



The NL Camera is an easy-to-use, stand-alone device for detecting and localizing partial discharges in medium and high voltage electrical systems during routine inspections. The NL Camera utilizes 124 microphones to find sounds emitted by partial discharges—even when they are completely inaudible to the human ear. Sound appears before components start to heat up, and the NL Camera enables detecting problems at an early stage.

The NL Camera instantly shows the located partial discharges on the camera view, allowing users to pinpoint and report possible problems effortlessly. The NL Camera quickly scans large areas from a distance, locating problems in power grids from more than 130 meters away. The NL Camera detects 50/60 Hz partial discharges automatically and displays the PRPD (Phase Resolved Partial Discharge) Pattern.

Is it a bad connection? Perhaps a faulty insulator? The included NL Cloud software instantly determines the partial discharge's severity and gives you action recommendations. The NL Camera Viewer and NL Camera Viewer Pro offline software are for those who cannot use WiFi.

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

Technical Specifications

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	116 dB (frequency-dependent)
Bandwidth	2–35 kHz
Measurement distance	From 0.3 m (1.0 ft) up to and above 130 m (430 ft)
Discharge classification & analysis	PRPD pattern Negative corona Positive corona Floating discharge Surface discharge or discharge inside a component
Discharge localization & detection	Automatic detection 50/60 Hz

User Interface

Display	5 in, 800 × 480 resistive touchscreen
Brightness	1000 cd/m ² (adjustable)
Snapshot resolution	800 x 480
Video 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	2000 snapshots (typical)
Storage, external	8 GB USB mass storage, 500 snapshots (typical)
Camera power input	Nominal input voltage: 12 V _{dc} Max input: 15 VDC, 2.5 A
External battery	LiFePO ₄ 84 Wh, 12 VDC Use time 6 h, charge time 4-6 h Max output: 13.8 V, 4.0 A
Battery charger	Input: 100-240 V _{ac} ~ 50/60 Hz 1.3-1.5 A Max output: 13.8-14.6 VDC, 4 A (depends on the charger provided)
Internal battery	Li-Ion 6 Wh (only for backup purposes)

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

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)