PRY-CAM

Breakthrough technology for monitoring, condition assessment and asset management of electrical systems

PRY-CAM

A Brand of Prysmian Group

For data-driven power

Welcome to

PRY-CAM

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A revolution in monitoring, condition assessment and asset management of electrical systems

The worlds of monitoring, condition assessment and asset management of electrical systems are undergoing a revolution that can help prevent failures and service interruptions, increasing uptime and safety, enhancing assets' longevity and significantly reducing maintenance costs and risks.

It's a revolution that harnesses the extraordinary possibilities of the Internet of Things, and where key parameters measurement and condition assessment data can be collected and stored via private Cloud, to be accessed and shared remotely, allows effective maintenance strategies for electrical assets and learning for continuous improvement.

Leading this revolution is PRY-CAM from Prysmian Group

It's a fast, flexible, reliable game-changer and a breakthrough technology paired with a suite of electronics-based products that allow performing online measurement and data gathering of key parameters without service interruption, with a database that hosts more than three million measurements that had never been classified and stored before Prysmian did it.

For data-driven power

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

Our core values

Revolutionise technologies for the management of electrical assets

Bring innovation to the world of electricity

Create simple products for complex problems

Innovative solutions to real-world challenges

Our customers are becoming more and more data-driven. Our mission is to gather data and to classify them in a way that they can be analysed by automated diagnostics systems.

PRY-CAM is a breakthrough technology that allows online, accurate and reliable measurements of key parameters, diagnosis and defect localization from remote. The data that we can gather are manifold: conditions of use, malfunctioning, overheating. All in real time and with no specific expertise.

Thanks to a whole private cloud-based system built around our technologies, today we have a database that hosts more than three million measurements that had never been classified and stored before, but Prysmian did it.

We have been the first to develop powerful monitoring, data gathering and diagnostics tools and now we are transitioning from pure cable manufacturer to the new role of cable system integrator and data provider: this is why we are a world leader.

The PRY-CAM family

The PRY-CAM family features a range of cutting-edge products covering the key aspects of condition assessment and monitoring of electrical systems.

Suitable for any electrical equipment from 3 kV to 600 kV.

Every PRY-CAM product is conceived based on four main pillars

- IDENTIFICATION OF PARAMETER TO MEASURE AND DEVELOPMENT OF THE SUITABLE DEVICE
- DATA ACQUISITION AND TRANSMISSION
- CLOUD PLATFORM STORAGE
- MACHINE LEARNING

PRY-CAM SYSTEM

PRY-CAM SYSTEM integrated combined monitoring solutions consist of one or more PRY-CAM products installed within the same cabinet.

Each PRY-CAM SYSTEM solution can be configured based on the customers' specific requirements in terms of parameters to be monitored to fulfil their specific maintenance and asset management strategies.

Use on HV and MV equipment

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

- TO DETECT
- TO MONITOR
- TO LOCALISE
- TO PREVENT

Products

PRY-CAM PORTABLE

Portable wireless device for the online spot measurement of PD (Partial Discharges).*

PRY-CAM GATE

Fixed device for the permanent measurement of PD on cable joints both in AC (Alternate Current) and DC (Direct Current) electrical systems.**

PRY-CAM GRIDS

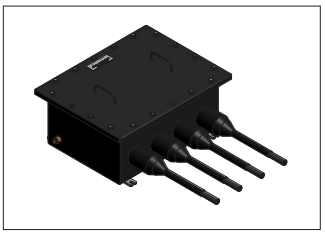
Fixed device for the permanent monitoring of PD in AC electrical systems.

* Patented in 2009

** Patented in 2015

APPLICATIONS

	PRY-CAM PORTABLE	PRY-CAM GATE	PRY-CAM GRIDS
HV & Submarine	●	●	●
Solar & Wind	●		●
O&G/SURF	●		●
Power Distribution	●		●
Other Industrial (Mining, Cranes, etc.)	●		●



PRY-CAM LINKBOX

Enhanced link-box containing self-powered electronic products and sensors capable of transmitting diagnostic information and data (PD, sheath current, SVL state, etc.) through GSM or fibre to a Cloud system.***

PRY-CAM HARVESTER

Device used to acquire power supply from the AC cable system and feed power to the monitoring system when a power connection is not available on site.

