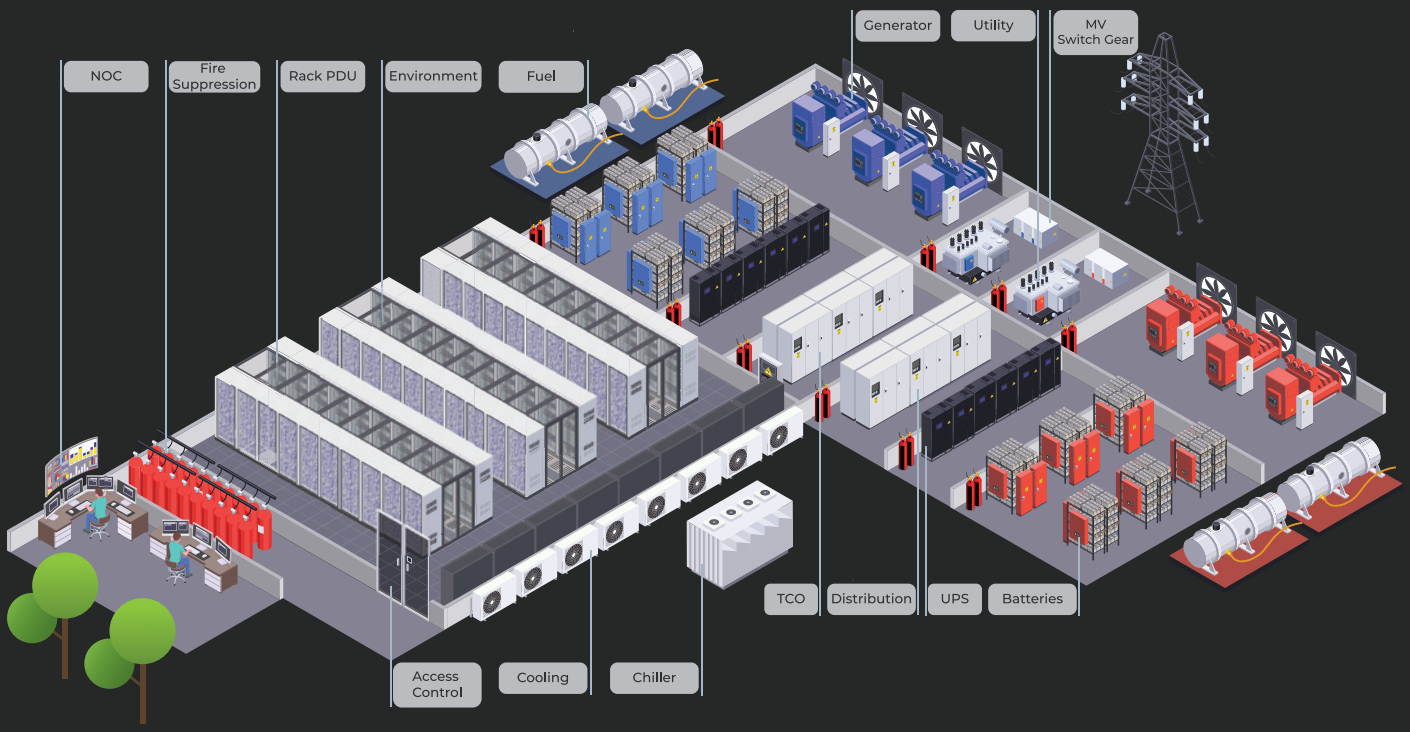
MULTI-SITE MONITORING

ALARMING, TRENDING & ANALYTICS

AIVA

Powered by

MASTER POWER TECHNOLOGIES



We Monitor All Critical Power, Cooling and Environmental Elements IN REAL-TIME

THE AIVA PLATFORM OUTCLASSES THE OLD CONCEPT OF INDIVIDUAL SITE MONITORING

The system allows viewing of multiple sites and their constituent components, the grouping of their efficiencies, and consolidation of their timelines and figures reliably on every level, without the requirement for a separate software package sitting atop an already expensive DCIM.

The AIVA System

ADVANCED INFRASTRUCTURE VISUAL ANALYTICS

Africa faces significant energy challenges. The deterioration in the countries' electricity generation has placed enormous pressure on businesses of all scales to adapt their infrastructure systems to an increasingly interrupted electrical supply. However, critical industries such as hospitals, mines, factories and data centres have always required support for interruptions in their power supply due to the essential nature of their operation.

Since 1999, Master Power Technologies has delivered multiple reliable turnkey projects for Data Centres and telecom switches, all still in operation today. At the time of these deliveries, very few remote monitoring systems existed, and none were consolidated. Customers had to use separate platforms to monitor fuel levels, UPSs, generators, and the like and primarily relied upon SMS and VPNs. These multiple platforms were ineffective.

In response, Master Power started to develop the AIVA solution, originally known as the Universal Controller. This all-in-one system ensures remote visibility and uptime of multiple sites, even in the most secluded locations in Africa.

The Power Of
REMOTE MONITORING

Reliable backup power solutions are our forte.

Our turnkey power solutions range from UPSs, batteries, generators, solar power, supply control, and automation to monitoring, all with intrinsic redundancy for failure mitigation to create a secure electrical ecosystem for sensitive equipment on a small to enterprise scale.

