

BULFRO PUMP HEALTH MONITORING & CONTROL SYSTEM

(PHMC)

IoT-Based Motor Protection, Monitoring & Predictive Analytics

PHMC is an innovative product on the IoT platform, which protects and controls with enabled failure prognosis — plug-in ready “Motor Current Signature Analysis (MCSA)”.

Bulfro Monitech Pvt. Ltd. is proud to introduce the Pump Health Monitoring & Control System (PHMC), an innovative product with disruptive technology, built on an IoT platform. Bulfro Monitech Pvt. Ltd. is a DIPP-recognised Start-Up India initiative.

PHMC helps reduce maintenance cost and increase the life expectancy of a pump or motor. Data produced by PHMC is a strong input to predictive data analytics, filling the diagnostics and prognosis gap left by conventional protection mechanisms.

Pump/motor health parameters are transmitted via the internet to Bulfro-Brain, a smart server; the transmitter is Bulfro-Comm; and the rugged “watchdog” sensor is Bulfro-Eye. The system can be operated remotely via Bulfro-Web, the Bulfro-Andro Android app, or SMS.

WHY CHOOSE BULFRO WEATHER STATION?

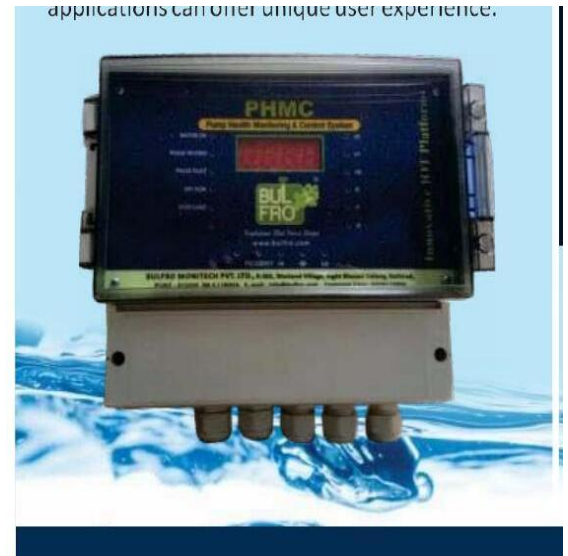
- **Predictive Pump Health Monitoring** - Detects faults before failures occur.
- **Reduced Downtime & Maintenance Costs** - Prevents unexpected breakdowns.
- **IoT-Enabled Remote Monitoring** - Real-time insights, alerts & control from anywhere.

FEATURES

- **IoT-Enabled Monitoring** - Real-time monitoring and remote access to pump health from anywhere.
- **Predictive Analytics (MCSA)** - Identifies developing faults before they become costly failures.
- **Comprehensive Motor Protection** - Protects against overload, dry run, voltage imbalance, phase reversal, and more.
- **24x7 Online Monitoring** - Continuously tracks pump performance without manual inspection.
- **Remote Control & Scheduling** - Operate pumps remotely with ON/OFF control and automated scheduling.

PROTECTIONS & MONITORING

PROTECTIONS	MONITORING
▶ High Voltage ▶ Low Voltage ▶ Over Load ▶ Dry Run / Under Load ▶ Single Phasing	▶ Line Voltage ▶ Motor Current ▶ Power Factor ▶ Input Kilowatt ▶ Signal Strength



PHMC control unit — Bulfro Monitech Pvt. Ltd.

▶ Voltage Imbalance ▶ Load Imbalance ▶ Phase Reversal ▶ and many more...	▶ Water Flow ▶ Pressure ▶ Winding Wire Temperature ▶ Motor RPM
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CONTROLS & MONTHLY REPORTS

CONTROLS	MONTHLY REPORTS
▶ Mobile ON/OFF ▶ Server ON/OFF ▶ Time Scheduling ▶ Auto ON/OFF ▶ Motor Current Signature Analysis (MCSA)	▶ Motor Run Time ▶ Number of ON/OFF ▶ Water Pumped Totalizer ▶ Average Voltage ▶ Average Current ▶ Unhealthy Condition Occurrences ▶ Motor Health Status

DISRUPTIVE SERVICES

- **24 × 7 Technical Support**
Round-the-clock support backing every deployment.
- **Auto / Online Pump Health Monitoring**
Continuous, automated visibility into pump and motor condition.
- **Support On Call**
Direct access to the Bulfro team when it matters.
- **Monthly Email Reporting**
Scheduled health and performance summaries delivered automatically.
- **Alarms for Unhealthy Diagnostics**
Instant alerts the moment a fault condition is detected.
- **Maintenance Alerts**
Proactive notifications that help prevent unplanned downtime.

BENEFICIARIES

Irrigation Schemes • Sugar Factories • Water Treatment Plants • Urban Water Supply Schemes • Rural Water Supply Schemes • Societies, etc.

GET IN TOUCH

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