and 1 IP port |
| **PORTABLE CONTROL & DISPLAY UNIT** | |
| Display | 8.4" high resolution color LCD |
| Resolution | 800 x 600 SVGA |
| Operation | Joystick, keyboard |
| Controlled Units | UV camera, Pan & Tilt, Recorder |
| Audio Interface | Internal microphone & speaker |
| Dimensions | L7.6 x W31.7 x H22.6 cm \| L3" x W12.5" x H8.9" |
| **RANGER-EYE HD UV - VISIBLE BI-SPECTRAL CAMERA** | |
| Minimum Discharge Detection | 1pC @ 15 meters |
| Minimum RIV Detection | 3.6dBμV (RIV) @1MHz @10m |
| Minimum UV Sensitivity | $1.9x10^{-18}$ watt/cm$^2$ |
| Field of View H x V | 10°-1.6° \| 5.6° - 0.9° |
| Video Standard | HD, 720p ,1280x720px |
| UV/Visible Overlay Accuracy | Deviation < 1 miliradian |
| Visible Zoom | 25x optical & digital, continuous |
| UV Zoom | 2x (Opt.), 6.25x (Dig.), Slaved to the visible channel, continuous zoom |
| Dimension | L259 x W128 x H117 mm \| L10.2" x W5.03" x H4.6" |
| **IR CAMERA (OPTIONAL)** | |
| FOV | 16° x 12° |
| Detector Array Size | 1024x768 pixels |
| Spectral Range | 7.5-14μm |
| Temperature Resolution @ 30°C | < 0.02K (*) |
| Temp. Accuracy of Reading | +/-1°C or +/- 1% (*) |
| Temp. Measuring Range | (-40 ... 2,000) °C (*) |
| **VIDEO CAMERA (OPTIONAL)** | |
| Image Sensor | 1/2.8 CMOS type |
| Picture Quality | 2.38 Megapixels |
| Optical zoom | 30x |
| Digital Zoom | 12x (360x with optical zoom) |
| Viewing Angle | 63.7°(wide end) to 2.3°(tele end) |
| **ACCESSORIES** | |
| CoronaWise - Corona Management Software; Wide FOV lenses; Additional sensors/cameras per customer's preferences | |

(*) Depending on Model



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