DayCor®
UV·EYE HD

OEM Multipurpose Block HD Corona Camera

DayCor® UV-Eye is a bi-spectral UVc-Visible solar blind block camera for OEM integrations. The UV-Eye is a daytime corona & arcing imager. It incorporates an ultraviolet detector and a HD visible camera to enable detecting, seeing and pinpointing UVc radiation sources. A proprietary embedded SBUV filter ensures perceiving UVc traces under daylight without being obscured by the sun.

DayCor® UV-Eye can be integrated on helicopters, vehicles, trains, robots, ATVs or as a stationary camera and more. Organizations use UV-Eyes to perform inspections on the move.

- » HD camera
- » Rugged & Light weight
- » Highest sensitivity to UV
- » HDMI & Ethernet interfaces
- » Bi-Spectral UV-Visible
- » Fit for speedy inspections
- » Corona events counting
- » Powerful optical zoom
- » Block camera

CRITICAL INFORMATION ON DEFICIENCIES

DayCor® UV-Eye HD camera core adds critical information on deficiencies in high/medium voltage systems caused either by bad design, structural & mechanical problems, contamination, eroded insulation, loss of hydrophobicity and other voltage related issues.

HIGH SPEED LONG DISTANCE INSPECTION

Users of DayCor® Eye HD benefit from fast results in real time, high resolution videos, pinpointed visual display of multiple existing discharges on remote and nearby components. Throughout inspection HD video is transmitted to a remote LCD. Videos are sharp, and clear.

EASY INSTALLATION & MOUNTING

DayCor® Eye HD is enclosed in a rugged durable electromagnetically shielded housing and has a socket for standard ¼" thread mount.

ENHANCED INSPECTION FEATURES

DayCor® Eye HD has a powerful optical and digital zoom for both visible & ultraviolet spectral ranges, and a wide FOV for scanning larger areas.
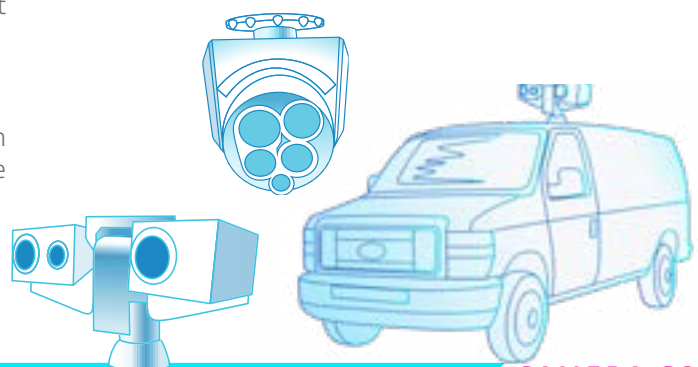
SHARING IN REAL TIME

HDMI interface streams out H.264 digital video ensuring the delivery of high quality video at very low data rates. The streamed video is useful for computerized machine learning (ML), fault recognition, diagnostic, trending and more. Corona events count can be added to the transmitted media.

REMOTELY CONTROLLED

DayCor® UV-Eye HD is controlled through a set of communication commands using a bi-directional RS232 1GB Ethernet interface.

DAYCOR® TECHNOLOGY INSIDE

DayCor® UV-Eye HD incorporates Ofil's exclusive proprietary DayCor® technology [Registered Patent EP1112459B1].

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 m, Innogy SE - Eurotest, Test Regulation IEC 60270:2000 PD Measurement
Minimum UV Sensitivity	1.9×10^{-18} watt/cm²
Minimum RIV Detection	3.6dBµV (RIV) @1MHz@10m
Fields of View H x V	H: 10° - 1.6° | V: 5.6°-0.9° Continuous. UV & visible channels synchronized
Focus	Full manual and auto focus for both UV & Visible channels
UV Zoom	2x (Opt.), 6.25x (Dig.), Synchronized with the visible channel, continuous
UV Frames Integration	On | Off
UV Display Colors	Multiple shades: Red, Green, White, Black, Yellow
Spectral Range	240-280nm

VISIBLE - OPTICAL CONFIGURATION

UV/Visible Overlay Accuracy	Deviation < 1 miliradian
Minimum Visible Light Sensitivity	0.07Lux
Fields of View	H: 10° - 1.6° | V: 5.6°-0.9° Continuous. UV & visible channels synchronized
Visible Zoom	12x optical & 12x digital, continuous
Noise Suppression	Yes
Focus Range	0.6m | 1.96ft to infinity, automatic & manual

DATA OUTPUT

Video Out Standard	HD 720p 60fps
Streaming Format	Real Time Streaming Protocol - RTSP
Video Compression Standard	H.264

I/O CONTROLS AND OPERATION

I/O Interfaces	HDMI, 1GB Ethernet bi-directional
UV & Visible Output Combination Modes	Combine (UV & Visible), UV only, visible only

PHYSICAL CHARACTERISTICS & POWER SOURCE

Storage and Operation Temp	-20⁰C up to +55⁰C | -4°F up to +131°F
Weight	3.6 Kg | 7.9lb
Dimensions L x W x H	32.5 cm x 18.5 cm x 15 cm | L12.7" x W7.28" x H5.9"
IP Rating	IP65
Nominal Power Supply & Consumption	12V DC, 36 Watts
Vibration and Shock	ETSI EN 300 019-2-5 V3.0.0 (2002-12), IEC 60068-2-64

ACCESSORIES

ConecTOP - Remote control Desktop Software