

# BC-20

## UV Corona Detection Camera

### Dual F.O.V Lens: 13.3x10.6° (Wide-angle) & 5x3.75° (Telephoto)

The corona detection camera is a diagnostic tool to control critical components in an electrical network. Using a susceptible ultraviolet radiation camera such as BC-10 / 20 / 30 series, corona and ultraviolet radiation can be recorded to evaluate the state of a device. Installation faults or failures in high voltage equipment carry a very high risk, so preventive maintenance saves high repair costs. Corona discharges may occur due to structural defects or problems in the insulation.

BC-20 UV Camera is a powerful dual-channel UV imaging equipment with a dual FOV Lens, 13.3 x 10.6° (Wide-angle) & 5 x 3.75° (Telephoto). The Lens are built-in for flexible applications. It can accurately locate corona and arc to display and record the photon number of discharge. Also, it can realize the prospective and pre-maintenance inspection of electrical equipment such as substations, transmission/distribution lines, generators and railway lines. BC-20 is an ergonomic design, professional and lightweight device; 1.80 Kg. High UV sensitivity performance but no sensitivity to sunlight during operation in daylight. Thanks to the high-performance UV detector and filter to give high sensitivity. It can detect weak UV signals: high precision image registration and fusion algorithm are employed to obtain accurate, sharp images and videos. It provides data recording and software for data transmitting & report making. It is helpful in mining, petroleum, heavy industry, fire prevention, insurance, detection services and other industries.



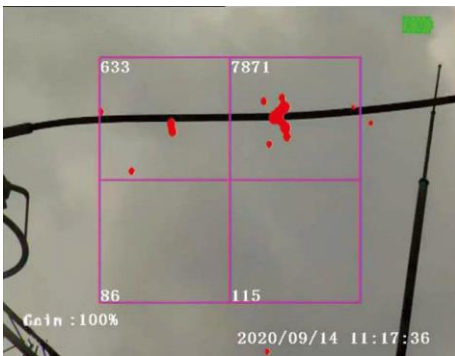
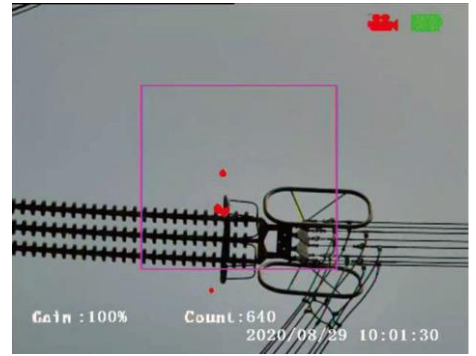
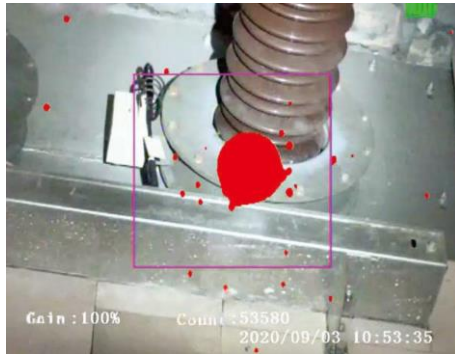
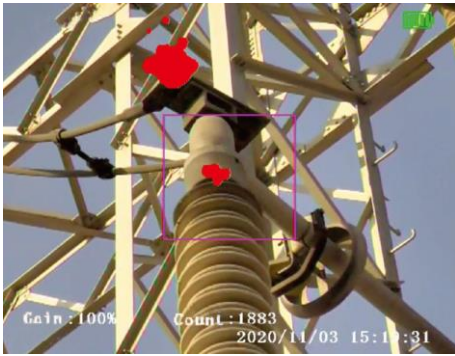
High Sensitivity UV Signal Detector

Accurate Photon Counting

Ergonomic Design

Expert Diagnostics

## Screen Display



# 1. FEATURES

## High Sensitivity Detector

A high-performance, no attenuation UV detector is very powerful for weak UV signals generated from discharge corona.

