

## UVS640

### SATIR CORONA DETECTION CAMERA

The High-Sensitivity UV Inspection Camera is designed for accurate detection of electrical discharge and UV emissions, making it an essential tool for power grid inspections and substation maintenance.

Equipped with a high-sensitive UV sensor, dual field-of-view options, and ergonomic design, it ensures precision and ease of use. Its 10x optical zoom, UV-visual overlay, and sunlight-readable display provide clear diagnostics even in challenging environments. With support for image and video recording on a 64GB card, it's built for efficient documentation and analysis.

Corona discharge represents a localised area where the air has become conductive due to electrical breakdown and is mainly present in the air adjacent to pointed metal conductors carrying high voltage. The corona discharge is present in the power and electrical field.

Reliable, portable, and versatile—this camera is a smart choice for UV inspection professionals.



### Key Features

- High Sensitive UV Sensor
- Non-destructive testing
- Ergonomic Design
- Accurate Photon Number
- Accurate Positioning
- Expert Diagnostics
- Multiple Configuration
- Wi-Fi and Bluetooth

# UVS640 Specifications

| UV - OPTICAL PROPERTIES           |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| UV Spectral Range                 | 240 ~280 nm                                                    |
| Our-of-Band Rejection             | Provided, Can Be Used in Daytime Under Sunshine                |
| Minimum Discharge Sensitivity     | 1.0pC / 15m                                                    |
| Minimum RIV Sensitivity           | 3.6dBμV (RIV)                                                  |
| Minimum UV Sensitivity            | 2.0×10 <sup>-18</sup> Watt/cm2                                 |
| Focus & Focus Range               | Auto/Manual (Follow visible light), 1.5m ~ ∞                   |
| F.O.V                             | 13.3 * 10.6° & 5 * 3.75°                                       |
| F.O.V Switchable                  | F.O.V can be Switchable between Wide angle and telephoto angel |
| Zoom                              | 2x                                                             |
| UV Integral Function              | Provided, 2x, 4x, 8x, 16x                                      |
| Gains                             | 0-100%, Adjustable                                             |
| Photons Counting                  | Provided                                                       |
| Counting Box                      | ≥5 Kinds: Small, Medium, Big, Full Screen, Quad box            |
| Auto Alarm                        | Alarm Threshold Values of Photons Counting Can Be Preset       |
| Detector Degradation              | No degradation                                                 |
| VISIBLE - OPTICAL PROPERTIES      |                                                                |
| Focus & Focus Range               | Auto, 1.5m ~ ∞                                                 |
| Minimum Visible Light Sensitivity | 0.1 Lux                                                        |
| Optical Zoom                      | X10                                                            |
| Digital Zoom                      | X12                                                            |
| Resolution                        | 1920*1080                                                      |
| DISPLAY                           |                                                                |
| Modes                             | Combine (UV+VIS), UV only, Visible Only                        |
| UV/Visual Overlay Accuracy        | 1 mrad                                                         |
| Type                              | 5" Color Transflective Sunlight Readable LCD                   |
| Brightness                        | 1000 cd/cm <sup>2</sup>                                        |
| Display and Image Resolution      | 1280*720                                                       |
| Corona Color                      | ≥7 Kinds: Red, White, Blue, Yellow, Cyan, Green, Magenta       |
| Status Information Display        | Battery, Gains, Photons Counting, Date, Alarm                  |

| CONTROLS AND OPERATION |                                                                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status Modes           | Real Time, Standby, Power off                                                                                                                                    |
| Continuous Operation   | Continuous Operation, No Cooling System                                                                                                                          |
| Controls Command       | One for One Keyboard input                                                                                                                                       |
| Communication          | WIFI/Bluetooth/HDMI                                                                                                                                              |
| SAVE AND PLAYBACK      |                                                                                                                                                                  |
| Video                  | Provided, Output BNC/HDMI/WIFI/Bluetooth (Optional)                                                                                                              |
| Still Images           | Provided                                                                                                                                                         |
| Data Save              | 64G TF Card                                                                                                                                                      |
| Video Format           | MP4                                                                                                                                                              |
| Stills Format          | JPG                                                                                                                                                              |
| Playback Function      | Video and Still Images                                                                                                                                           |
| Audio Annotation       | Microphone Voice Input                                                                                                                                           |
| PHYSICAL PARAMETERS    |                                                                                                                                                                  |
| Battery                | Rechargeable Li Battery                                                                                                                                          |
| Working Hours          | ≥4h per battery                                                                                                                                                  |
| Adapter                | DC14.8V 15.4W                                                                                                                                                    |
| GPS                    | Provided                                                                                                                                                         |
| Temp & Humidity Sensor | Provided                                                                                                                                                         |
| Operation Temp         | -20°C ~ +55°C                                                                                                                                                    |
| Storage Temp           | -40°C ~ +70°C                                                                                                                                                    |
| IP Grade               | IP54                                                                                                                                                             |
| Dimensions (L*W*H)     | ≤24.4×13.5×9.6cm                                                                                                                                                 |
| Weight                 | ≤1.8 kg                                                                                                                                                          |
| Accessories            | Basic Units with Dual FOV Lens, 64GB Card, Card Reader, Lens cap, Carrying Strap, Adaptor, 2 Batteries, Microphone, Video cable, Carrying Case, Software, Manual |