At the heart of our offering is the Master Power Technologies AIVA system, an 11-year, field-proven, multi-site remote monitoring, alarming, and analytics tool. It monitors critical power, cooling and environmental elements of data centres and telecommunications facilities, tailored to suit clients with the need for in-depth visibility of multiple sites in multiple regions.

Bourne through an obligation to provide excellent service to our clients, AIVA was developed in accordance with the most exacting industrial standards.

AIVA provides intelligent automation and real-time building and energy management and monitoring to mitigate potentially critical issues that could cripple essential functions. Information is relayed directly to customers' smartphones and, if required, any of their preferred electrical service providers with no limitations on users. Coupled with this is our Life Centre Team operating our Network Operations Centre (NOC). The AIVA NOC monitors your site 24/7/365 and expedites any issues and site-compromising faults to our internal experts, immediately contacting you and dispatching skilled technicians where required.

Whether you need emergency breakdown support, routine maintenance, or budget planning, we have the experience and expertise to provide industry-leading support response.


AIVA

AIVA SYSTEM

FEATURES & BENEFITS

System-wide monitoring consolidation

The inefficiency of having to use secured network access such as a VPN to access multiple webpages, all with different login credentials, for various devices on one site, or, even more taxing, attempting to build a comprehensive timeline of events from outdated SMS-based monitoring systems is completely abolished with AIVA by providing one platform to monitor all devices, regardless of brand.

Reduce site downtime (Proactive fault monitoring)

Providers' ability to remotely inspect their respective equipment from their smartphone at any point infers that potential failures can be averted through preventative action, whilst increasing the speed of any reactive response.

Higher operational efficiency (Electrical & mechanical)

As a result of increased response and preventative action, fewer site failures are experienced with the AIVA solution installed.

Personnel management

Through remote alarming and notifications, full cloud-based logging and alarm escalation, maintenance team's responses to faults and routine maintenance schedules can be monitored by respective superiors.

Speed of implementation (Proven technology)

AIVA is currently implemented across 120+ sites, with37 multi-national clients, in 11 countries on two continents. As such, the system has been proven to be robust and repeatable, with simple site and server configuration for ease of deployment.

Reporting (Improved planning & budgeting)

Full history and trending on all monitored aspects, from power quality, utility failure duration and frequency, diesel run time, diesel consumption, and individual component failure amongst many more, allows cost-projection based on current consolidated history to make the correct financial decisions.

Brand-agnostic

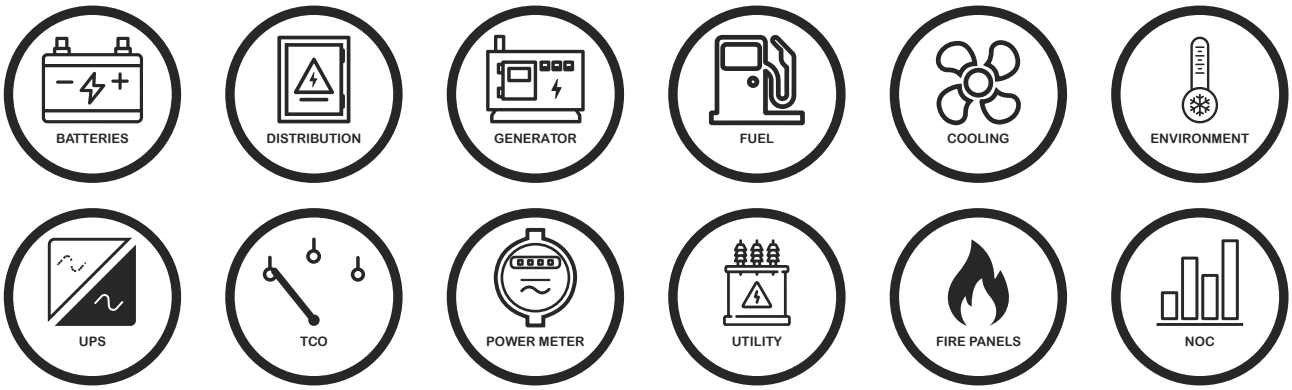
Brand-agnostic communications allows AIVA to be tailored to communicate with all connected devices, and even piggy-back off existing BMS systems, preventing the need to repurchase all monitoring hardware. Alongside this, the AIVA system is open source, allowing other contractors to monitor the AIVA equipment directly without the hassle of licencing.

