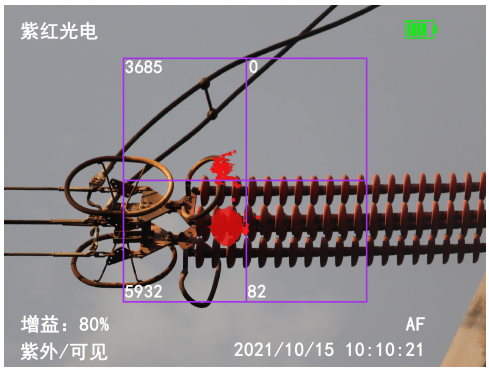
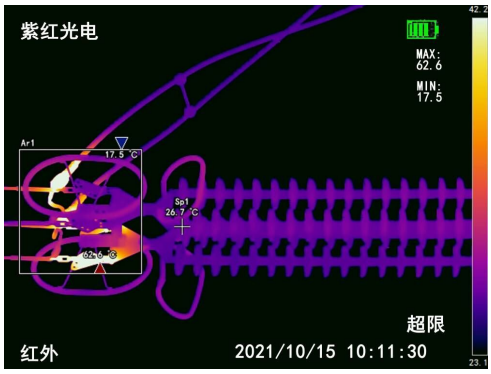
# MULTI-SPECTRAL (UV+IR+VI ) CAMERAS

## Corona Defects Detection Systems For Substations and Transmission Lines

ZH580

ZH580 Daytime Corona Cameras is a non-destructive testing (NDT) technology which is now widely used for Substations and transmission lines corona defects detection. ZH580 takes the UV detecting technology, out-of-band rejection UV filter technology and visual optical fusion algorithm technology. It can eliminate the disturbance of sunlight background and detect wear UV signals generated by corona. ZH580 is an advanced multi-spectral camera with the combinations a UV camera, an infrared (IR) camera and a visible light camera, which provides the possibility of performing a corona and thermal inspection simultaneously and efficiently.




## Application

Substation
Transmission Lines

High Voltage Electrical Laboratory
Live Inspection Service for Electric and Power

- No tailing, pinpointing for precise positioning
- Photons counting for quantitative analysis
- Daytime and night application
- Adjustable UV gain from 0-100%
- Closed encloser, low heat, continuous stable operation
- 5 inch Large deluxe reflective LCD

- High IR pixels: 640*480
- Temperature Range: -20 - 150 ℃
- Temperature Accuracy:± 2℃
- High Overlay Accuracy
- More than 3 hours of battery operation
- Portable and compact, 2.9kg

### High Sensitive UV Sensor

High performance UV Sensor, can detect very weak Corona signal, 240-280nm out-of-band rejection Technology,can be used daytime and night.

### Ergonomic Design

Compact structure with built-in Li battery, One key one function. Easy operation. Portable, 2.9 kg. Standard tripod mounting hole. Large size sun shading board.

### Precise Defects Positioning

With 1 mard overlay accuracy for the fusion visible, IR, UV images. By adjust gains, to obtain pinpoint UV signal and analyse the exactly location of the defects.

### Rugged Reliable

Rugged reliable design, applicable to severe atmospheric environment for continuous stable operation.High quality material with excellent performance.

### Photons Counting

By 1-4 Region of Interest (ROI), accurate photon numbers can be obtained to analyse the serious of defects.

### Simultaneous and Efficient

Integrated information about the faults, jointly locating partial discharges and abnormal temp spots.

### Still Pictures and Video

Still pictures and videos can be recorded and played back. All data can be stored in 32G TF card for further analysis.

### High Pixels IR Sensor

640*480 pixels Infrared Sensor with ±2 accuracy.Display the temperature point and its position in real time.

# ZH580 Technical Specifications

| | |
|---|---|
| **UV - OPTICAL PROPERTIES** | |
| Spectral Range | 240 ~280 nm |
| Minimum Discharge Sensitivity | 1Pc/10m |
| Minimum RIV Sensitivity | 3.6dBμV (RIV) @ 10m |
| Minimum UV Sensitivity | $2.0\times10^{-18}$ Watt/cm² |
| Focus & Focus Range | Auto, 3m ~ ∞ |
| F.O.V | 9.0 * 6.75 ° |
| **VISIBLE - OPTICAL PROPERTIES** | |
| Focus Range | 3m ~ ∞ |
| Minimum Visible Light Sensitivity | 0.1 Lux |
| Focus | Auto |
| **IR - OPTICAL PROPERTIES AND DISPLAY** | |
| Pixels | 640 * 480 |
| Temp Range | -20 - 150 ℃ |
| Temp Accuracy | ±2 |
| Display Modes | Combine(UV+VIS), UV only, Visible only |
| Display Type | 5 inch color Transflecctive Sunlight readable LCD |
| Display Brightness and Resolution | 450cd/㎡, 640*480 |
| **CONTROLS AND OPERATION** | |
| Status Modes | real time, sleep, power off |
| Continuous Opereation | Continuous operation, no cooling system |
| Controls Command | One for One keyboard input |
| **SAVE AND PLAYBACK** | |
| Video | Provided |
| Still Images | Provided |
| Data Save | 32G TF Card |
| Video Format | MP4 |
| Stills Format | JPG |
| Playback function | Video and Still Images |
| **CHARACTERISTICS** | |
| Detector | Life without attenuation |
| Images fusion | images fusion algorithm |
| Colors | multiple colors selectable |
| **POWER SOURCE** | |
| Battery | Rechargeable batter |
| working hours | ＞3 hours |
| Adapter | DC14.8V 15.4W |
| **ENVIRONMENTAL** | |
| Storage and Operation Temp | -20℃ — +55℃ |
| **PHYICAL PARAMETERS** | |
| Dimensions L*W*H | 218 * 196 * 104 mm |
| Weight | 2.9kg |

Speciations are subject to changes without notice.

UVIRSYS MAKE INVISIBILITY VISIBLE

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