## Accurate Photon Counting

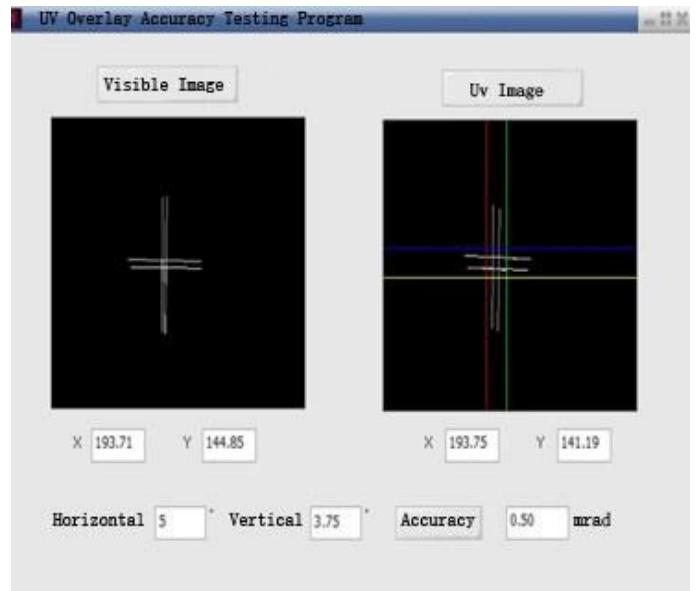
Five types of photon-counting boxes for quantitative analysis. Single or multiple areas corona photons counting.

## High-performance Filter

High precision 240-280nm cutoff wavelength UV filter, which has excellent out-of-band rejection performance and will not interfere with 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, 2 x 4.5 hours (with two batteries) continuous operation; compact size design only 1.8kg; portable and enable one-hand operation.

## Super Configuration

Standard configuration with 2 pcs batteries. Other Tripod, image report unit, temperature and humidity sensors, distance sensors, GPS etc., are optional to save costs and purchase flexibility.

## Expert Diagnostics

Provide test reports based on US Electrical Power Research Institute (EPRI) field guide.

## Considerate After-sales Service

1+1-year warranty\*; free repair\* with spare parts at a minimal price. Backup unit\* provided during the repair or service period.

\*Terms & Conditions applied\*

## 2. TECHNICAL SPECIFICATIONS

### UV - OPTICAL PROPERTIES

Field Of Vision (W x S)	13.3° x 10.6° & 5° x 3.75° Switchable
Spectral Range	240nm ~ 280nm
Minimum Discharge Sensitivity	1Pc/10m
Minimum RIV Sensitivity	3.6dB $\mu$ V (RIV) @ 10m
Minimum UV Sensitivity	2 x 10 <sup>-18</sup> watt/cm <sup>2</sup>
Focus Range	1.5m ~ $\infty$
Focus	Auto

### VISIBLE - OPTICAL PROPERTIES

Minimum Visible Light Sensitivity	0.1 Lux
Focus Range	1.5m ~ $\infty$
Focus	Auto

### DISPLAY AND OUTPUT

Modes	Combine (UV+VIS), UV only, Visible only
UV / Visible Overlay Accuracy	Better than one milliradian
Type	5-inch colour Transflective Sunlight readable LCD
Brightness	450 cd/ m <sup>2</sup>
Resolution	736 x 576
Status Information Display	Battery, Gain, Counting Number, Date, Focus, Thresholds Alarm

### 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 & Still Images

### CHARACTERISTICS

Detector	Life Without Attenuation
Images Fusion	Images Fusion Algorithm
Colours	Multiple Colours Selectable

### POWER SOURCE

Battery	Rechargeable Battery
Working Hours	≥4.5h
Adapter	DC14.8V 15.4W

### ENVIRONMENTAL

Storage and Operation Temp	-20°C ~ +55°C
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### VISIBLE - OPTICAL PROPERTIES

Dimensions (L x W x H)	24.4cm x 13.5cm x 9.6cm
Weight	1.8kg

## 3. ACCESSORIES

- Battery x 2 pcs
- Charger
- Hand Strap
- Card with Adapter
- Microphone
- Video Cable
- AC/DC Adapter
- Carrying Case



Battery x 2 pcs



Charger



AC/DC Adapter



Card with Adapter



Microphone



Video Cable



Carrying Case



Hand Strap