TRUSTED AND RECOMMENDED BY

- Data Centres
- Telecommunications
- Medical
- Banking
- Security
- Process Plants in Mines

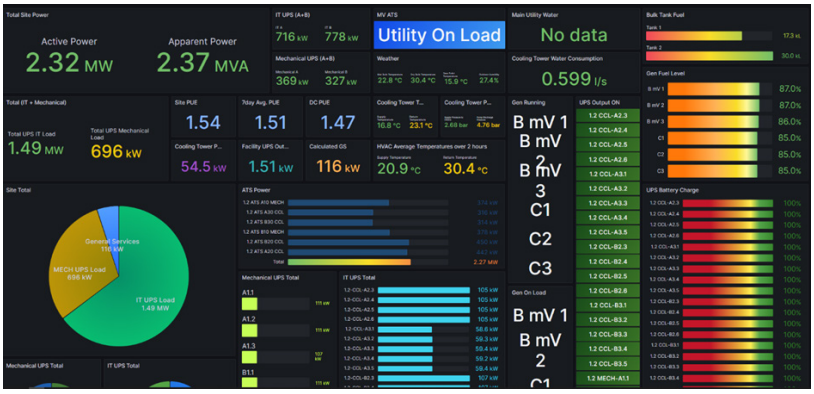
WHAT AIVA MONITORS

With AIVA as backbone, we developed several product applications to improve and expand our remote monitoring capability. These applications are entirely modular and open sourced, and can be used as standalone or in combination, allowing flexibility based on budget constraints. Any combination of the following applications can be used:



AIVA REPORTING CAPABILITIES

Real-Time and Historical Data Analysis



Gain comprehensive insights with the ability to view real-time and historical data at your convenience. Track the progression of individual alarms throughout your site's entire lifecycle, from the initial commissioning alarms to present-day incidents, all accessible anytime, anywhere.

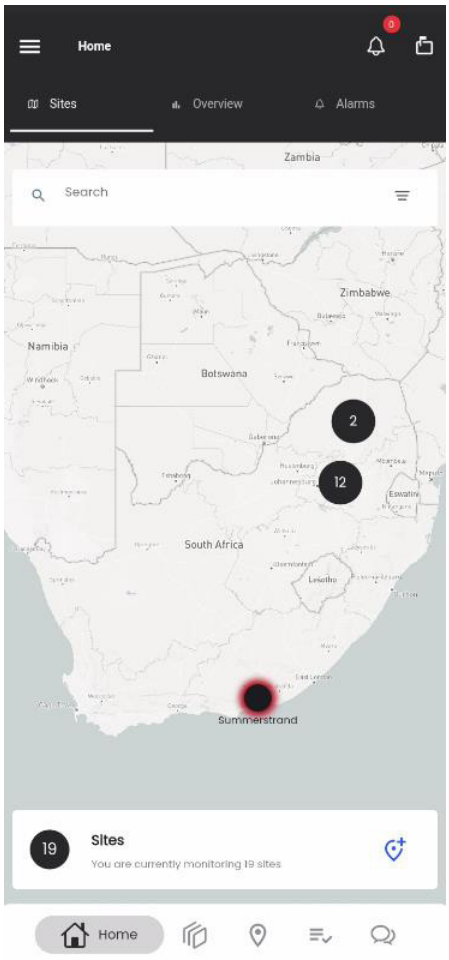
Bespoke Dashboards

Our capabilities extend to crafting customized dashboards tailored to your specific needs. Whether it's a commissioning screen, cost dashboard, or operation personnel-specific screens, we can create bespoke dashboards that simplify fault identification and enhance data visualization.

AIVA Mobile
APP FEATURES

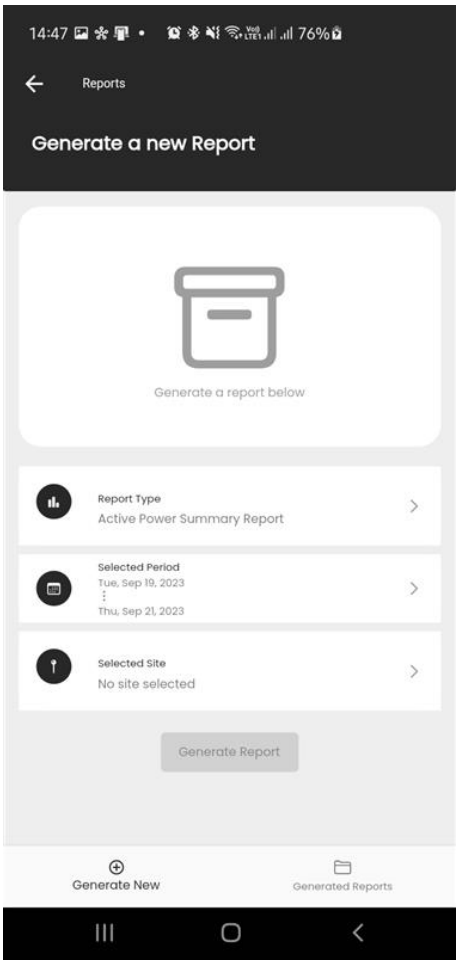
Custom Per-Site Alarms and Notifications

Tailor your alarms to suit individual sites. Eliminate nuisance alarms and receive notifications that matter most to you.



