

DayCor® SUPERB



PORTABLE CORONA CAMERA

Superb is a portable daytime corona and partial discharge detection camera. It is the most sensitive solar blind bi-spectral UV-Visible imager. Superb detects ultraviolet emission in full daylight with high signal to background ratio from far-off and nearby sources. Superb is an ideal NDT-Non Destructive Testing predictive maintenance tool for inspecting and monitoring overhead transmission & distribution lines and substations. Superb is also attractive in heavy industry, mines, data centers, laboratories and others who need to ensure corona free electrical installations. Its unique ergonomic design supports extended continuous inspection intervals and is popular for heavy duty maintenance tasks. Superb provides an immediate clear view of the inspected asset.



- >> Corona detection highest sensitivity
- >> Rapid optical zoom of the visible channel
- >> Digital UV zoom
- >> Auto focus of the UV and Visible channels
- >> Background noise reduction

- >> Built-in video stills and audio recording
- >> Integral folding high resolution color LCD
- >> UV events counter
- >> Reporting software - multilingual
- >> Optional multilingual display

OUTSTANDING UV SENSITIVITY

UV sensitivity of 3×10^{-18} watt/cm² enables detection and displaying of corona emission as weak as 1.3 pC at a distance of 10m, and capture moving targets without smearing the output image. Built-in UV events counter and display for estimation of the corona strength.

PINPOINTS CORONA LOCATION

Equipped with exclusive lenses and powerful zooming capabilities Superb can pinpoint corona on far-away as well as on very close objects. These features and the outstanding sensitivity make Superb an ideal inspection camera for overhead transmission lines and high voltage substations.

EASY TO OPERATE

Control is via keyboard with direct access to functions and with on-screen indication of the selected functions. Straightforward intuitive operation.

DAYCOR® TECHNOLOGY INSIDE

Based on Ofil's DayCor® technology Superb is a bi-spectral solar blind UV-Visible camera allowing operation in full daylight.

BUILT-IN RECORDING & STORING

Superb has built-in recording, playback and storing of high resolution video clips with voice annotations, still pictures and optional GPS data. Media is stored on a removable compact flash card. NTSC/PAL compatibility.

RUGGED AND LIGHTWEIGHT

Superb is a heavy-duty system fit for harsh environment and extreme weather conditions. The low weight of the camera is comfortably distributed on the shoulders.

REMARKABLE ERGONOMICS

Superb is unique in its ergonomic design that enables long continuous inspection eliminating hands and eyes strain and back aches. No need to grasp the camera to hold it.

SINGLE AND TEAMWORK

The integral reflective, high-brightness, color, adjustable 5" LCD is ideal for outdoor inspections and for team work. Essential for working in hazardous places where operators need to be watchful.

TECHNICAL SPECIFICATIONS

UV - OPTICAL PROPERTIES	
Minimum Discharge Detection	1.3 pC @ 10 meters (RWE certified, DIN EN 60270 VDE 0340:2001-08)
Minimum RIV Detection	10.7dBµV (RIV) @1MHz (RWE certified, DIN EN 60270 VDE 0340:2001-08)
Minimum UV Sensitivity	3x10 ⁻¹⁸ watt/cm ²
Field of View H x V	5° x 3.75°
Detector Life Span	No degradation
Focus	Manual and full Auto-Focus for the UV and visible channels
Focus Range	3m 9ft - infinity (0.5m 1.6ft with close up lens)
Digital UV/Combined Zoom	X2 and X4
Spectral Range	240-280nm
VISIBLE - OPTICAL PROPERTIES	
UV/Visible Overlay Accuracy	Deviation <1 miliradian
Minimum Visible Light Sensitivity	0.1 Lux
Video Standard	NTSC
Rapid Visible Zoom	25 optical x 12 digital attained within 1 sec
DISPLAY	
Type	Integral color Transflective Sunlight Readable LCD, adjustable
Brightness	450 cd/m ² reflective, adjustable
Resolution	640x480 pixels, color
Size	5"
Modes	Combined (UV & Visible), UV only, visible only
Video Output	NTSC via BNC jack
CONTROLS & OPERATION	
Method	Keyboard
Functions Activation	One touch button
Rapid Zoom	Continuous push button max attained withing 1 second
System Status Indicator	LCD shows low battery
Mounting Point	Standard 1/4" thread tripod mount
ENVIRONMENTAL	
Storage and Operation Temp	-20°C up to +55°C -4°F up to +131°F
Encapsulation	IP54, Certified
MEDIA CAPTURE & STORAGE	
Video & Stills Capture	Internal
Video Format	AVI
Stills Format	BMP
Audio	External microphone
Playback	Video and still pictures
Storage Media	Memory flash card
PHYSICAL CHARACTERISTICS & POWER SOURCE	
Weight	3.3 Kg 7.3 lb
Dimensions L x W x H	L23 x W18 x H15 cm L9.1" x W7.1" x H5.9"
Nominal Power Consumption	12V DC, 16 Watts
Power Source	Rechargeable battery for over 2.5 hours continuous operation Universal AC/DC 12V Adapter
ACCESSORIES	

Close-up lens; Wide FOV lens; GPS; Flight table; Remote control;
Corona Base - Database Repeating Software

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