Harbor

Smarter Equipment Health Solutions

AI-Powered System for Diagnostics, Monitoring, Prediction

Server AI | Gateway AI | Sensor AI

Total Solution for
Equipment Health Diagnostics, Monitoring, and Prediction.

Want to avoid unexpected failures? Looking for ways to reduce maintenance costs?
Need real-time visibility into equipment health?
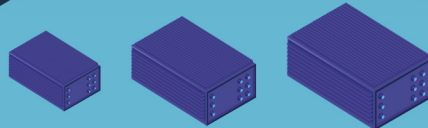Harbor Technology can handle it all.

Three Layers AI Architecture

Server AI
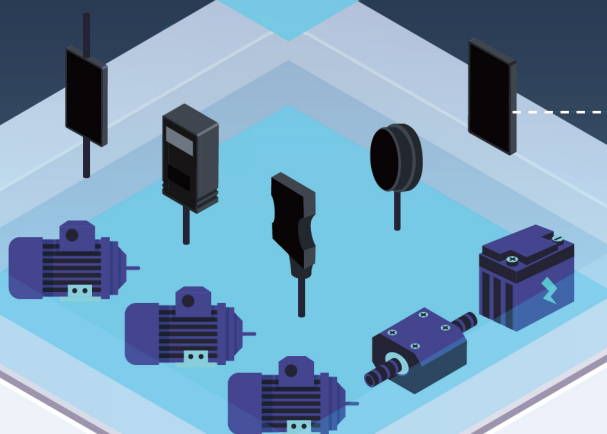Centralized Management
& AI Training

EAS100 / EMS100

Gateway AI
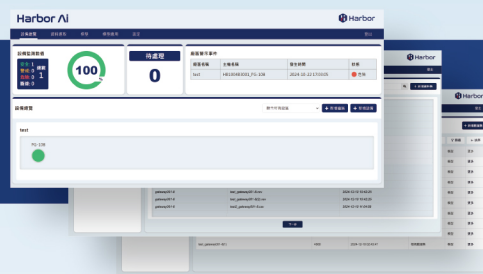Data Storage & AI Inference

EAG200 / EAG500 / PG108

Sensor AI
Data Acquisition
& Preliminary Judgement

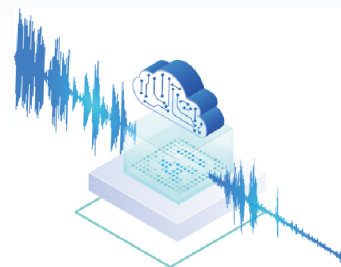HEA931 / HEA932 /
HDS100R / PT1000 / PGS100

Harbor ΛI

Centralized Platform for Monitoring, Optimization, and Predictive Analytics

HarborAI is the centralized management AI platform.
It seamlessly integrates critical data from multiple sites and devices, building a powerful system for smart monitoring and predictive maintenance.

Smarter AI for Greater Diagnostic Accuracy

- Continual learning and Automatic fine-tuning can significantly improve alarm accuracy
- OTA update keeps firmware and AI models always up to date

Predictive Diagnostics, Insights into the Future

- Predicts equipment conditions and reduces unexpected downtime
- Maximizes equipment availability and reduces operational costs
- Transforms complex data into a visual dashboard

Break Down Data Silos, Integrate Site Conditions

- Unified dashboard integrates all equipment and site data
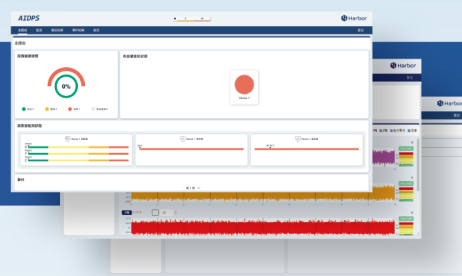- Supports both on-premise and cloud deployments

Dashboard

Vibration Guard

End Unplanned Downtime.
Detect Hidden Equipment Issues.