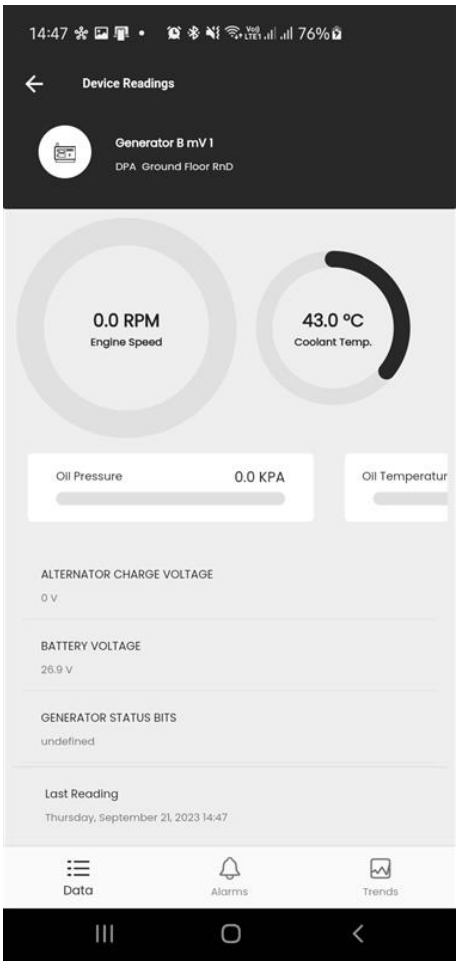
Multisite Geographic View

Our remote monitoring application offers boundless accessibility to real-time data on tablets and smartphones. Easily pinpoint your site's location and monitor its health through an intuitive map interface.



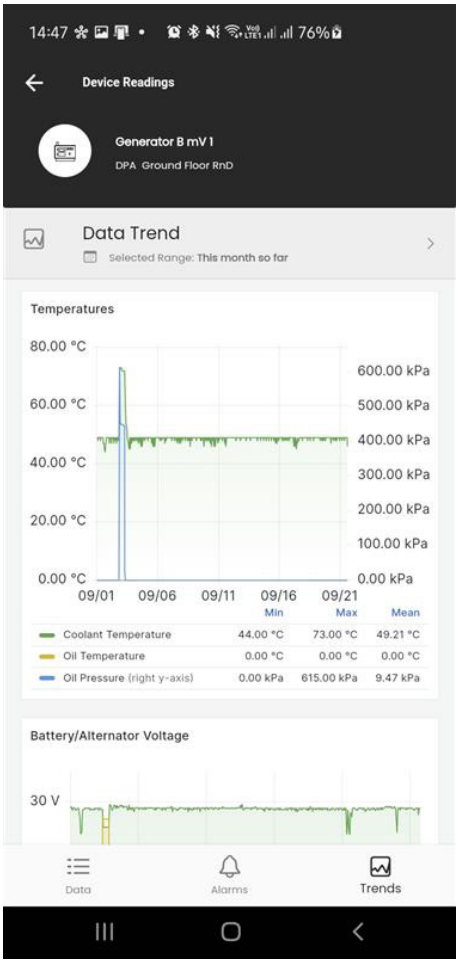
Reports

Effortlessly generate real-time reports on your smartphone anytime, anywhere. These reports are seamlessly stored on your devices and can be effortlessly shared with colleagues.



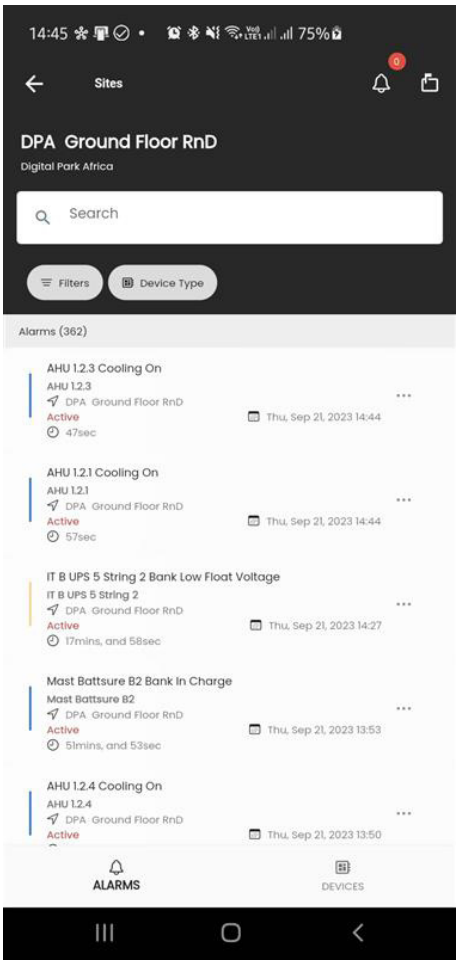
Real-Time Device Information

Stay up-to-date with the latest device information as it unfolds in near real-time. Your phone receives updates with data refreshed at intervals as short as 3 seconds.



Data Trending

Effortlessly review historical data trends, allowing you to analyse past occurrences. Easily navigate back to specific times and dates for comprehensive insights.



Real-Time Site Active Alarms

Monitor site alarms in real time, receiving immediate notifications on your smartphone as incidents occur. Streamline your response by creating tasks with resolution dates and assigning responsible personnel.

TRIPLE CHANGE-OVER CONTROLS

This is a complete bespoke package for the monitoring and control of utility to generator(s) and return changeovers.

Multi-Source Independent Control:
The requirement for a backup generator for utility failure and a redundant generator in the event of the failure in mission-critical applications, this system manages up to two independent generator sources (consisting of multiple generators in synchronisation per source if required) and utility, hence triple-changeover (two generator sources and utility).

