# Uninterruptible inspection

# **UV CAMERA**

for detecting high voltage discharge

**COROTEK-V200** 







# About COROTEK-V200

#### The wavelength band

1. Band for UV(Ultra Violet)

#### UV-A band:320-400nm / UV-B band: 280-320nm / UV-C band:100-280nm

Just only, Band C can detect the corona emission above UV Bands, COROTEK-V200 can detect corona emission within ranges, 185~260mm Band, so that can detect the more wide Band UV-C compared to other model.

2. UV-C Band is Solar Blind Band and all of the wave from the sun is cut through the atmosphere and Solar Blind Band is not influenceable by wave of light. UV-C Band, 280mm is influenceable by UV filter built in other existing high price corona camera, that is, filter sensitivity in camera can be decreased by deplition of ozone layer, seasonal influence and UV-C Band. Eventually, UV camera have a difficulty for detecting corona discharge from high voltage facilities. In conclusion, COROTEK-V200 was developed for easy catching the default of high voltage facilities behind the UV-C Band as far as possible.



#### Sensitivity

At first UV camera for corona was developed for expansion to commercial plan from misslie weapon that was developed for preventing flight airplane misslie. Practically in terms of industrial purpose, no need to aims such remote target.

### **Event Counting**



Event Counting is the volume of corona emission. It is not having a reference such as "pC", "Kg" unit, therefore event counting in this model is not absolute reference to all kinds of the corona devices. Even the same volume of corona emission in a unit, the closer is lager number, the further is smaller number when the COROTEK–V200 measures corona discharge at high voltage facilities, transmission high voltage line and plant stations. It needs to be measured continuously by comparing to discharge volume for exactly making a trend.

# **Maximum Event Counting**

Event counting is temporal numeric display, so fade in and fade out. It's number makes user to confirm the volume of emission and make a decision for maintaining the high voltage devices.

#### The more characteristic on COROTEK-V200

Other company corona camera uses UV filter module that is built in "band pass filter film" for implementing the function of solar blind. Band pass filter film tends to reduce the ability of UV area transmission factor. Therefore, COROTEK-V200 have overcome just like above weakness and have released a new conception model which made a new opening UV camera era. Even if users use COROTEK-V200 for a long time, it does not reduce the ability of function in relation with long time measuring. So that the life cycle of the unit was expanded than ever seen used.

# User friendly

User friendly interface and very easy to operate: turn-on aim to target and store video clips with SD card. Also very light weight enough to handle with single hand.

The COROTEK-V200 is the latest solar blind UV camera that can optically detect UV signals in broad daylight. With high sensitivity to UV in the solar blind range, it is a powerful tool detecting weak UV signals even at long distances.

- Light and handy
- Easy to use and convenient
- Detect corona stably at a wide range within 10 meters
- Easily determining the abnormality of electronic high power equipment by displaying maximum amount of corona
- Function of detecting corona with beep sound
- Recording and playing the situation in real time
- More than 5 hours battery run time with one charge, Easy battery replacement
- No degradation of detection performance for using this model special sensor system
- Available for use both inside and outside





Bushing of indoor HV transformer



Insulator of a substation



Electric pole



Inspection of CT

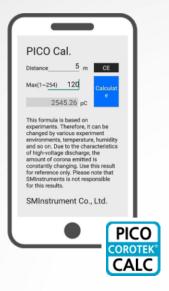
## **Specifications**

Items	Description
Field of view (HXV)	27.6° × 20.7° (Vis) / 6.4° × 4.8° (UV)
Focus	0.5 M ~ ∞ (Visible)
UV-C wavelength	185 ~ 260 nm
Display	3.5 inch LCD
Resolution	320 x 240 pixel
Frame rate	30 Hz
Sensitivity	6.8pC (at 10 meters distance)
Event counting	Display on board
Maximum event counting	Display on board
Image storage function	Pausing, recording, replay (SD memory card)
Power capacity	7.4V, 3500mAh rechargeable Li-ion battery
Size	(W)111 x (H)125 x (D)180 mm
Weight	approx. 1.2 kg (included battery)

<sup>\*</sup>The specifications of the camera are subject to change without notice to improve performance.

#### pC Calculator APP

This formula is based on experiments. Therefore, it can be changed by various experiment environments, temperature, humidity and so on. Due to the characteristics of high-voltage discharge, the amount of corona emitted is constatly changing. Use this result for reference only.



Playstore, Appstore **COROTEK** 

#### Report program



We offer a free program for reporting diagnostic results. You can conveniently write a report with screen capture and pC value calculation functions of saved videos.

### **Components**



- 1 UV canera
- 1 SD memory card(16GB)
- 2 Rechargeable battery
- 1 Auxiliary charger
- 1 Charging adaptor
- 1 Charging cable
- 1 Hand strap
- 1 Instruction manual
- 1 Carrying case