

NL CAMERA FOR PARTIAL DISCHARGE DETECTION



SOUND REVEALS THE THREATS TO YOUR ELECTRIC POWER DISTRIBUTION

With the NL Camera for partial discharge detection, you can tell normal sounds apart from fatal ones and will know what to do about them.

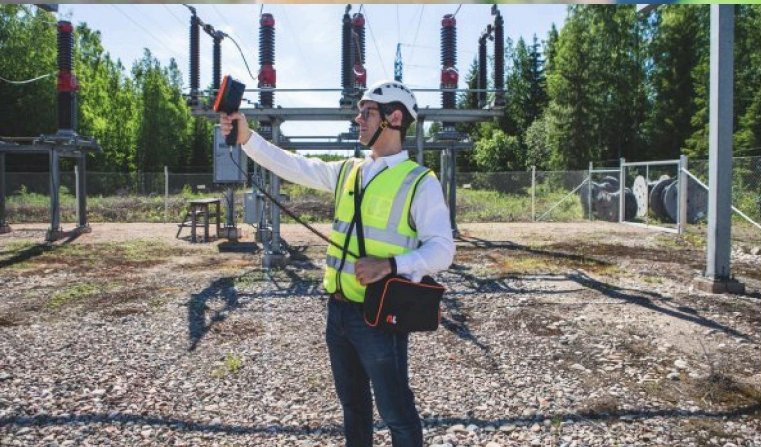
Did you know that...

- ⚠ 85% of disruptive failures in high and medium voltage systems are related to partial discharges.
- ⚠ Invisible partial discharges are often the first indication of insulation failure.
- ⚠ Partial discharges cause power loss, electromagnetic interference, and often progress over time leading to catastrophic failures.

Solution:

The NL Camera for Partial Discharge Detection





NL CAMERA

Quick overview of the most critical problems early on

- Detects problems in power grid components before they start to heat up
- No direct line of sight required

Requires minimal training

- Light, hand-held, automatically displays the detected PDs' locations on its intuitive user interface

Machine learning-powered NL Analytics

- Locates and distinguishes PDs from other sounds
- Classifies PD type and severity
- Suggests further corrective actions
- Easy reporting tool for sharing repair and maintenance plans

Acoustic Specifications

Acoustic measurement	124 low-noise MEMS microphones, real-time sound visualization
Dynamic range, low limit	Below -15 dB (frequency-dependent)
Dynamic range, high limit	120 dB (frequency-dependent)
Bandwidth	2–65 kHz
Measurement distance	From 0.3 m (1.0 ft) up to and above 130 m (430 ft)

User Interface

Display	5 in, 800 × 480 resistive touchscreen
Brightness	1000 cd/m ² (adjustable)
Snapshot resolution	800 × 480
Frame rate	25 fps (optical image) / 30 fps (acoustic image)
Zoom	2x digital zoom

Communication and Data Storage

Wireless data transfer	IEEE 802.11.b/g/n/ac
Storage, internal	32 GB/999 snapshots
Storage, external	8 GB USB mass storage, 500 snapshots (typical)

Environmental

Operating temperature	-10°C – +50°C (14°F – 122°F)
Storage temperature	-20 °C – 70 °C (-4 °F – 158 °F)
Charging temperature	0°C – +40°C (32°F – 104°F)
Humidity	Recommended 0–90%
Ingress Protection	IP51

NL Analytics & Features

Discharge localization & recognition	Automatic detection 50/60 Hz without direct line of sight
Discharge classification & analysis	PRPD pattern In the NL Cloud and NL Camera Viewer Pro: negative & positive corona, floating discharge, surface or internal discharge
Severity assessment	In the NL Cloud and NL Camera Viewer Pro software: Recommends actions to fix the issue
Video recording	Up to 5 minutes
Audio recording	Up to 5 minutes
Video resolution	1640 × 1232
Video frame rate	15 fps

Power Specifications

Camera power input	Nominal input voltage: 12 V _{dc} Max input: 15 V _{DC} , 2.5 A
Internal battery	Li-Ion 6 Wh (only for backup purposes)

Physical data

Camera size & weight	273 × 170 × 125 mm (10.7 × 6.7 × 4.9 in), 980 g (2.2 lb)
Battery size & weight	90 × 145 × 65 mm (3.5 × 5.7 × 2.6 in), 985 g (2.2 lb)
Total weight	2.9 kg (6.4 lb) (includes all accessories)

Supported Languages

Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Thai, Traditional Chinese, Turkish, Vietnamese