Market Tested Automation:
The system consists of multiple power analysers, breaker monitoring and control, and a rock-steady market-proven proprietary algorithm for the automated selection (start, open, close) of the required source to ensure the continued supply of electricity to downstream equipment.

Intelligent Utility Return Decision-Making:
The power analysers considers all aspects of electrical supply, including phase rotation, customizable high and low frequency tolerance, customizable high and low incoming voltage threshold, and phase loss to enact the correct decisions.

Innate Control Redundancy and Diagnostics:
The use of multiple power analysers in series allows for cross-checks on power metering for breaker issues (voltage drop over breaker input and output), breaker faults, or power quality issues through the supply board, whilst also allowing the automation of the changeover source selection to happen in spite of one or more faults. Allied to this, each source has its own completely isolated and independent controller-any action or failure on one source board does not affect the other, providing a truly dual independent source reliability and control.

Innovation for the African Market-Crossover Optimization:
As a result of the demanding conditions of back-up power systems across Africa, where power is generally incredibly unreliable, the standard for changeover automation optimization is vastly different to that of European backdrop. With multiple changeovers per day and interrupted supply to non-UPS based sources such as HVACs, coupled with extended generator run hours necessitated the invention of the dual link crossover, a new methodology is required

Here, instead of running two generators, Lead-Lag set is introduced for both feeds. The source controllers select the same source independently (with isolated independent requests in parallel to the same generator), and perform breaker operations to close to one generator to run two feeds, using the other generator as a redundant back-up in the event of a lead failure. This effectively halves the generator's run time, staggers the service intervals of both units, runs the generator at a higher operating load thus increasing its efficiency, and still provides independent back-up redundancy on two sources during a utility failure event.

POWER DISTRIBUTION

Android or Apple Realtime SLD:
Using the AIVA system, power metering, breaker status and alarming (tripped, open or closed) and system function can be observed remotely through a simple animated GUI SLD, directly mimicking your board or site's SLD in real-time, to the palm of your hand.

Custom alarming and priority:
Some breakers opening are less important than others. With AIVA remote monitoring, you can customize whether a breaker's functioning is an SMS event, an app notification, a scaled warning, an urgent notice or a critical alarm to a hierarchy of users.

Breaker Lifetime:
With the option to place power monitoring above and below the breaker, any voltage drop across a breaker in the SLD provides insights into the breakers function. Worn contacts, unnecessary tripping not correlated to loading, and high resistance over the breaker can all be detected to assist with planned and unplanned maintenance, breakdowns, and knowing the difference through a faster and more complete assessment.

POWER ANALYSIS

Power Quality Monitoring:
Installing AIVA Power Analysers directly onto your source or sensitive equipment can produce an incredibly high quality picture of device function and quality of supply, allowing you to identify potential brown-out situations, power failure counts, over voltage supply, transient damage, phase rotation issues, harmonic distortion, and frequency discrepancies, with real-time configurable priority and threshold alarming for all situations and a complete remote cloud based history for timelines of electrical supply events.

Billing Level Accuracy, Exceeded:
For AIVA, the minimum of Class 1 power monitoring was ambitiously over designed, whilst still remaining surprisingly cost effective. The AIVA Power Analyser is a Class 0.1 monitoring device, capable of waveform capture on 3 phases for current and voltage up to the 31st harmonic for the price of a standard Class 1 power meter from competitive leading international brands, or 10% the price of their competitive Power Analysers available on the market.

Always-On Power Monitoring:
With onboard logging direct to memory and independent Li-ion power supply, any electrical damage to the DC Voltage control circuit can interrupt the ability of the power meter to determine what happened, and when, on the bus being monitored.

No Cables, No Problem:
For convenience, where an outside panel requires monitoring and installing the required metal conduit for lightning protection, or trenching sleeves or expensive fibre, the same 868MHz radio technology can be used to wirelessly link the power meter to the indoor monitoring system.

GENERATOR MONITORING AND CONTROL

Generator Issues in Real-Time:
A failing generator brings your business to a standstill. By remotely alarming when a generator has an issue prior to a utility failure, such as low fuel, low battery, no coolant or oil, failures to start are reported prior, and failures during running can be diagnosed immediately and rectified sooner with a reliable trend history behind the cause of the failure.

Remote Dashboard:
See all the details of the generator as you would in a car-Oil pressure, RPM, power usage, temperatures, fuel level, fuel consumption, fuel loss/theft, fuel fill detection and other vital issues in real-time.

Analytic Diagnostics:
With the history of all vital information for your generator stored indefinitely, AIVA empowers you to investigate your service providers quality of service, honesty in fuel delivery, and degradation of your generator through an increase in consumption, allowing for planned and unplanned maintenance budgeting and asset management.

FUEL MANAGEMENT

Bulk Storage Management:
If your site requires bulk storage and diesel polishing solutions with multiple tanks, the AIVA management system can provide insights into total diesel quantity and consumption, bulk polishing operations, bulk fuel fills and losses, transfers and usage statistics.

Leak Detection:
Combining the above technologies with separated and supplier-agnostic discrete monitoring of diesel spills, diesel overfill, bund spill and leak detection are all possible with AIVA.

Water in Diesel:
Detect replacement of diesel with a water in diesel sensor to protect your diesel generators and prevent cunning theft of diesel.

