

# Positron Substation Insulator Tester For Live Power Station Bushings and Insulators



## Detects Conductive Defects with 100% Reliability (up to 1,000 kV)

The Substation Insulator Tester has been specifically designed for use in fully energized power stations to test bushings and insulators of all shapes and sizes. Positron's proven and patented electric field technology ensures 100% reliability in safely detecting any conductive defects. You will know in less than a minute the severity of the conductive defects, if maintenance or repair is necessary and whether it is safe to work nearby.

### Test porcelain or polymer bushings and insulators in power stations used with:

- Voltage transformers
- Current transformers
- Circuit breakers
- Lightning arrestors
- Coupling capacitors
- Polymer posts
- Cable terminations
- Ceramic hollow posts\*

The Positron testers' reliability has been validated by major power utilities worldwide.

- **Safe to use:** Does not make electrical contact with any high voltages
- **Proven electric field detection technology**
- **100% reliable:** Detects all conductive defects including early stage defects and contamination

\* Not for use on ceramic solid posts

## Protects The Safety of Personnel

## Eliminates Costly Power Interruptions, Outages and Dangerous Conditions

The Substation Insulator Tester model #3782652U is equipped with a high dielectric, adjustable Ski-Guide assembly that makes physical, non-conductive contact with the bushings or insulators. The tester glides along the contours of the bushing or insulator and detects defective bushings and insulators of any shape and size without making electrical contact. For voltages less than 100 kV, the Ski-guide assembly can be changed for a Pressure-Switch Actuator assembly (also included).

**Operation:** The operation technique involves attaching the lightweight microprocessor-based sensor probe with a Ski-Guide assembly to a hot stick. The adjustable skis glide along the surface of any shape of bushing or insulator to be tested. Each conductive defect causes an electric field distortion. The tester will sense and record the distortion, indicating the presence of a defect.

Quick assessments can be made periodically to ensure safe conditions, prevent power outages and equipment damage caused by failed bushings and insulators. Designed for fully energized testing, this tester removes the need for the planning and de-energizing sections of the power station to test questionable bushings or insulators.

### Provides Instantaneous Detection of Defects

- Reads the E-Field and analyzes the field distortions caused by conductive defects
- Substation bushings and insulators can be tested without interrupting power transmission
- Removes the guesswork associated with high voltage asset assessment
- Completely safe since the tester requires no electrical contact with energized insulators
- Scans a substation bushing in less than one minute
- Test results are instantly transmitted via Bluetooth to a Tablet/Laptop
- Detailed graph of the E-Field of the bushings or insulators shows the severity of the defect

### Specifications:

- Weighs less than 1.2 kg (2.6 lbs)
- Works with voltages up to 1,000 kV
- Available in 50 Hz and 60 Hz versions
- Operational temperature range:  
-40°C to +50°C (-40°F to +125°F)



Rugged Carrying Case

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