PRY-CAM INFRARED

Contactless sensors using infrared technology to detect temperature of objects.

APPLICATIONS

	PRY-CAM LINKBOX	PRY-CAM HARVESTER	PRY-CAM INFRARED
HV & Submarine	●	●	●
Solar & Wind		●	
O&G/SURF			
Power Distribution			●
Other Industrial (Mining, Cranes, etc.)			●

*** Patented in 2016

PRY-CAM WINGS

Sensors for the fixed measurement of PD and local temperature in AC systems.**

** Patented in 2015

PRY-CAM D-LOG

Multichannel fixed device for the measurement of key analogue parameters (temperature, pressure, currents, voltage, flooding, intrusion, smoke and more).

PRY-CAM MINILOG

Single channel fixed device for the measurement of analogue parameters (pressure, voltage, etc.).

●	●	●
●	●	
●	●	
●	●	●
●	●	●

PRY-CAM OZONE

Sensor to detect the presence of ozone (O_3) in the confined space surrounding a power grid component.

PRY-CAM DAS

Fixed optical device using Distributed Acoustic Sensing technology, for the measurement of noises in the vicinity of a cable.

PRY-CAM DTS

Fixed optical device using Distributed Temperature Sensing technology, for the measurement of the cable temperature along and/or inside a cable.

	●	●
●	●	●
	●	●
●		
●		

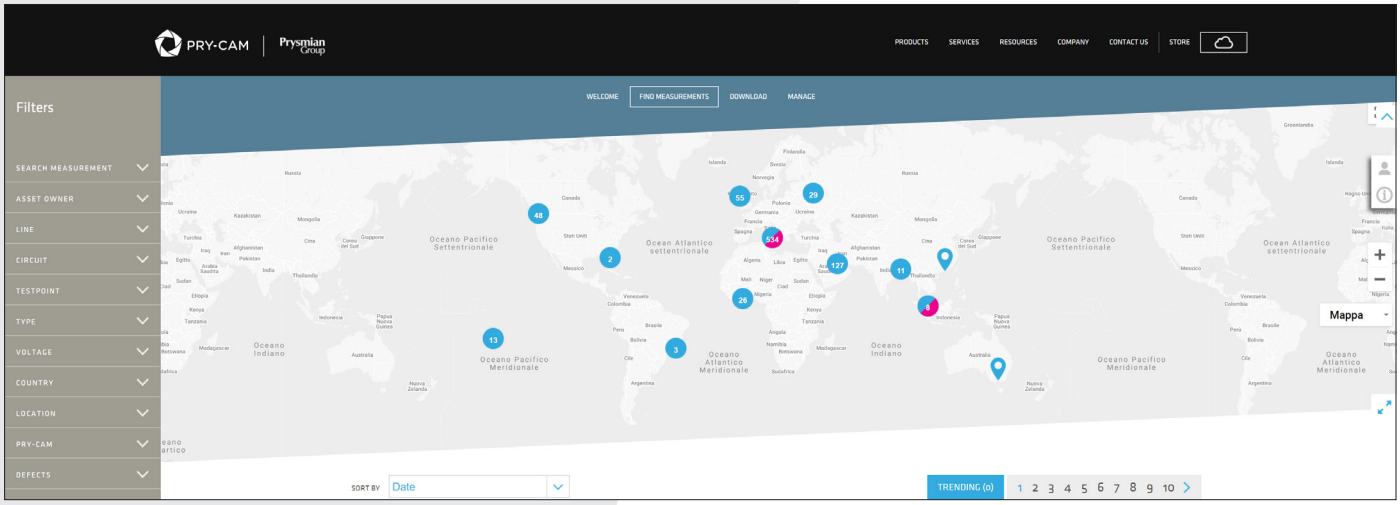
PRY-CAM Cloud

Remote and real-time monitoring and data analysis for better maintenance management.

How it works

The PRY-CAM Cloud is the ideal way to effectively manage your data. Your measurements, collected via PRY-CAM devices, can be safely stored and protected on the PRY-CAM Cloud and used for advanced post processing and learning. So you can easily share measurements, test-point details and knowledge within your company.