INFORMED COOLING

Multi-Platform Cooling Monitoring Solution:
Whether you have a complete chiller plant, air Handler Units, direct compression (DX) units, or building humidifier, AIVA is capable of monitoring all solutions at all scales. If your cooling device is smart and can be digitally read, AIVA can analyse the device and report to an informative illustration of your device remotely, storing all the values required.

Configurable Alarms:
With the option to alarm on any parameter of your unit, such as high or low supply and return water temperature on a chiller plant, high or low supply and return air temperature on a DX unit, or humidity of either for retaining the right environment requirements, alarms can be configured to give you the right response time to an event you deem important.

Service Scheduling:
Tracking the unit's runtime hours, AIVA can warn of potential services upcoming on configurable threshold based on individual component run hours, be it the fan of the unit, the compressors, or a simple filter change alarm, with the option to directly relay the information via SMS, email, or app notification to your preferred service provider for automated servicing requests.

UPS AND RECTIFIER

Real-Time Device Specific Monitoring:
Through the ability to monitor very specific details of the device, be it rectifier or UPS, you are enabled to share this information directly with your device OEM service provider for any incumbent issues or history.

Redundant Monitoring:
With the ability to monitor low level alarms (LLIs) connected to standard discrete outputs, as well as direct alarm monitoring via SNMP or Modbus TCP, and a possible third redundant option of RS485/RS232/CANBus in the event either other interface fails, communication with the unit is spite of communication failure is almost always possible.

BATTERY MONITORING

VOLTAGE

Voltage monitoring provides battery float, charging, and discharging insights and identifies potential disastrous failures such as short circuits.

TEMPERATURE

Monitoring temperatures according to manufacturer specifications prevent the risk of corrosion, expands battery life and detects and prevents thermal runaways.

CURRENT

Monitors energy delivered by battery strings to eliminate imbalances between strings, detection of earth leakages and battery charging faults.

STATE OF HEALTH (SOH)

Monitors cells and detects shorts, loose connections, and weak and faulty batteries.

STATE OF CHARGE (SOC)

Protection against battery over-charging and undercharging.

INTERNAL RESISTANCE DEVIATION

Measuring battery internal resistance and detection of deviations that may indicate the deterioration of batteries.

Critical Alarming:
With the potential of thermal runaway and catastrophic failure with a massive potential for fire risk, monitoring high-energy density cells for integrity is possible with critical alarm detection for out-of-step voltage, high current variance and many other vital alerts, the risk of fire is massively mitigated, protecting the remainder of your investment near your batteries.

OEM Integration:
By allowing 3rd party monitoring companies open access to the values obtained onsite, the monitoring system can be included in a retrofit solution, allowing your preferred SCADA supplier the ability to show the information on their own systems with no restrictions.

Fire Mitigation:
In the event a cell/battery fails catastrophically, the battery monitoring system alerts you directly, and can employ direct measures to isolate the affected bank and begin ventilating the affected area for the purposes of safety, without anyone on site.

Cost-Effective Hydrogen Sensing:
Combining our BattSure with our very competitively priced environmental point hydrogen sensing in a battery room gives added gains to room safety and prevention of battery fires, assuring you that your energy storage system is monitored from all aspects.

ENVIRONMENTAL MONITORING

Wireless Building Sensing:
With a 868MHz frequency based sensor capable of temperature, humidity, air pressure, air quality, hydrogen sensing, carbon dioxide sensing, onboard anemometer and 4 discrete inputs for value added environmental sensing such as water detection, the Wireless Building Sensor is capable of giving you any metric you require.

2 year battery life:
With a life expectancy of 2 years on a charge for a lithium ion battery before considering the input of the onboard solar panel that can run the device off incandescent light, and a recharge time of 2 hours through a standard USB port, and low battery alarming long before running out, the hassles of wireless sensing are almost entirely mitigated.

NFC Programmability:
In the event the sensor completely dies, use an NFC device to scan the device (even with 0% charge) and clone over to a spare.

Extendable Mesh Range:
With a practical range through 2-3 walls and floor slabs of ~30m, or 120m line of site device to device, and the ability of devices to act as repeaters for each other's signals acting as range extenders and sensors coupled into one, there is only necessity for one receiver over most large spaces, reducing cost and complexity.

AIVA SYSTEM ITSELF

Redundant Power Supply:
Never lose visibility of your site with the option to include up to six different power sources for truly uninterrupted monitoring and logging of the site, regardless of the situation.

All protocols covered:
With the ability to monitor RS485, RS232, CANBus, Ethernet and wireless across a range of protocols including open-source BACNet, SNMP, Modbus TCP/IP and RS485, and the CANBus J1939 protocol, and any documented proprietary protocol you can provide, we have your monitoring need covered over any platform.
Industrial Proofing: With isolation on all cabled interfaces of 1.5kV (CAN, Ethernet, RS485, and RS232), and isolated onboard power supply capable of 1.5kV isolation as well with onboard Li-ion should the worst happen, AIVA is ruggedized to the most demanding situation, whilst being very simple to install with standard DIN rail mounting.

Cost Effective:
With the main processor board of AIVA coming in at a price close to auxiliary boards of the competition, the use of AIVA is far more economical than the usual grudge purchasing pain experienced when buying a standard and surprisingly limited big brand alternative.