Eliminating unexpected equipment downtime is a major challenge in today's competitive business environment. **Vibration Guard** integrates various types of AI sensors and Edge AI Gateways, and provides accurate equipment health diagnostics in real-time manner, eliminating downtime risks and significantly boosting production efficiency.
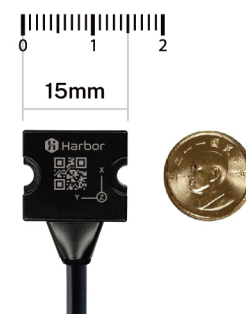

Powerful Edge AI Processing

- AI model inference provides in-depth analysis for precise diagnostic results
- Store equipment and factory operation data at the edge
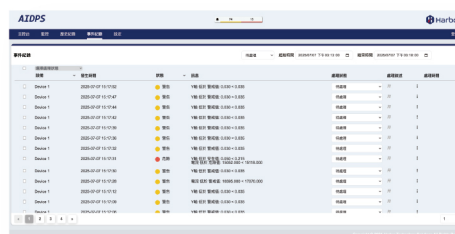- Simultaneously receive and process 3 distinct types of sensor signals

Ultra-Compact AI Sensor

- Built-in AI model with noise reduction and automatic
- recognition
- Supports vibration, current, and temperature sensors
- Ultra-compact sensor for easy installation in any place

Accurate Diagnostics and Decision-Making

- Visualized dashboard demonstrates concise system status
- Provides early warnings of equipment anomalies
- Exclusive two-stage AI noise separation technology significantly
- Muses-streamTM delivers real-time multi-channel data via USB/Ethernet
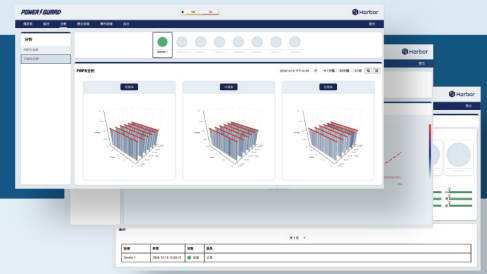

Abnormal Event Alert

Power Guard

Ultra Early Detection of Partial Discharge for High-Voltage Equipment

Ever had a critical high voltage electrical equipment failure that caused massive losses?

Power Guard offers full-band frequency digital sensors and an Edge AI Gateway to detect partial discharge at its earliest stages. With dynamic AI noise reduction and PRPD feature recognition technology, it helps prevent equipment failure, extend asset lifespan, and ensure uninterrupted power reliability.
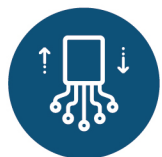

Advanced Edge AI Gateway

- Supports PRPS analysis and real-time PRPD for detailed partial discharge pattern recognition
- Store equipment and factory operation data at the edge
- Supports up to 8 sensors

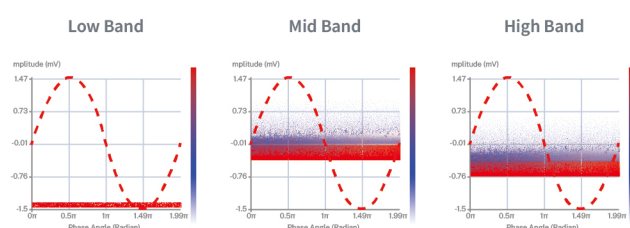## Full-band Frequency Digital Sensors

- Supports detection of partial discharge signals from 0.1 Hz to 1.5 GHz
- Supports CAT.5e/POE with 100M cable length for flexible deployment
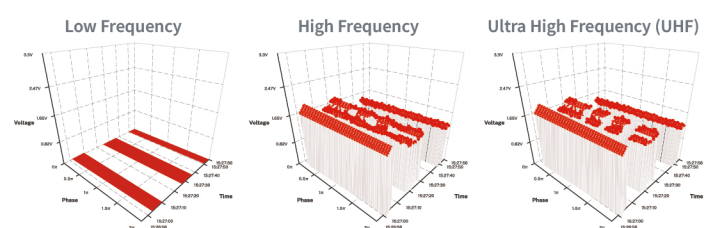- High sensitivity antenna design

Innovated System Architecture

- Provide real-time abnormal discharge alerts
- Dynamic AI noise reduction filters out interference and reduces false alarms
- Transform complex signal data into visual dashboards
- Muses-stream™ delivers real-time multi-channel high speed data

PRPD Analysis

Low Band

Mid Band

High Band

PRPS Analysis

Low Frequency

High Frequency

Ultra High Frequency (UHF)

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