

# DayCor® SUPERB

Superb OD | Superb XD



## PORTABLE CORONA CAMERAS



Superb-OD & Superb-XD are portable handheld daytime corona and arcing recording cameras. Superb models are robust solar blind bi-spectral UV-Visible imagers with high sensitivity to surface partial discharges that differ in their display unit. Either model detects ultraviolet emission in full daylight with high signal to background ratio, from far-off and nearby sources, and is considered as the most effective workhorse. Superb cameras are used for nondestructive testing (NDT), inspecting & monitoring high and medium voltage apparatuses. The imagery provided about existing discharges is used by utilities, heavy industry, mines, data centers, laboratories etc., that need to ensure corona free environment. Ergonomically designed to facilitate extended continuous inspection intervals.

- >> Highest corona detectivity
- >> 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 5" | 6.5"
- >> UV events counter
- >> Supporting comfortable harness
- >> Optional multilingual display

### OUTSTANDING UV SENSITIVITY

Superb can detect UV radiation of corona emission as weak as 1pC at a distance of 10m and 7.7dBμV (RIV) @ 1MHz, and display both the signals and their emitting sources overlapped accurately with indications 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 & distribution lines and 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 [Registered Patent EP112459B1].

### BUILT-IN RECORDING & STORING

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

### RUGGED AND LIGHTWEIGHT

Superb is a heavy-duty workhorse system fit for harsh environment and extreme weather conditions. An anatomically form-fitted harness distributes the camera's weight and allows extended inspection intervals.

### 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 grip the camera to hold it.

### SINGLE AND TEAMWORK

The transfective 5" (OD model) or 6.5" (XD model) adjustable bright color LCD are ideal for outdoor inspections and for sharing images with team members. The use of LCD is essential in hazardous locations.

## TECHNICAL SPECIFICATIONS

| OD                                      | XD   | UV - OPTICAL PROPERTIES                                                                                 |                                                                                              |
|-----------------------------------------|------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| ✓                                       | ✓    | Minimum Discharge Detection                                                                             | 1pC @ 10 meters (RWE certified: IEC 60270:2000) Tested & certified                           |
| ✓                                       | ✓    | Minimum RIV Detection                                                                                   | 7.7dBµV (RIV) @1MHz @10m (RWE Tested & certified: NEMA107-1987)                              |
| ✓                                       | ✓    | Minimum UV Sensitivity                                                                                  | 1.5x10 <sup>-18</sup> watt/cm <sup>2</sup>                                                   |
| ✓                                       | ✓    | 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)                                        |
| ✓                                       | ✓    | UV 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                                                                                      | 18 optical x 12 digital attained within 1 sec                                                |
| DISPLAY                                 |      |                                                                                                         |                                                                                              |
| ✓                                       | ✓    | Type                                                                                                    | Adjustable, color (Transflective) Sunlight Readable LCD                                      |
| 450                                     | 800  | Brightness                                                                                              | cd/m <sup>2</sup> reflective, adjustable                                                     |
| ✓                                       | ✓    | Resolution                                                                                              | 640x480 pixels, color                                                                        |
| 5"                                      | 6.5" | Size                                                                                                    |                                                                                              |
| ✓                                       | ✓    | Modes                                                                                                   | Combine (UV & Visible), UV only, visible only                                                |
| ✓                                       | ✓    | Video Output                                                                                            | NTSC via BNC jack                                                                            |
| CONTROLS & OPERATION                    |      |                                                                                                         |                                                                                              |
| ✓                                       | ✓    | Method                                                                                                  | Keyboard                                                                                     |
| ✓                                       | ✓    | Rapid Zoom                                                                                              | Continuous, max attained withing 1 second                                                    |
| ✓                                       | ✓    | Mounting Point                                                                                          | Standard 1/4" X20 thread tripod mount                                                        |
| COMMUNICATION                           |      |                                                                                                         |                                                                                              |
| ✓                                       | ✓    | Interface                                                                                               | RS232                                                                                        |
| MEDIA CAPTURE & STORAGE                 |      |                                                                                                         |                                                                                              |
| ✓                                       | ✓    | Video Format (Internal)                                                                                 | AVI                                                                                          |
| ✓                                       | ✓    | Stills Format (Internal)                                                                                | BMP                                                                                          |
| ✓                                       | ✓    | Audio                                                                                                   | External microphone                                                                          |
| ✓                                       | ✓    | Playback                                                                                                | Video and still pictures                                                                     |
| ✓                                       | ✓    | Digital Storage                                                                                         | 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"                                                   |
|                                         | ✓    | Dimensions L x W x H                                                                                    | L23 x W18 x H16.5 cm   L9.1" x W7.1" x H6.5"                                                 |
| ✓                                       | ✓    | Nominal Power Consumption                                                                               | 12V DC, 16 Watts                                                                             |
| ✓                                       | ✓    | Power Source                                                                                            | Rechargeable battery for over 2.5 hours continuous operation.<br>Universal AC/DC 12V Adapter |
| ENVIRONMENTAL                           |      |                                                                                                         |                                                                                              |
| ✓                                       | ✓    | Storage and Operation Temp                                                                              | -20°C up to +55°C   -4°F up to +131°F                                                        |
| ✓                                       | ✓    | Encapsulation                                                                                           | IP54, Certified                                                                              |
| ACCESSORIES                             |      |                                                                                                         |                                                                                              |
| ✓                                       | ✓    | Flight table; Remote control; CoronaWise - Corona Management SW; Close-up Lens; Wide Field-of-View Lens |                                                                                              |

\* Specifications are subject to changes without notice. Imagery used for illustration purposes only. Copyright Ofil Ltd. REV 17.0.