

# SONEL UV-260

Ultra Violet Corona Camera

## OVERVIEW

Easily locate arcing corona in high-voltage transmission and distribution systems by detecting UV emissions, even in full daylight. The UV-260 is an advanced design of imaging camera that detects, displays, and records flash-arc and partial discharge events. The high sensitivity of the UV-260 can detect UV radiation in full daylight from both faraway and nearby sources. It operates in both the visible light spectrum as well as in the ultra-violet region. Simply point the camera at a target. When UV corona emissions are detected they are overlaid on the visible target image pinpointing the location of the UV source accurately. The UV-260 is an ideal predictive maintenance and inspection tool for trouble-shooting overhead transmission lines and conductors in high-voltage substations.

## KEY FEATURES

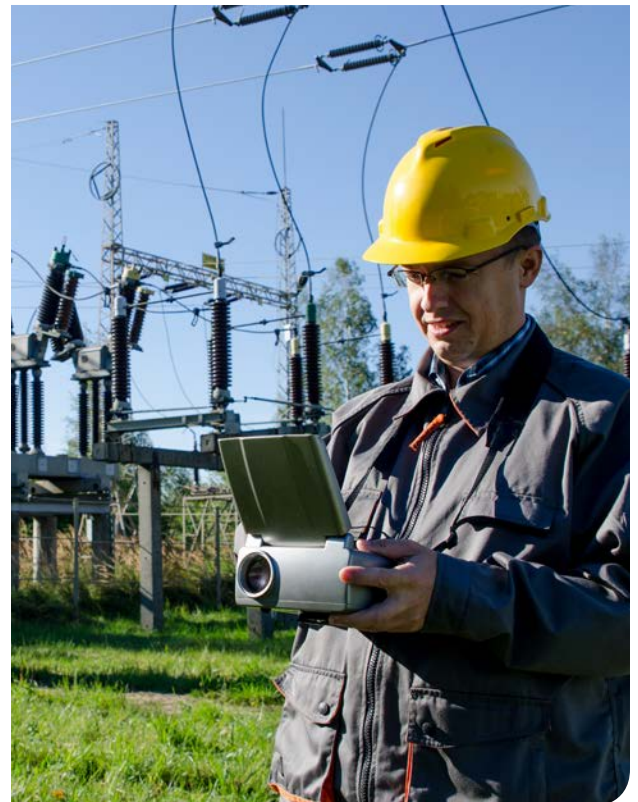
- » High sensitivity to UV signals
- » Precise location of corona-emitting sources
- » Auto-focus of UV and visible channels
- » Background noise reduction
- » 5.7" color LCD touch-screen folds away for transport
- » UV events alarm by audio or LED
- » UV events counter
- » Fast optical zoom
- » Still image capture and review
- » Video recording and playback
- » Built-in GPS documents test location
- » UV-260 PC software for reports

## APPLICATIONS

- » Electrical utility transmission line and substation inspection
- » HV Research Institutes and Laboratories
- » HV electrical component inspection
- » HV panel inspection
- » Field service and maintenance organizations

## STANDARD ACCESSORIES

- » AC power adapter
- » 12V car power adapter
- » 2pcs Li-ion battery
- » Battery charger
- » SD card and SD reader
- » Headset
- » Video cable
- » PC software on CD
- » Warranty card
- » Strap
- » Carrying case
- » User manual



## SPECIFICATIONS

### UV - Optical Properties:

<b>Image Type</b>	Monochrome video; red, white, blue
<b>Minimum UV Sensitivity</b>	$3 \times 10^{-18}$ watt / cm <sup>2</sup>
<b>Minimum Discharge Detection</b>	1.5pC @ 8 meters
<b>Spectral Range</b>	UV 240 to 280 nm
<b>Field of View H x V</b>	5.5° × 4.0°
<b>Focus</b>	Full manual and auto for UV and visible channels
<b>Focus Distance</b>	2 m. to ∞
<b>Detector Life Span</b>	No degradation

### Visible - Optical Properties:

<b>Image Type</b>	Color video
<b>UV and Visible Image Overlay Accuracy</b>	Better than 1 milliradian
<b>Minimum Visible Light Sensitivity</b>	0.1 lux
<b>Zoom Factor</b>	26x optical and 12x digital

### Display:

<b>Type</b>	5.7" VGA color LCD, folding touchscreen
<b>Video Standard</b>	PAL/NTSC switchable
<b>Modes</b>	Combined (UV & visible), UV only, Visible only
<b>Corona Image Color Rendering</b>	White, Red, Blue

### Processing & Communications:

<b>Video standard</b>	H.264
<b>Alarms</b>	LED
<b>Menu</b>	Button operation or touch-screen operation
<b>Audio</b>	Headphones and microphone jack
<b>GPS</b>	Yes

