

DayCor® ROMPACT



PORTABLE SBUV BLOCK CAMERA



DayCor® ROMpact is a bi spectral UV-Visible block camera module 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, records and transfers 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
- >> Built for flight conditions
- >> Rigid and enduring encapsulation
- >> Set for high speed inspection
- >> Absolute solar blind
- >> Built-in recording
- >> Corona events counter
- >> Remotely controlled with video transfer
- >> Fit for most mounts and payloads configurations
- >> Adaptable to customers' needs

HIGH SPEED INSPECTION

ROMpact's high sensitivity to UVc radiation enables detection and capture of distant corona discharge. Imaging is direct and does not involve processing nor frames integration. The resulted videos are sharp, showing pinpointed information without any smearing even during high speed motion.

REMOTELY CONTROLLED

Systems are remotely controlled through a set of communication commands of RS232 standard. Wireless control is also optional.

EASY INSTALLATION & LOW WEIGHT

ROMpact cameras can be mounted onto existing gimbals or on any standard 1/4" thread tripod mount. Installation is simple and standard. Systems can be dismantled after use.

VIDEO RECORDING & TRANSMISSION

Throughout inspections a videos is being transferred to a remote monitor. Selected findings can be recorded onto an onboard internal flashcard for further analysis and documentation. ROMpact can be used either as a stand-alone UV-Visible camera or in combination with other optical sensors such as IR.

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

Encapsulating in a rigid case with a stabilizing plate makes ROMpact cameras a match for extreme motion conditions.

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 @ 15 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 PAL standards
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	1.4kg 3.08 lb
Dimensions L x W x H	L245 x W125 x H101 mm (L9.65" x W4.92" x H3.9")
Nominal Power Consumption	7.5÷30 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 Transmission	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)
MEDIA CAPTURE & STORAGE	
Video Format	AVI
Digital Storage	Removable SD card
ACCESSORIES	
CoronaWise - Corona Management Software; Inspection Guide; Remote Control wired	

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