



**Global
Hydro**



HydroxOptimize

AI-Powered Analytics for Maximum Hydropower Performance

Proactive optimization

For reduced costs, higher output, and fewer surprises

HydroxOptimize is an AI-powered analytics platform for hydropower plants. It continuously analyzes turbine and generator data, detects anomalies early, and delivers clear recommendations—so you can act before problems become expensive.

With HydroxOptimize, you transform raw operational data into actionable insights. The platform empowers your team to optimize

plant performance, maximize energy output, and reduce service costs—no matter your technical capacity on site. Automated reports, predictive maintenance analytics, and remote expert support help you plan maintenance, prevent unplanned downtime, and extend equipment life. Instead of reacting to failures, you stay ahead—making smarter decisions for reliable, profitable hydropower operations.

Asset's Owners Challenges

Are you struggling with high operational costs, unexpected outages, or limited technical resources? HydroxOptimize is your solution for:

High service costs

Ongoing maintenance and unexpected repairs drive up operational expenses and reduce profitability.

Unplanned downtime

Sudden failures or outages interrupt production, causing lost energy generation and costly delays.

Lost revenue

Every hour of reduced output or downtime directly impacts your bottom line and long-term returns.

Maintenance stress

Coordinating, scheduling, and executing maintenance is complex—especially without clear data or early warnings.

Lack of skilled personnel

A shortage of experienced operators and technicians makes it harder to keep plants running efficiently and safely.

Our Solution – HydroxOptimize

HydroxOptimize is an AI-powered analytics platform for hydropower plants. It continuously analyses turbine and generator data, detects anomalies early, and delivers clear recommendations - so you can act before problems become expensive and benefit from the following:

Reduce Service Costs

Proactively identify issues and schedule maintenance before they escalate—minimizing emergency repairs and lowering your overall service expenses. With HydroxOptimize, you avoid costly surprises and keep your budget under control.

Boost Output & Revenue

Unlock the hidden potential of your plant. Actionable insights from continuous data analysis help you fine-tune operations, maximize energy production, and increase your revenue—every kilowatt counts.

Avoid Unplanned Downtime

Stay ahead of failures with early anomaly detection. HydroxOptimize continuously monitors your equipment, alerting you to potential problems so you can intervene before they cause unexpected outages.

Plan Maintenance with Confidence

Receive clear, data-driven recommendations for inspections and repairs. This enables you to plan maintenance activities efficiently, optimize resource allocation, and avoid unnecessary interventions.

Detect Damage Early

Benefit from advanced diagnostics that spot wear, faults, and abnormal trends at an early stage. By acting before issues become critical, you protect your assets and prevent expensive, unplanned shutdowns.

How it works?

HydroxOptimize transforms your hydropower plant into a smart, self-optimizing asset. Sensors installed on turbines, generators, and other critical components **continuously collect operational data**. This data flows seamlessly into our **AI-powered analytics engine**, where advanced algorithms monitor every trend, detect anomalies, and uncover optimization opportunities - 24/7.

You receive automated reports and instant alerts, highlighting exactly what matters: emerging risks, efficiency trends, and actionable recommendations. And whenever you need expert guidance, Global Hydro's specialists are just a click away via integrated remote support.

**HydroxOptimize, you're not just monitoring -
you're always one step ahead.**

Why HydroxOptimize?

HydroxOptimize delivers more than just numbers—it provides real results. From day one, you gain detailed performance statistics, accurate energy forecasts, and in-depth analyses of availability and efficiency. The system continuously monitors critical components such as bearings, windings, and hydraulic systems, issuing early warnings and clear, actionable recommendations- -so you can make the right decisions at the right time.

Built on decades of expertise and operational knowledge from countless hydropower units worldwide, HydroxOptimize combines real-world data, proven best practices, and a deep understanding of plant operations - developed through years of hands-on engineering at GLOBAL Hydro. This means you benefit from the collective know-how of our team: comprehensive support, holistic insights, and solutions that keep your plant running reliably, efficiently, and profitably.



Ready to reduce costs, boost output, and secure your plant's future? Contact us today and let's make it happen!

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