Manage, store and share your data safely and effectively. You measure, you control, you learn.

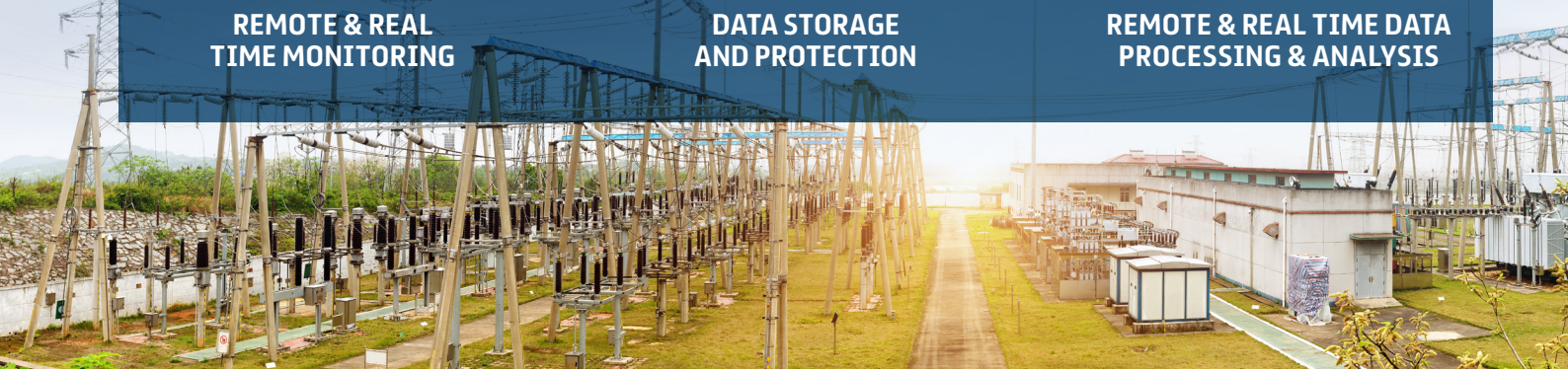


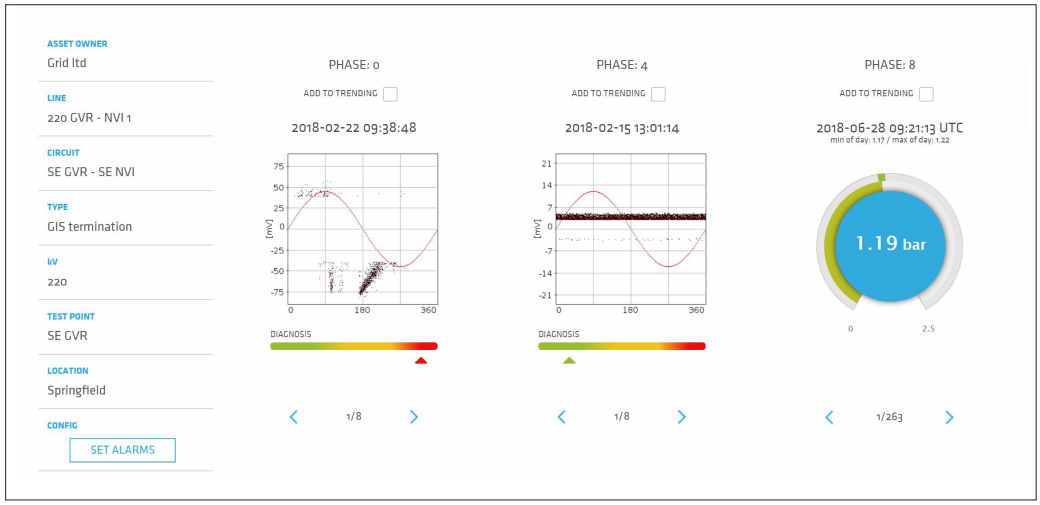
KEY FEATURES

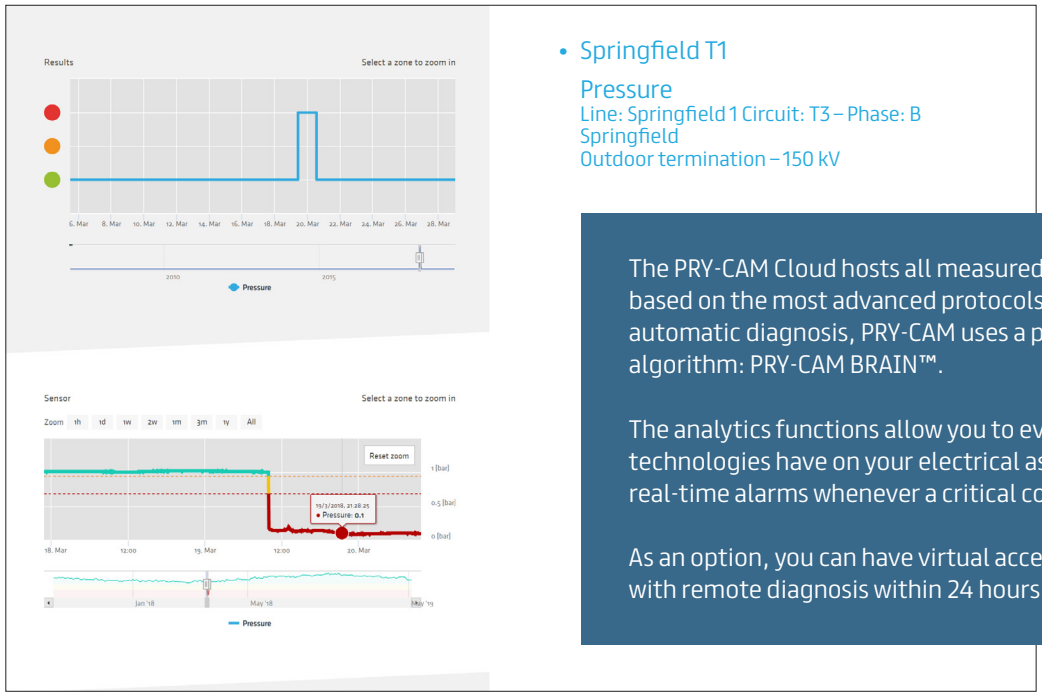
REMOTE & REAL TIME MONITORING

DATA STORAGE AND PROTECTION

REMOTE & REAL TIME DATA PROCESSING & ANALYSIS







- Springfield T1

Pressure
Line: Springfield 1 Circuit: T3 – Phase: B
Springfield
Outdoor termination – 150 kV

The PRY-CAM Cloud hosts all measured parameters that are analysed based on the most advanced protocols. For Partial Discharge (PD) automatic diagnosis, PRY-CAM uses a proprietary artificial intelligence algorithm: PRY-CAM BRAIN™.

The analytics functions allow you to evaluate what impact the PRY-CAM technologies have on your electrical assets over time. It also generates real-time alarms whenever a critical condition or a malfunctioning occurs.

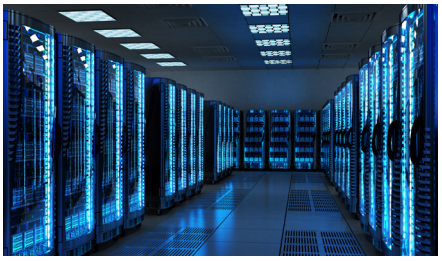
As an option, you can have virtual access to Prysmian PRY-CAM experts with remote diagnosis within 24 hours.

Diagnostics and asset integrity services

Hundreds of failures have already been prevented using PRY-CAM condition assessment and defect localisation systems and services.

PRY-CAM supports customers not only with products but also with **services** provided directly by its experts.

