Saves money and improves energy efficiency

- Pinpoints tiny leaks and shows leak size and cost estimate
- More accurate and faster than other leak detectors and methods

Data for maintenance, repair plans, and ISO 50001-compatible reporting

- The machine learning-powered NL Cloud service offers advanced analytics and reports

Speeds up audits & requires minimal training

- Scans large areas quickly
- Easy to use
- Fits any stage of your maintenance cycle

The NL Camera is a smart acoustic device for locating leaks in compressed air systems. The NL Camera automatically detects leaks by the sound that they emit, even in loud industrial environments. The device is lightweight and easy to use.

The 124 microphones of the NL Camera allow leak detection in a wide field of view and from an extended range. Leak location is up to 10 times faster than with traditional methods. The NL Camera instantly shows the located leaks on the camera view, allowing users to pinpoint and report leaks effortlessly.

The NL Camera analyzes leaks in real time, utilizing its built-in processing power. Users can upload leak data and images to the included NL Cloud for deeper analysis and reporting. The NL Camera Viewer and NL Camera Viewer Pro offline software are for those who cannot use WiFi.

Datasheet version 210527
Compatible with SW version 21H1

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	120 dB (frequency-dependent)
Bandwidth	2–35 kHz
Measurement distance	From 0.3 m (1.0 ft) up to and above 130 m (430 ft)
Leak rate	In typical industrial environment: >0.032 l/min @ 3 bar from 3 m (9.8 ft) >0.05 l/min @ 3 bar from 10 m (32.8 ft) Absolute minimum detection in quiet environment: 0.016 l/min @ 1.2 bar from 0.3 m (1.0 ft)
Leak localization & detection	Automatic leak recognition

User Interface

Display	5 in, 800 × 480 resistive touchscreen
Brightness	1000 cd/m2 (adjustable)
Snapshot resolution	800 x 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/2000 snapshots (typical)
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

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 lbs)
Total weight	2.9 kg (6.4 lb) (includes all accessories)

NL Analytics & Features

Leak detection	Automatic, real-time leak recognition
Leak size & cost estimate	Automatic, real-time, on-device
ISO5001-compatible reporting	In the NL Cloud and NL Camera Viewer Pro software
Video recording	Up to 5 minutes
Audio recording	Up to 5 minutes
Video resolution	1640 x 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)

Battery Option RRC2040

External battery	Li-ion 36.2 Wh, 10.8 V_{DC} Use time over 2 h Max output: 12.6 V, 4.0 A
Battery charger	Input: 100.00–240.00 V_{AC} ± 10% ~ 50/60 Hz 1.70 A @ 100.00 V_{AC}
	Max output: 19.00 V_{DC} ± 5%, 3.40 A

Battery Option Tracer

External battery	$LiFePO_4$ 84 Wh, 12 V_{DC} Use time up to 7 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 V_{DC}, 4 A (depends on the charger provided)

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