

# PD Profiler™

## Next Generation in PD Monitoring

The PD Profiler™ is a cutting-edge Partial Discharge Monitor designed to boost reliability and safety of electrical systems. Whether it's transformers, switchgear, or cable testing, this versatile instrument is engineered to address a wide range of critical applications. With its flexibility, the PD Profiler™ enables electrical maintenance professionals to conduct on-site partial discharge surveys or seamlessly integrate the device into permanent monitoring systems for comprehensive grid coverage. Empowering engineers with actionable insights, the PD Profiler™ reduces downtime, optimizes maintenance costs with clear overview of asset insulation. Protect your investments—or your customers'—with this state-of-the-art monitoring solution. The future of electrical system reliability starts here!

## Highlights

- New generation of PD Monitoring
- From 8 to 20 PD channels with PrPD
- Advanced interference management/gating
- Highly scalable/daisy chain
- No shutdown required
- Din rail or magnetic mount
- Available in several configurations



## Next Generation of PD Monitoring

PD Profiler™ is perfectly suited for substation environment, field applications & remote locations.

20+ years experience in the partial discharge detection and analysis field

**Buy with confidence.** Training and support is included and provided by ndb Tech's skilled experts who performed hundreds of successful PD Profiler™ installations

## PD Profiler™ - Technical Specs

<b>PD Channels</b>	Up to 20 PD channels per unit
<b>Configuration</b>	Daisy chain
<b>Acoustic Bandwidth</b>	20 kHz to 250 kHz
<b>High-Frequency Bandwidth</b>	3 MHz to 80 MHz
<b>Dynamic Range</b>	Acoustic: 60 dB HF: 80 dB
<b>Ultra-High Frequency (UHF) Bandwidth</b>	100 MHz to 500 MHz
<b>Phase-Resolved Analysis</b>	PrPD (Phase Resolved Partial Discharge) 45-505 Hz
<b>PD Detection Features</b>	PD qualifying indicators
<b>Filtering</b>	Configurable filters per channel
<b>Noise Suppression</b>	Gating
<b>Alarm Output</b>	Configurable alarm contact output
<b>Communication Interfaces</b>	Modbus IP / MQTT / REST API / USB



## Partial Discharge Phenomenon

Partial discharge is commonly found in aging MV and HV cable accessories. Insulation faults accelerate degradation and shorten the lifespan of electrical equipment, leading to higher operational costs and reduced reliability. Since economic performance and reliability are key factors in evaluating electricity suppliers, addressing these issues is crucial. However, a major challenge lies in monitoring secondary substations, which are often overlooked due to their high number and widespread distribution.

## PD Profiler™ Solution

The PD Profiler™ is a next-generation partial discharge monitoring system designed for local or remote deployment at a reasonable cost. It features 8 to 20 PD channels with phase-resolved partial discharge (PrPD) analysis, ensuring precise detection and diagnosis. With advanced interference management and gating, the PD Profiler™ effectively filters out noise for reliable monitoring. Its highly scalable, daisy-chainable architecture allows seamless expansion, enabling clean installations with minimal cabling. Equipped with onboard memory capable of storing several months of recordings, it provides long-term data retention for in-depth analysis. Designed for effortless setup, the PD Profiler™ attaches directly to metallic cabinets using strong magnets and requires no system shutdown during installation. In the event of partial discharge activity, a local alarm activates the corresponding LED indicator while simultaneously transmitting the alarm status to SCADA.

## Sensor That Fits Your Application

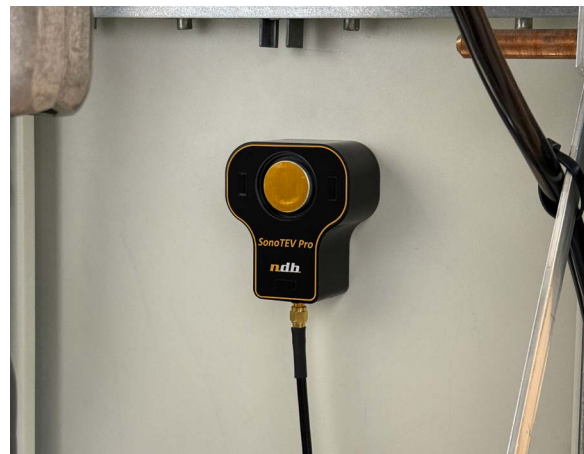
Not only does the PD Profiler™ offer outstanding performance and flexibility, but it also comes equipped with a range of advanced, well-designed sensors. The SonoTEV Pro™ sensor is the latest innovation, combining ultrasonic acoustic and transient earth voltage (TEV) technology in a compact, magnetic design. Whether for direct contact or airborne acoustic detection, there's a SonoTEV Pro™ configuration to suit your application. For ground return monitoring, HFCT-HD™ clamp sensors deliver powerful performance with features such as noise immunity, aluminum construction, and advanced filtering. These weatherproof, split-core sensors

are easy to install, featuring a convenient spring latch system, 20mm or 60mm openings, and IP66-rated protection.

Real case scenario: Partial discharge detected on a cable termination by the PD Profiler™ system with SonoTEV Pro™ and HFCT-HD™ sensors.



HFCT-HD™ sensor



SonoTEV Pro™ sensor

