

ZH480

CORONA

DETECTION CAMERA

ZH480 UV Camera is a powerful dual-channel UV imaging equipment with a wide-angle and telephoto lens. It can accurately locate corona and arc, display and record the photon number of discharge. With a moderate spectral range, the camera can be used in the daytime under sunshine. It can realize the prospective and pre-maintenance inspection of electrical equipment such as substation, transmission and distribution line, generator and railway line. It can also be used in mining, petroleum, heavy industry, fire prevention, insurance, detection services and other industries. Using a high-performance UV detector and filter, it has high sensitivity and can detect weak UV signals. High precision image registration and fusion algorithm are used to obtain accurate location and clear images and videos.



ZH480 Key Features

Dual F.O.V Lens: 13.3*10.6°(Wide Angle)& 5*3.75°(Telephoto)

Convenient Field Inspection

An external wide-angle or telephoto lens is more than 500 g. You need turn it on and off for calibration after changing the lens. ZH480 doesn't need to change the lens on site, and can be easily switched by the menu, the overall weight is only 1.8kg.

High Cost-performance

A separate wide-angle or telephoto lens costs a lot. ZH480 adopts built-in dual F.O.V lens, and one camera serves for multiple purpose, which can greatly save your cost.

Wide scope of application

For a close target (substation), the whole component (such as bushing) needs to be imaged in a wide field of view. For long-distance target, you need a telephoto lens to clearly image the target. Traditional UV camera is hard to view the whole object in close range.

Efficient Inspection

The test area can be increased by 4 times at the same distance by using wide angle lens. The comprehensive inspection efficiency can be increased by 4 times with ZH480 dual F.O.V UV camera.

※ High Sensitivity Detector

High-performance no attenuation UV detector is very powerful for weak UV signal generated from discharge corona.

※ Accurate Photon Number

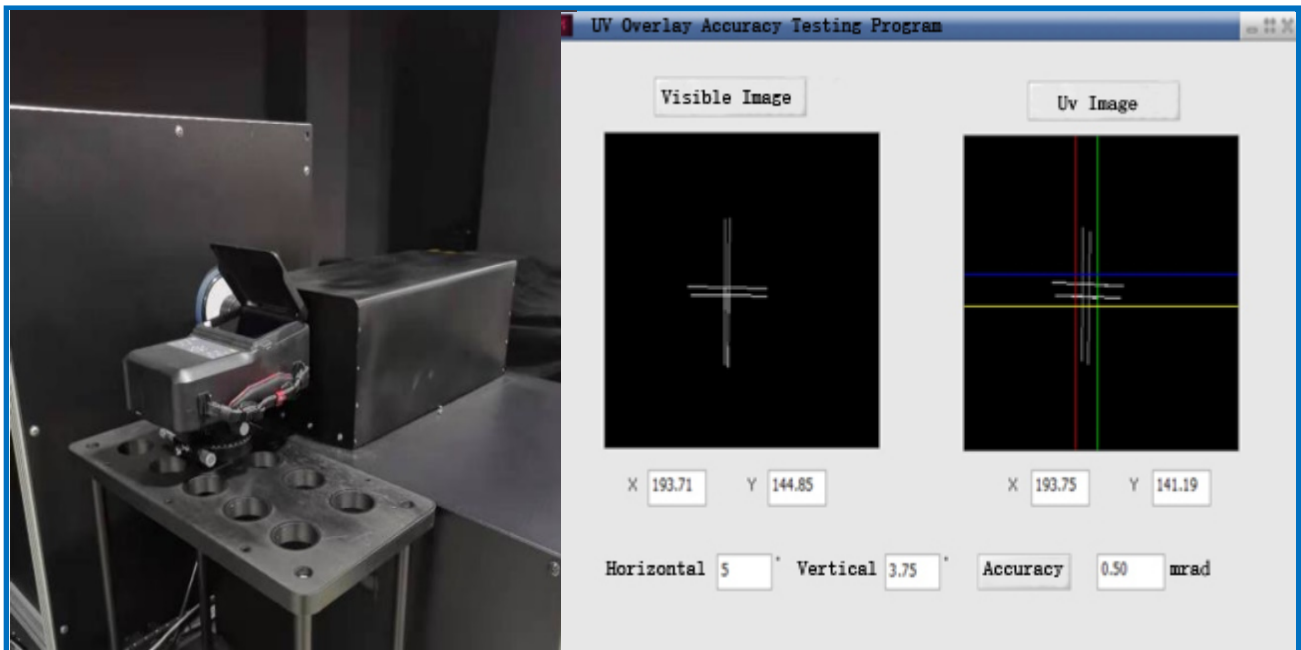
Up to 5 types photon counting boxes can be selected for quantitative analysis. Single or multiple areas corona photons counting.

※ High performance Filter

High precision 240-280nm cutoff wavelength UV filter, which has excellent out-of-band rejection performance and will not be interfered by sunlight.

※ Accurate Positioning

High precision image fusion algorithm can accurately locate the corona position, the overlay accuracy is 0.5mrad.



※ Ergonomic Design

One press button, 64G TF card, 3 * 4.5 hours continuous operation; compact 1.8kg; portable and can be operated by one hand.

