

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:

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

Visible - Optical Properties:

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

Display:

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

Processing & Communications:

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

Data Storage:

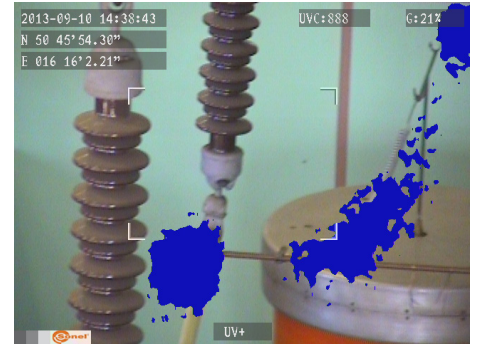
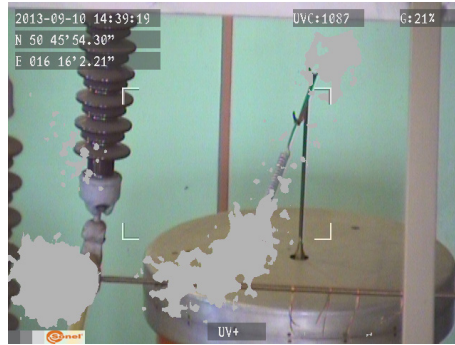
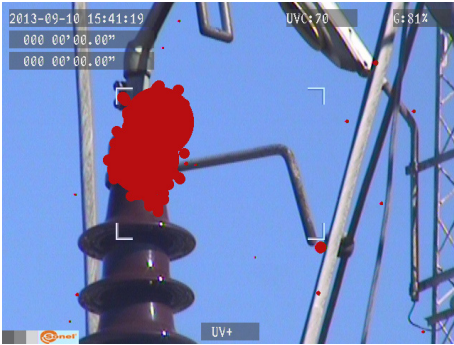
Storage Media	SD card
Image Format	JPG
Video Storage	AVI compressed format
Storage Capacity	8000 images, or > 4 hours video
Data Transfer to PC	Via SD card

Power system:

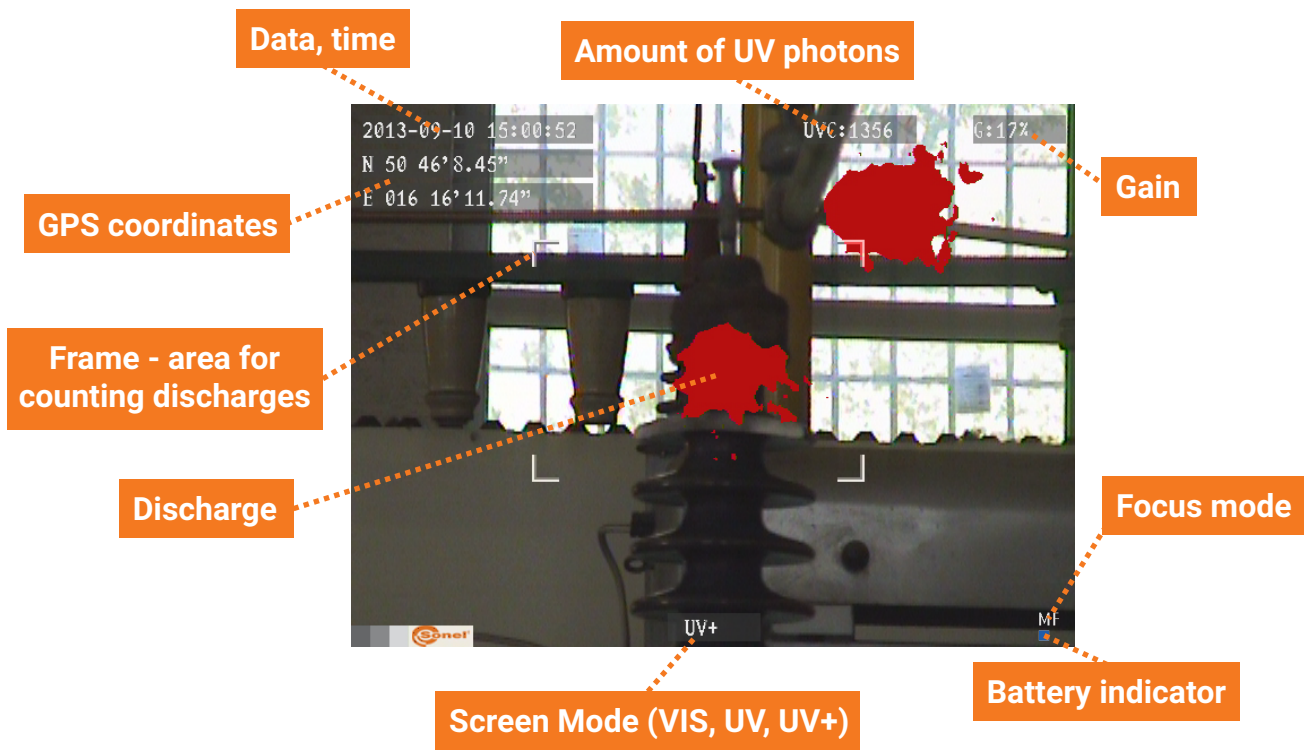
Power Consumption	10 W
Battery Type	Rechargeable Li-ion battery (2 pcs.)
Battery Run Time	2 hours

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