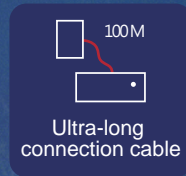
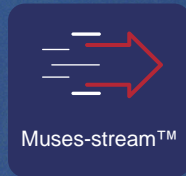


# POWER GUARD

## Ultra Early Partial Discharge Diagnostic System



Sensing the future

The screenshot displays the POWER GUARD web interface. At the top, there is a navigation bar with tabs for '主控台' (Main Control), '監控' (Monitoring), '分析' (Analysis), '紀錄資料' (Record Data), '事件紀錄' (Event Record), and '設定' (Settings). Below the navigation bar, there are eight device status indicators labeled Device1 through Device8. The '分析' (Analysis) section is active, showing 'PRPS分析' (PRPS Analysis) with a time filter set to '2023/12/18 A.M.09:41'. There are three 3D bar charts representing different analysis levels: '高頻帶' (High Band), '中頻帶' (Mid Band), and '低頻帶' (Low Band). A 'High Band' line graph is also visible. A table at the bottom of the screenshot shows event logs:

Time	Event	Status
2023-12-19 13:22:57	警告	警告
2023-12-19 13:22:02	安全	安全
2023-12-19 13:21:25	安全	安全

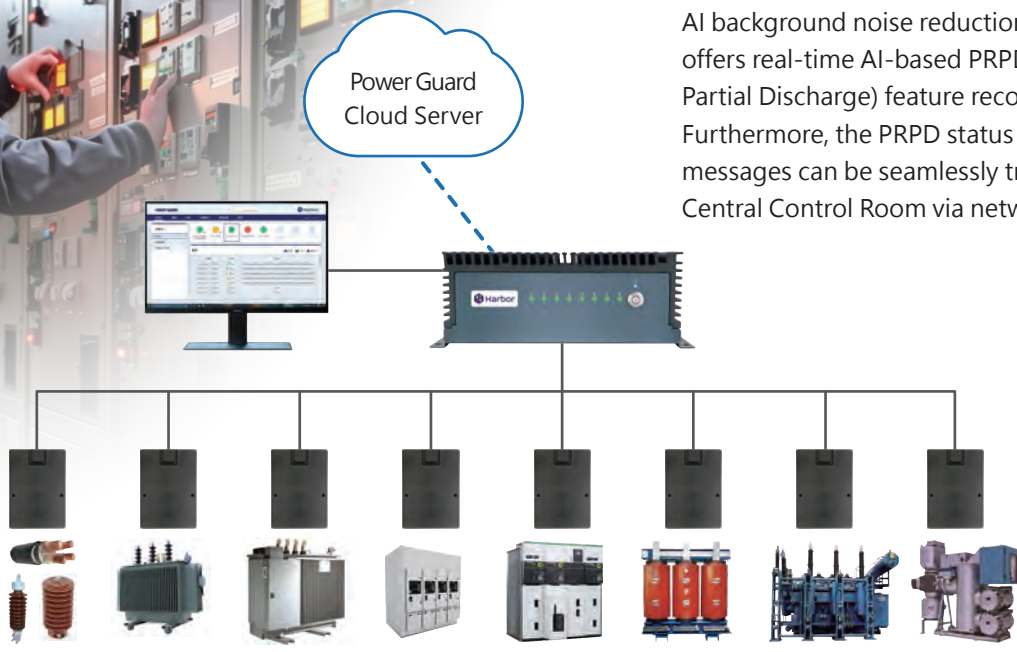






## System Architecture:

The "Digital broadband electromagnetic wave sensors" are connected to the high performance host with up to 100 meters network cable. This setup efficiently minimizes noise signals through AI background noise reduction technology and offers real-time AI-based PRPD (Phase Resolved Partial Discharge) feature recognition. Furthermore, the PRPD status and warning messages can be seamlessly transmitted to the Central Control Room via networking.



## Industry-leading AI Technology:

- Dynamic AI background noise reduction
- Dynamic AI PRPD Recognition and Analysis

Introducing the Power Guard - an advanced system for ultra-early detection and monitoring of partial discharge. This innovative system incorporates digital broadband electromagnetic wave sensors, setting a new standard in early detection technology. Paired with cutting-edge AI dynamic noise reduction and real-time AI-based PRPD (Phase Resolved Partial Discharge) feature recognition, it minimizes false alarms and swiftly identifies partial discharge in its infancy. Not only does it pinpoint the type and severity of the discharge, but it also empowers operators to take immediate action, ensuring the prolonged and stable operation of high-voltage electrical equipment.