Secured Redundant Outbound Communication:
With onboard dual-SIM failover and the option to use different carriers for carrier failure, onsite SMSing redundancy in the event of internet connection loss for alarming, and the SIM card providing a secure Virtual Private Network (VPN) over Transport Layer Security (TLS) for direct access anywhere in the world, and the ability to communicate directly with the site via SMS, your communication with your site is tangibly secured.

Remote Mobile Updates and Changes:
To avoid the costly exercise of call-outs for adding users, to allow you access to the latest features and updates, and to provide the opportunity for customisation on the fly at your behest, your site's link to the server via its secured communication and our 24/7 NOC available to take your custom request at any hour allow us to fit your requirement in all eventualities.

NewLife & Mobile BMS

THE REMOTE MONITORING NORM

REMOTE DEVICE SPECIALIST

Through the procedure of internal analysis and communication with the client, get an expert opinion on what's wrong from the highly experienced team of Master Power when the alarm is happening to your UPS, your Generator, MLV or anything else affected.

DISPATCH BEFORE DROP

With the ability to see the chronological sequence of events, such as Utility failure, then generator failure, secondary generator failure, UPS low battery, and high temperature in the DC, dispatch a technician to site and know precisely where you are in a chain of events without being there, allowing you to have the correctly metered response to the incident at hand.

AUTOMATED REPORTING

With the advent of the reporting feature, obtain a full site report in a specified time frame for specified devices, with the development of customized and automated reporting through subscription on a recurring schedule coming soon!

SPEND WHAT YOU NEED TO

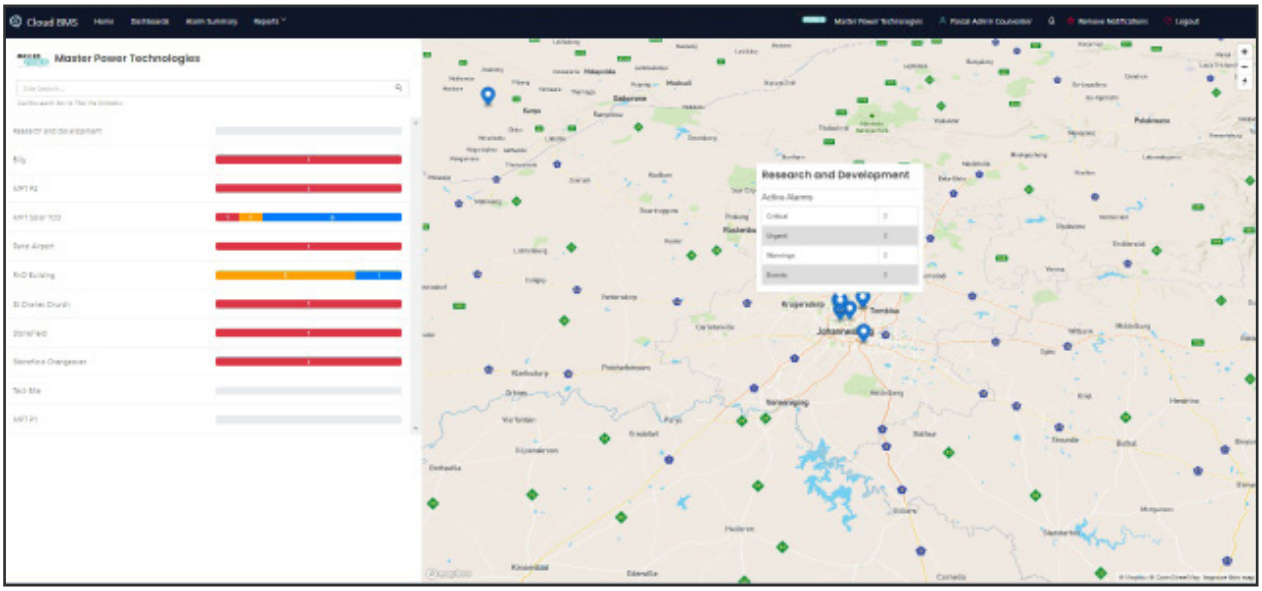
With the ability to see all infrastructure, the decision to implement power factor correction and the Return on Investment period for the significant capital investment are answered without the use of a professional engineering company on site to measure basic parameters; use professionals the way they should be used-for serious and intricate problems.

GO BACK IN TIME

Trend any single alarm over the course of your site's life, right down to the first day and commissioning alarms from implementation, anytime, anywhere.

AIVA DISPLAY SCREENS

MONITORING FROM REMOTE LOCATIONS



Multi-Site Overview

The remote monitoring application provides customers with unlimited, easy access to real-time data from tablets and smartphones.
The system was designed to simplify battery monitoring and to empower customers to take control of their backup power systems easily.

