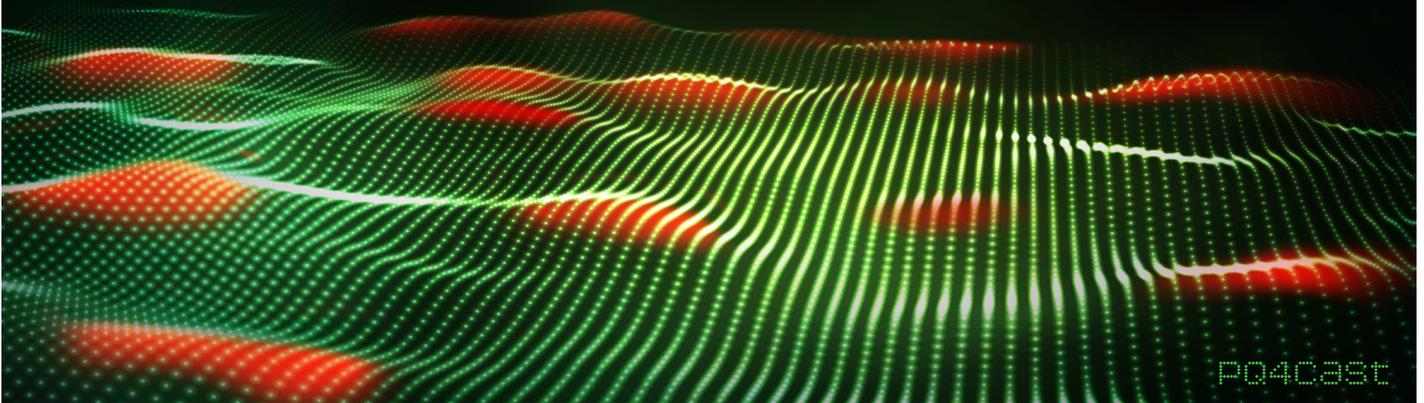


# PQ4CAST PREDICTS THE FUTURE WITH AI

metrum



PQ4cast

## CONTROL THE FUTURE WITH BETTER GRID KNOWLEDGE

With AI we can analyse large volumes of data, opening up limitless opportunities. However, it is only when we have a tool that is programmed for a specific task that we can effectively analyse the information and reach great results.



## PQ4cast

### TREND ANALYSIS GIVES THE COMPETITIVE EDGE

Metrum is now launching the next generation measurement system for efficient monitoring of energy and power quality using pattern recognition and machine learning. By using the very latest technical advances, *PQ4cast* is able to predict the forthcoming status of the electrical grid.

With a forecast you are able to follow how voltage, current and power are expected to change in the near future. This gives you cost-saving opportunities since you can act before any faults occur.

*PQ4cast* is installed in your existing Power Quality Monitoring System (PQMS) from Metrum.



### MEASUREMENTS IN AN INTUITIVE INTERFACE

*PQ4cast* registers multiple parameters to ensure that electricity is supplied with good quality. The measurement readings are provided in an intuitive interface, allowing you to monitor the forecast in real time and study potential changes as they arise, hour by hour.



