

DayCor® ROMPACT 300i



PORTABLE SBUV CAMERA



DayCor® ROMpact is a bi spectral UV-Visible camera with excellent scanning & corona detection capabilities that fit scanning high and medium voltage electrical installations. Due to its small size and low weight ROMpact can be installed in payloads of various sizes and shapes and in particular on UAS. ROMpact can also be mounted on fixed mounts and on a moving pan & tilt. ROMpact's precision

is attributed to the embedded DayCor® Technology, which guarantees high sensitivity to UV corona discharge. ROMpact performs in daytime, delivering in real time pinpointed information of occurrences of corona PD and of electrical faults. ROMpact is attractive to systems with size and weight limitation and to systems that wish to incorporate multi spectral sensors.

FEATURES

- >> High sensitivity to UV signals of corona & arcing
- >> High performance that matches flight conditions
- >> Rigid and enduring encapsulation
- >> Set for high speed inspection
- >> Absolute solar blind
- >> Video streaming
- >> UV photons counting
- >> Wired remote controllable
- >> Fit for most mounts and payloads configurations
- >> Adaptable to customers' needs

HIGH SPEED INSPECTION

High sensitivity to UVc radiation enables detection and capture of distant corona discharge as weak as 1 pC at a distance of 10m and 7.7dBµV (RIV) @ 1MHz. This feature allows high speed and remote inspections without smearing the output image and without missing corona events.

REMOTELY CONTROLLED

System is controlled through a laptop keyboard or stick via RS232 communication protocol.

EASY INSTALLATION & LOW WEIGHT

As a block camera, ROMpact can match any gimbal size and shape and any mount configuration including drones of small sizes. Installation is simple and standard. Systems can be dismantled after use.

VIDEO STREAMING

Streaming findings to a remote monitor provides an advantageous immediate view of the emitted corona and the emitting objects. The systems can either be used as a stand alone camera or in combination with other imaging devices such as IR and HD.

DAYCOR® TECHNOLOGY INSIDE



Implementing DayCor® technology ROMpact camera is a solar blind UV camera allowing operation in full daylight, blocking noise and false signals [Registered Patent EP1112459B1].

STABILIZED PLATE

A rigid stabilizing plate keeps the system securely attached to its seat letting the payload stabilization system gain full control.

EXTREME CONDITIONS PERFORMANCE

Encapsulated in a rigid case and equipped with a high precision detector and stabilizing plate, ROMpact camera can be adapted to extreme driving conditions while being mounted on vehicles' roofs.

TECHNICAL SPECIFICATIONS

ULTRA VIOLET (UV) - OPTICAL PROPERTIES	
Sunlight Rejection	Absolute – at all sunlight and all weather conditions, target can be inspected with the sun in the field of view
Minimum Discharge Detection	1pC @ 10 meters (RWE certified: IEC 60270:2000) Tested & certified
Minimum RIV Detection	7.7dB μ V (RIV) @1MHz @10m (RWE Tested & certified: NEMA107-1987)
Minimum UV Sensitivity	1.9 x 10 ⁻¹⁸ watt/cm ²
Variable UV Gain	10 Steps, to enhance detectivity
Field of View H x V	8° x 6°
Detector Life Span	No degradation
Focus Range	1.5m 4.9ft – Infinity
Corona Color	Can be selected to accommodate for various scenes or match individual preferences
Spectral Range	240-280nm
VISIBLE - OPTICAL CONFIGURATION	
Auto Focus Mode	Yes
UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Minimum Visible Light Sensitivity	0.1Lux
Zoom	10 optical x 12 digital (120 optical x digital)
Quick Zoom	Yes
CONTROLS AND OPERATION	
Video output	NTSC standard
Operation Time	Unlimited. No overheating
PHYSICAL CHARACTERISTIC & POWER SOURCE	
Storage and Operation Temp	-20°C up to +55°C -4°F up to +131°F
Weight	1.2kg 2.6lb
Dimensions L x W x H	L247 x W125 x H73 mm L9.72" x W4.93" x H2.87"
Nominal Power Consumption	7.5÷10 VDC, 14 Watts
Vibration and Shock	ETSI EN 300 019-2-5 V3.0.0 (2002-12), IEC 60068-2-64
INTERFACE	
Power Supply	Inbound
Video Streaming	Outbound
Control Functions	Inbound/Outbound
Communication	RS-232 (baud rate: 9.6 Kb/s, 19.2 Kb/s, 38.4 Kb/s, Stop bit: 1/2 selectable)
ACCESSORIES	
CoronaWise - Corona Management Software; Inspection Guide; Remote Control wired	

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