### Data Storage:

<b>Storage Media</b>	SD card
<b>Image Format</b>	JPG
<b>Video Storage</b>	AVI compressed format
<b>Storage Capacity</b>	8000 images, or > 4 hours video
<b>Data Transfer to PC</b>	Via SD card

### Power system:

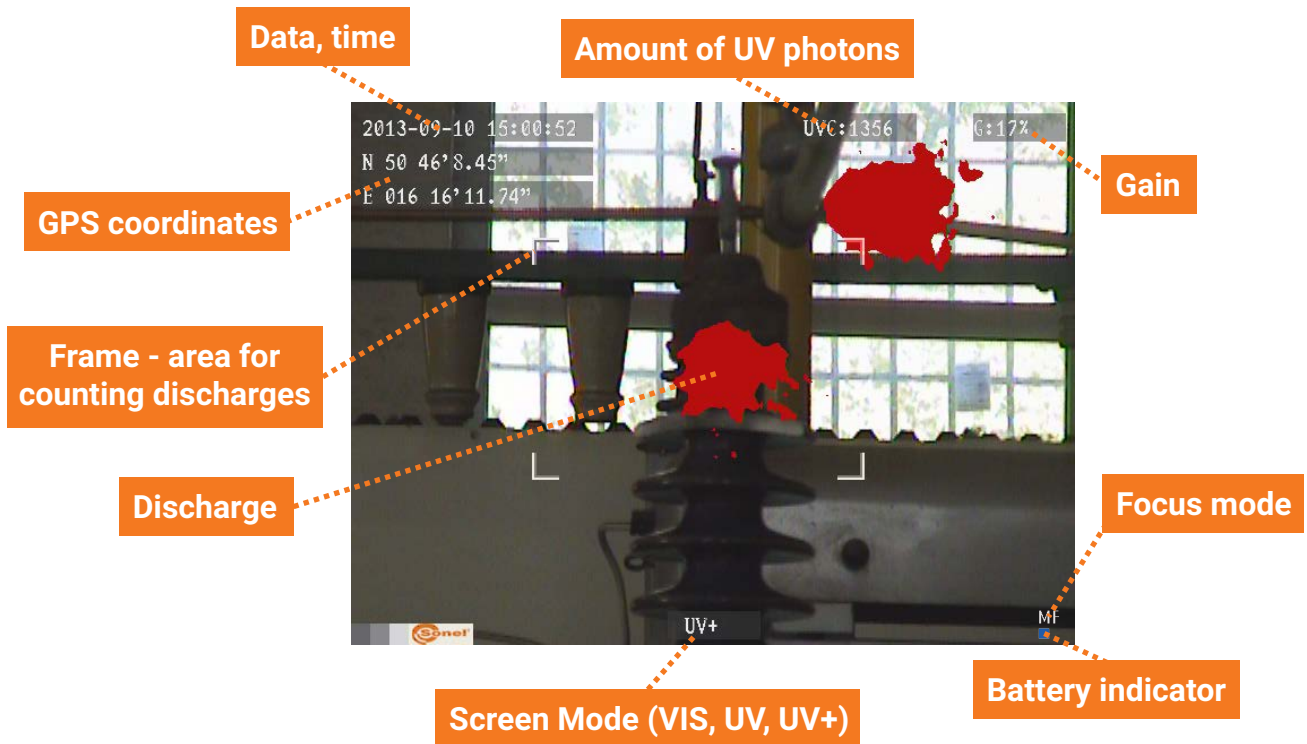
<b>Power Consumption</b>	10 W
<b>Battery Type</b>	Rechargeable Li-ion battery (2 pcs.)
<b>Battery Run Time</b>	2 hours

<b>Charging of batteries</b>	With power adapter	or external charger
<b>External supply</b>	9-12 V, 10 VA	
<b>Power adapter</b>	110-240 VAC, 50-60 Hz / 12 VDC 3.8 A	
<b>Operating temperature</b>	14°F to 122°F / -10°C to 50°C	
<b>Storage temperature</b>	-13°F to 140°F / -25°C to 60°C	
<b>Humidity</b>	95% Non-condensing	
<b>Size</b>	9.4 x 6.5 x 3.6 in / 238 x 165 x 91 mm	
<b>Weight</b>	5.5 lbs / 2.5 kg	
<b>Power interface</b>	Yes	
<b>SD card slot</b>	Yes	
<b>Video output</b>	Yes	
<b>Audio input / output</b>	Microphone / Headphones	





Examples of UV discharges. User can opt to show in red, white, or blue rendering against target image



Screen display showing UV discharge information and camera settings