## “PQ4CAST IS A REAL PARADIGM SHIFT IN THE MEASUREMENT OF POWER QUALITY”

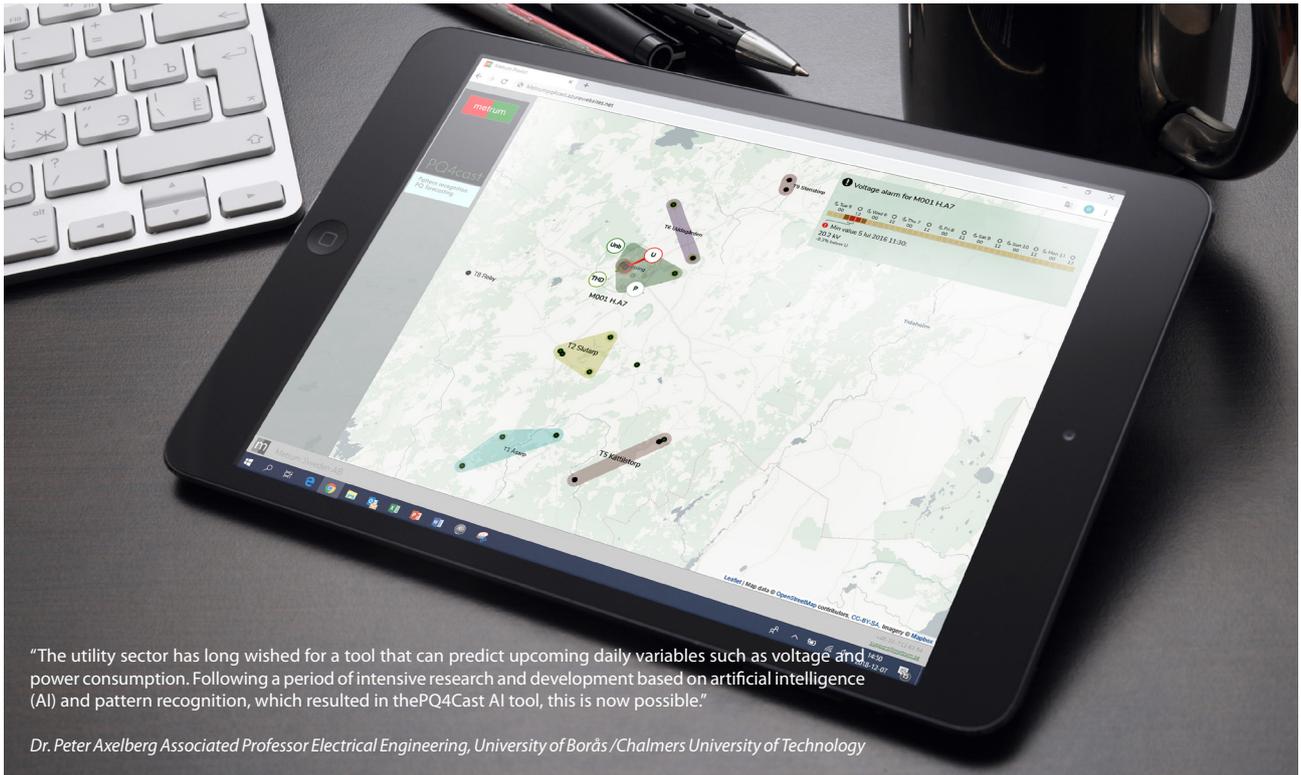
Dr. Peter Axelberg, Associated Professor Electrical Engineering, University of Borås /Chalmers University of Technology



### A WEB INTERFACE THAT GIVES YOU TOTAL CONTROL

The Web interface provides a geographical view of specific measurement points where a selectable number of parameters such as voltage, power and harmonic levels are presented. Using historic readings based on previous variations, a forecast is generated per selected parameter

which is automatically compared with selectable limits. In this way *PQ4cast* predicts the status of the electrical grid and monitors power quality, issues alerts about forthcoming deviations, and potentially avoid an interruption.



“The utility sector has long wished for a tool that can predict upcoming daily variables such as voltage and power consumption. Following a period of intensive research and development based on artificial intelligence (AI) and pattern recognition, which resulted in the PQ4Cast AI tool, this is now possible.”

Dr. Peter Axelberg Associated Professor Electrical Engineering, University of Borås /Chalmers University of Technology



### EUROPEAN PATTERN RECOGNITION PROJECT

*PQ4cast* is the result of a comprehensive pan-European research project focusing on the use of powerful AI algorithms to make better assessments and forecasts about the electrical grid status. The aim of the two-year project was to increase the amount of renewable energy in the electric grid, with Metrum serving as Managing Partner.



### METRUM – SMART MEASUREMENT SYSTEMS FOR SMART GRIDS

Metrum is the preferred partner for utilities with a vision to supply electricity with perfection. We develop the next generation measurement systems for the efficient monitoring of energy and power quality. With an integrated module that is part of the overall systems, we deliver powerful decision-making reports that secures strategic goals, long-term profitability and the ability to face future challenges.

Please contact us for a Web-based presentation of *PQ4cast*.



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