

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

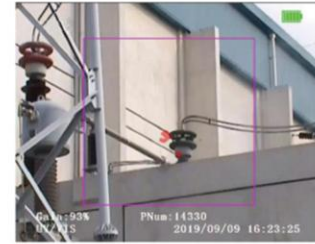
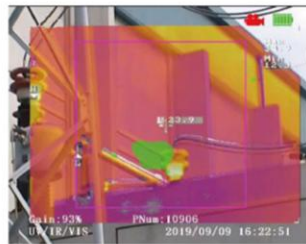
Corona Defects Detection Systems For Substations and Transmission Lines



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, Visual optical technology and fusion algorithm technology. It can eliminate the disturbance of sun light background and detect wear signals generated from the corona under full sun light by using the signal of the solar blind UV spectrum band 240-280nm. ZH580 is the most advanced multi-spectral camera on the market. It combines a high-performance 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 °C
- ❖ Temperature Accuracy: ± 2°C
- ❖ 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.

## 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.

## Photons Counting

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

## 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.

## Ergonomic Design

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

## Rugged Reliable

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

## Simultaneous and Efficient

Provide integated information about the cause of the fault, jointly locating partial discharges and abnormal temp spots.

## 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	3.6dB $\mu$ V (RIV) @ 10m
Minimum UV Sensitivity	$2.0 \times 10^{-18}$ Watt/cm <sup>2</sup>
Focus & Focus Range	Auto, 3m ~ $\infty$
F.O.V	9.0 * 6.75 °
VISIBLE - OPTICAL PROPERTIES	
Focus Range	3m ~ $\infty$
Minimum Visible Light Sensitivity	0.1 Lux
Focus	Auto
IR - OPTICAL PROPERTIES AND DISPLAY	
Pixels	640 * 480
Temp Range	-20 - 150 °C
Temp Accuracy	$\pm 2$
Display Modes	Combine(UV+VIS), UV only, Visible only
Display Type	5 inch color Transflective Sunlight readable LCD
Display Brightness and Resolution	450cd/ m <sup>2</sup> , 640*480
CONTROLS AND OPERATION	
Status Modes	real time, sleep, power off
Continuous Operation	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°C — +55°C
PHYSICAL PARAMETERS	
Dimensions L*W*H	218 * 196 * 104 mm
Weight	2.9kg



SHANGHAI UVIR TECHNOLOGY CO.,LTD.

Web: www.uvirsys.com Email: uvir@uvirsys.com

Tel: +86-21-5183 0882 Mobil: +86-13661665978

Addr: SF, Building 11, No.199, Guangfulin East Rd, Songjiang, Shanghai, China