PRY-CAM PORTABLE

A revolution in Partial Discharge management
More than 80% of failures in HV/MV assets are related to Partial Discharge (PD) activity

PD measurement is a key parameter to assess the conditions of any electrical system. Nevertheless, PD testing has never been widely used as a powerful online diagnostic tool due to several limitations of traditional PD technologies, which are usually complex, expensive, unscalable to the whole asset, and nearly impossible to integrate with all key asset parameters. In addition, defect detection and localisation can’t always be performed online.

The PRY-CAM answer

PRY-CAM’s breakthrough wireless technology allows online, accurate and reliable PD measurements, diagnosis and defect localisation.

PRY-CAM allows PD testing to be performed online – i.e. without having to switch the system off – and without the need for a direct connection to what is being tested, which also means greater safety for operators.

PRY-CAM is faster, more data-driven and more effective than ever before, solving problems today and delivering learning for tomorrow.

For data-driven power

Use on HV and MV equipment

- CABLES
- JOINTS
- TERMINATIONS
- SWITCHGEAR
- TRANSFORMERS
- ELECTRICAL MACHINES

TO DETECT
TO MONITOR
TO LOCALISE
TO PREVENT
Key features

- NO GALVANIC CONNECTION
- WIRELESS DATA TRANSMISSION
- USER-FRIENDLY MOBILE APPLICATION
- LIGHTWEIGHT AND EASY TO CARRY
- AUTOMATIC A.I. DIAGNOSIS

PRY-CAM PORTABLE is an integrated portable instrument for the automatic acquisition, processing and classification of pulse signals generated by PD phenomena occurring in insulating materials of Medium and High Voltage electrical systems and equipment, such as transformers, electrical machines, cables systems and switchgear.

It provides an instant snapshot of the condition of the object being monitored, that is easy and immediate to read thanks to a red-yellow-green traffic-light-like visual interface.

Automatic pre-diagnosis is based on the PRY-CAM BRAIN™ artificial intelligence algorithm.

Wireless data transmission paired with the absence of galvanic connections ensure maximum safety for operators.

Maximum safety for operators

Very high sampling rate and advanced filtering capabilities

PD measurement outcome with pattern, waveform (Time Domain Analysis) and frequency spectrum (Frequency Domain Analysis)

Patented Ultra Wide Band (UWB) capacitive probe sensor

Enhanced noise rejection

High sensitivity and directivity
**Technical specifications**

**Sensor type:** Electromagnetic sensor, based on a patented Ultra Wide Band (UWB) active capacitive probe

**Sampling frequency:** 200 MS/s

**Bandwidth:** 100 MHz

**PD sensitivity:** 1 pC

**Synch frequency:** From 10 Hz to 1 kHz

**Processing:** Real-time filtering capabilities

**Communication interfaces:** Wireless 802.11 b/g (Wi-Fi)

**AC synchronisation source:** Electric field, magnetic field, light, auxiliary/external

**Internal battery:** Li-Po 7.4 V, 2200 mAh

Autonomy approx. 6 hours

**Working temperature:** From -25°C to 70°C

**Weight:** 530 g

**Dimensions:** 175 × 125 × 70 mm (L × W × H)

**Case:** Carbon Fibre
One instrument and one APP, all your needs covered

Seamlessly move between BASIC, ADVANCED and PREMIUM operating modes depending on your information needs and PD expertise.

3 operating modes. Discover the right one for you.

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>Description</th>
<th>Recommended for MV</th>
<th>Recommended for HV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BASIC</strong></td>
<td>Free use Your PRY-CAM PORTABLE can be used as a reliable PD surveyor with traffic light and simplified PD pattern</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>ADVANCED</strong></td>
<td>Pay-per-use Provides you with the PD pattern for simple diagnosis only</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>PREMIUM</strong></td>
<td>Pay-per-use Provides you with the complete PD pattern, including waveforms and frequency spectrum, for any single PD pulse</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

You can temporarily upgrade from BASIC to ADVANCED or PREMIUM modes for more detailed diagnosis as and when you need it.
Data management

Every single PD measurement can be saved alongside other useful details, such as pictures, recorded messages, GPS coordinates, notes and tags.

Why PRY-CAM PORTABLE is good for your business

100% successful diagnosis on HV and MV
80% measurement time saved against traditional technologies
Up to 5× higher sensitivity on small defects
One device for all types of equipment and all voltage classes
Cost saving generated by online (system in operation) measurement
Easy to use – training available
Reliable remote diagnosis by PD experts on demand

Applications

Suitable for any electrical equipment from 3 kV to 600 kV
Suitable for cable systems (cables, joints, terminations), GIS, switchgear, transformers and electrical machines (motors, generators, turbines, etc.)
Suitable for AC and DC

Optional extras

PRY-CAM backpack kit
Includes one backpack, one telescopic stick, one tripod, one strap and one car charger, giving you everything you need, even in the most difficult situations.