

DayCor® RANGER



DRIVEN CORONA INSPECTION SYSTEM



DayCor® Ranger is a pan&tilt vehicle mounted inspection solution for driven practices. Ranger benefits from the unique capabilities of DayCor® in combination with optional additional supreme sensors, such as infrared & HD, and a durable, full featured, high-speed pan/tilt unit. Ranger guarantees the highest ultraviolet (UV) detection sensitivity coupled with data achieved from other sensors. The stabilizing mount guarantees smooth and sharp video clips of the inspected area with GPS data and corona severity indications. Ranger is the most reliable scanning system that provides pinpointed display of corona and its emitting sources. The system is controlled and operated remotely from within the vehicle using a joystick with pre-set positions and a consolidating controlling notebook for all imagers.

- >> Corona detection outstanding sensitivity
- >> Rapid zoom of the visible channel
- >> Auto focus of UV and Visible channels
- >> Consolidated control for multiple sensors
- >> Durable notebook with 14" outdoor readable display
- >> Video recording with audio & GPS
- >> Single or multi sensors payload
- >> Durable, full featured, high-speed pan/tilt unit

SUPREME SENSITIVITY TO UV SIGNALS

With absolute solar blindness and detection of at least 1pC from a distance of 10 meters and 7.7dBµV (RIV) @ 1MHz @10m. Ranger makes the faintest corona perceivable and displayed clearly. UV events counter supported by a dedicated algorithm designate detected corona severity.

COMFORT OF OPERATION

Ranger is operated from within the vehicle by means of a joystick and a laptop with keystrokes that invoke functions of all existing sensors. Active functions are displayed on the screen. Switching between control functions is instantaneous and seamless.

MULTI SENSORS CONCURRENT INSPECTION

Ranger is set to incorporate additional camera. Suggested IR & HD cameras or customers' choice are mounted on the roof and controlled remotely from within the vehicle. Concurrent inspections with a combination of UV, IR, Visible etc, streamlines work and provides a comprehensive view of the inspected asset.

RUGGED AND STABILIZED

Shock absorbers protect the imaging unit and support safety off roads driving. Made from composite material Ranger is strong yet low in weight. Ranger performs smoothly in windy conditions, and allows extremely precise positioning.

VIDEO RECORDING & STORING

Ranger records high resolution video clips, NTSC/PAL compatible with embedded GPS, date and time; audio commentary & UV counting.

EASY INSTALLATION

Ranger's installation is easy and fast. It is adjustable to most vehicle makes and sizes. Supplied with an installation kit and detailed instructions.

HIGH SPEED INSPECTION

DayCor® Ranger performs impeccably at speeds up to 100 km/hour inspecting energized high and medium voltage overhead lines and installations.

TECHNICAL SPECIFICATIONS

UV-VISIBLE BI-SPECTRAL CAMERA PROPERTIES	
Minimum Discharge Detection	1pC @ 10 meters (RWE tested & certified: IEC 60270:2000)
Minimum RIV Detection	7.7dBµV (RIV) @1MHz @10m (RWE tested & certified: NEMA107-1987)
Minimum UV Sensitivity	1.5x10 ⁻¹⁸ watt/cm ²
Field of View H x V	5° x 3.75°
Focus Range	3m 9.8ft - infinity
UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Rapid Visible Zoom	18 optical x 4 digital attained within 1 sec
UV Zoom	X2 and X4
Dimensions	L25 x W18 x H14.5 cm L9.8 x W7.0 x H5.7
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 +30°
Speed [°/Sec]	Pan: 0.012°/sec to 90° Tilt: 50° / Sec
Standard	IP67
Communication Port	RS232
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"
IR CAMERA (ACCOMODATED TO CUSTOMER'S REQUIREMENTS)	
FOV	12° x 9°
IR Resolution	640x480 pixels
Spectral Range	(7.5-14) µm
Temp resolution	Better than 0.04K@30°C
Accuracy	±2°C or ±2%
Temp. Range	-40°C to +1,200°C , Opt. >2,000 °C
VIDEO CAMERA (ACCOMODATED TO CUSTOMER'S REQUIREMENTS)	
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; IR camera (per customer's preferences)	

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