REMOTE DATA ANALYSIS



SPOT PD MEASUREMENTS

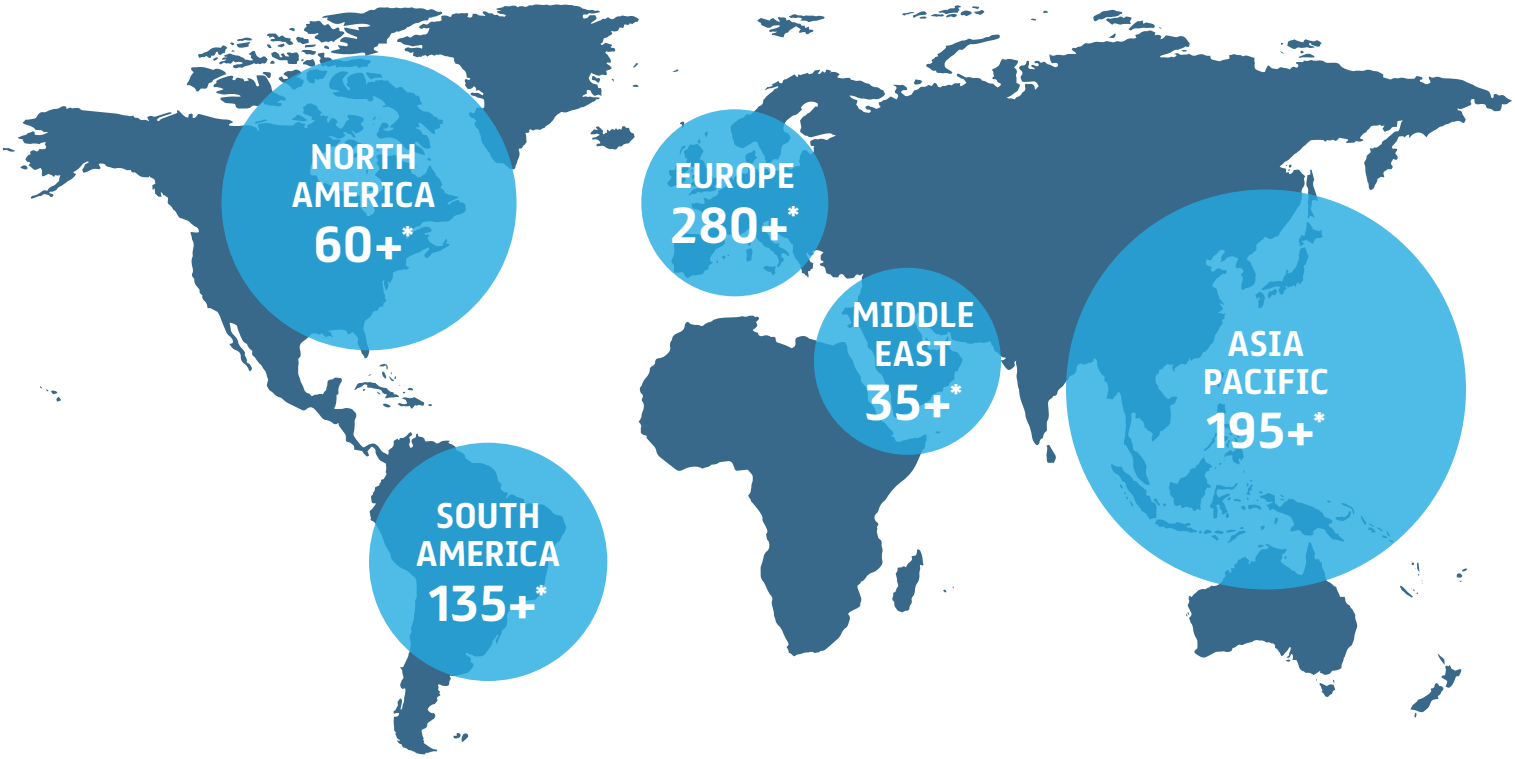
COMMISSIONING OF ELECTRICAL SYSTEMS

Training & education

We believe that innovation and knowledge must be shared to achieve the highest level of asset management and condition assessment. For this reason, we can provide you with two types of PRY-CAM training, BASIC and ADVANCED.

For more information, please don't hesitate to contact a member of the team.

Our worldwide figures



*Number of permanently monitored test points

Number of spot PD measurements **5,000,000+**	Number of monitoring systems sold **800+**	Number of DTS systems installed **25+**
Number of recurring customers **150+**	PD diagnosis reliability rate **100%**	

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