※ Multiple Configuration

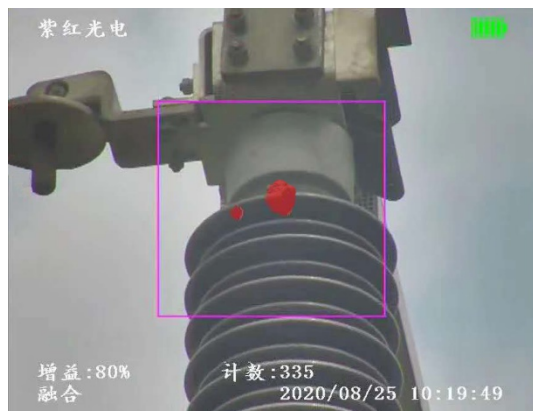
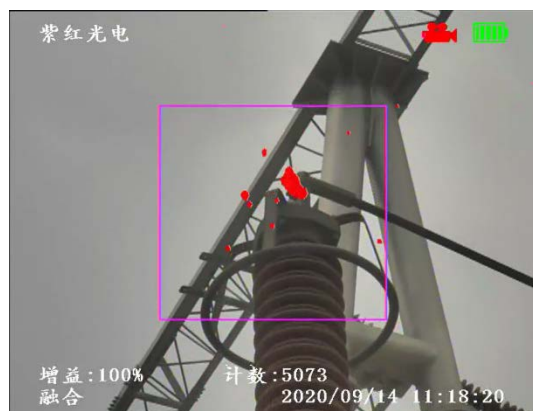
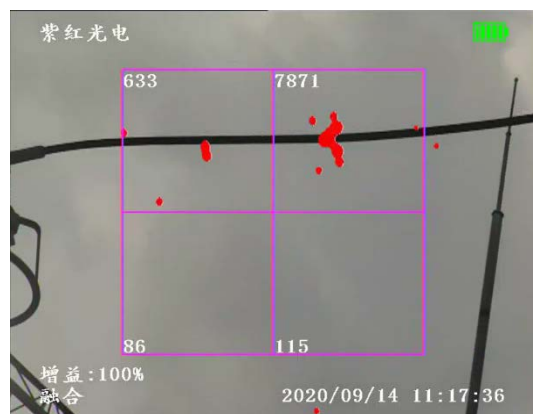
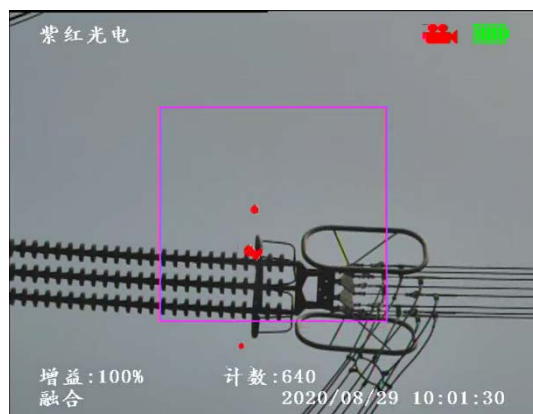
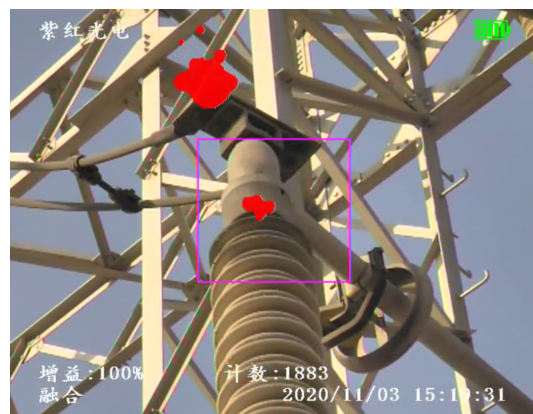
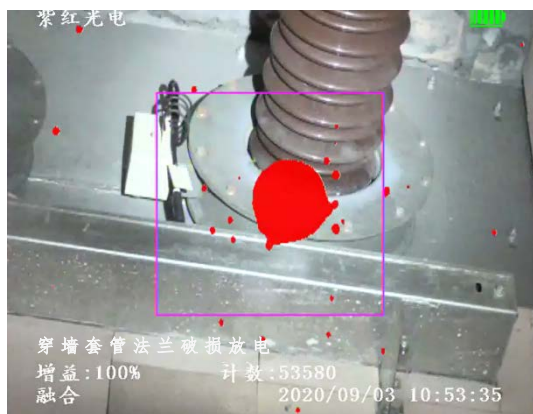
Standard configuration with 3 pcs batteries. Tripod, image report unit, temperature and humidity sensors, distance sensors, GPS etc are optional.

※ Expert Diagnostics

Provide professional test report from EPRI. Meet the 《Charged Device Technology Application Guidelines for UV Diagnostics》.

※ After-sales Service

1+1 year warranty; enough spare parts; Local after-sales engineers will be trained to provide locally and rapidly repairment.



ZH480 Technical Specifications

UV - OPTICAL PROPERTIES	
Spectral Range	240 ~280 nm
Minimum Discharge Sensitivity	1Pc/10m
Minimum RIV Sensitivity	3.6dB μ V (RIV) @ 10m
Minimum UV Sensitivity	2.0 $\times 10^{-18}$ Watt/cm ²
Focus & Focus Range	Auto, 3m ~ ∞
F.O.V	Switchable, 13.3 * 10.6° & 5 * 3.75°
VISIBLE - OPTICAL PROPERTIES	
Focus Range	3m ~ ∞
Minimum Visible Light Sensitivity	0.1 Lux
Focus	Auto
DISPLAY	
Modes	Combine(UV+VIS), UV only, Visible only
UV/Visble Overlay Accuracy	1 mrad
Type	5 inch color Transflective Sunlight readable LCD
Brightness	450 cd/cm ²
Resolution	736*576, 720P optional
Status Informatioon Display	battery, gains, counting number, date, focus
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	>4.5h
Adapter	DC14.8V 12W
ENVIRONMENTAL	
Storage and Operation Temp	-20℃ — +55℃
PHYSICAL PARAMETERS	
Dimensions L*W*H	24.4 \times 13.5 \times 9.6 cm
Weight	1.8 kg