



# DayCor® SWIFT

## CORONA MONITORING BLOCK CAMERA



DayCor® Swift is a bi spectral UV-Visible block camera module with excellent scanning & corona detection capabilities, that fit monitoring of HV & MV electrical installations. Swift can be installed on a fixed mount or on a moving pan & tilt with 360° rotation or used on a UAS.

### FEATURES

- >> High sensitivity to UV signals of corona & arcing
- >> Rigid and enduring encapsulation
- >> Set for inspecting areas from 1.5m|4.9ft to infinity
- >> Absolute solar blind
- >> Built-in recording and transmitting
- >> Corona events counter
- >> Remotely controlled
- >> Fit for standard tripod & gimballed mounts
- >> Adaptable to customers' needs
- >> Uninterrupted continuous operation

### REAL TIME INFORMATION

High sensitivity to UVc radiation enables detection and capture of corona discharge from distances as close as 1.5m (4.9 feet) and transfer of the detected discharge in real time without any delay. Operation is continuous without interruption or overheating

### REMOTELY CONTROLLED

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

### EASY INSTALLATION & LOW WEIGHT

DayCor® Swift can be mounted and dismantled easily. Installation is simple and standard.

### STABILIZED PLATE

A rigid stabilizing plate keeps the system securely attached to its seat. .

Swift transmits during daylight videos of the scenes and of occurrences of corona. Detection, transmission & recording of detected corona events are accomplished in real time. As such, Swift transmits true imaging of the inspected scenes with valuable pinpointed information of electrical faults. The system can be customized to alert in real-time of changes in corona occurrences. Swift is fully remotely controlled wired and wireless.

### HIGH QUALITY VIDEO & IMAGING

DayCor® Swift provides sharp clear pinpointed view of corona sources without missing corona events nor smearing artifacts even during movement.

### VIDEO RECORDING & TRANSMISSION

Throughout inspections a videos is being transmitted to a remote monitor . Selected findings can be recorded onto an onboard internal flashcard for further analysis and documentation. Swift 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 Swift camera is fully solar blind and perceives UV signals in full daylight. while blocking noise and false signals [Registered Patent EP1112459B1]. Swift was tested for sensitivity to UV radiation, complying to industry standard IEC 60270:2000 , and certified for its actual performance.

### EXTREME CONDITIONS PERFORMANCE

Encapsulated in a rigid case & equipped with a high precision detector Swift is fit for extreme 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 @ 10 meters (RWE tested & certified: DIN EN 60270 (VDE 0340):2001-08)  |
| Minimum RIV Detection   | 3.6dBµV (RIV) @1MHz @10m (RWE tested & certified: NEMA107-1987)  |
| Minimum UV Sensitivity  | 2.6 x 10 <sup>-18</sup> watt/cm <sup>2</sup>   |
| Variable UV Gain  | 10 Steps, to enhance detectivity   |
| Field of View H x V   | 6.4° x 4.8°  |
| Detector Life Span  | No degradation   |
| Focus Range   | 1.5m 4.9ft – Infinity  |
| Corona Color  | Can be selected to accommodate for various cenes or match individual preferences                                 |
| Spectral Range  | 240-280nm  |
| UV Frames Integration   | On Off   |
| 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   |
| Operating Duration  | 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   3.08lb   |
| Dimensions L x W x H  | L247 x W125 x H73 mm   L9.72" x W4.93" x H2.87"  |
| Nominal Power Consumption   | 6.5÷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 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  |
| OPTIONAL ACCESSORY  |  |
| Wide FOV Lens; CoronaWise - Corona Management SW; Inspection Guide; Remote Control wired & wireless |  |

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