OUR EXPERIENCE

RECOGNISED FOR EFFECTIVE, COMPREHENSIVE SOLUTIONS ACROSS THE ENTIRE AFRICAN CONTINENT

CLIENT	SITE
Digital Park Africa	DPA Ground Floor RnD
First National Bank	Fairlands
Vodacom SA	DataPark
Master Power Technologies	Research and Development
CRDB	CRDB Tanzania
Firstnet Technologies	Firstnet Technologies
GPAA	GPAA Pretoria
K2	Constantia Park
MTN Congo	Brazzaville
MTN Nigeria	Apapa
MTN Nigeria	Asaba Switch Center
MTN Nigeria	Benin Switch Centre
MTN Nigeria	Abuja Switch Centre
MTN Nigeria	CLS
MTN Nigeria	Enugu Switch Centre
MTN Nigeria	Ibadan Switch Centre
MTN Nigeria	Ikoyi Switch Center
MTN Nigeria	Kaduna Switch Center
MTN Nigeria	Kano Switch Centre
MTN Nigeria	Lagos VGC Exchange
MTN Nigeria	Ojota Energy Center 1
MTN Nigeria	Ojota Energy Center 4
MTN Nigeria	Ojota Energy Center 5
MTN Nigeria	Ojota EC 3 & 4 UPS
MTN Nigeria	Owerri Switch Center
MTN Nigeria	Owo DRC
MTN Nigeria	PHC Switch Center
MTN Nigeria	PHC VGC (Benjamin Opara)
Mammut Teleca	MTN Irancell Esfahan
Master Power Technologies	Billy
Master Power Technologies	MPT P3
Master Power Technologies	MPT Solar TCO
Master Power Technologies	Rand Airport
Master Power Technologies	RnD Building
Master Power Technologies	St Charles Church
Master Power Technologies	StoneField
Master Power Technologies	Stonefield Changeover
Master Power Technologies	Test-Site
Monte Casino	Monte Casino
Seacom	Seacom POC
Stratosat	Stratosat
TIGO Ghana	Tigo - Barnes Rd
Tigo Tanzania	Tigo - Salasala
Vodacom Lesotho	Lekokoaneng
Vodacom Lesotho	Maseru West

CLIENT	SITE
Vodacom Mozambique	Beira
Vodacom Mozambique	Maputo
Vodacom Mozambique	Maputo HO
Vodacom Mozambique	Matola
Vodacom Mozambique	Matola WH
Vodacom Mozambique	Nampula
Vodacom Mozambique	Tete
Vodacom Mozambique	Vilanculos
Vodacom Mozambique	Xai Xai
Vodacom SA	Centurion
Vodacom SA	DR Huawei RAN
Vodacom SA	DR Huawei TX
Vodacom SA	DR NSN RAN
Vodacom SA	DR NSN TX
Vodacom SA	East London CUBE
Vodacom SA	Emalahleni Cube
Vodacom SA	Ermelo
Vodacom SA	Foreshore
Vodacom SA	Germiston
Vodacom SA	Meyersdal
Vodacom SA	Mt Edgecombe
Vodacom SA	MTA
Vodacom SA	MTB
Vodacom SA	MTO
Vodacom SA	Nelspruit
Vodacom SA	New Germany
Vodacom SA	Polokwane CUBE
Vodacom SA	PPQ
Vodacom SA	Randburg CUBE
Vodacom SA	Rosslyn
Vodacom SA	Techno Center
Vodacom SA	Techno Park Fuel
Vodacom SA	VDC Bloemfontein
Vodacom SA	VDC Florida
Vodacom SA	VDC Framesby
Vodacom SA	VDC Silverton
Vodacom SA	Polokwane Telkom
Vodacom SA	Vereeniging CUBE
OADC	WIOCC LEKKI CLS
Digital Park Africa	DPA Block Level 2
Digital Park Africa	DPA Ground Floor
First National Bank	FNB Randburg
MTN South Africa	MTN 14th Ave
MTN South Africa	MTN Doornfontein
MTN South Africa	MTN Port Shepstone

CLIENT	SITE
Free Senegal	Free Senegal
Incomar	Incomar
Nestle	Estcourt
Master Power Technologies	MPT P1
Digital Park Africa	ABSA Building
Vodacom SA	Summerstrand
MTN Zambia	Chingola
Demo Client	Demo Site
Energy Unite	Energy Unite Sandton
Wingu	Ethiopia 1
Cell C	BTS ID 8826
Cell C	BTS ID 136
Cell C	BTS ID 8351
Cell C	BTS ID 49
Cell C	BTS ID 1701
Cell C	BTS ID 8796
OADC	OADC LOS 1
Elinex	Demo
Cell C	Test Site
Cell C	BTS ID 9975
Cell C	BTS ID 4546
Cell C	BTS ID 1739
Cell C	BTS ID 1919
Cell C	BTS ID 1981
Cell C	BTS ID 1100
MPT Rental	Red Dragon
OADC	JNB1
Wingu	Tanzania
Minor hotels	Avani
Minor hotels	Royal
MPT Rental	Supreme Mafikeng 1700KVA
MPT Rental	Supreme Mafikeng Generators
Vodacom SA	DataPark New
MPT Rental	MTN 14th Avenue 0100
MPT Rental	Supreme Mafikeng Utility Controller
Rack Center	Rack Center Nigeria
CSquared	CLS - Togo
Wingu	Somaliland
Cell C	BTS ID 1100B

CLIENT	SITE
MPT Rental	Village View
Master Power Technologies	AC LoadBank
MPT Rental	Nestle Eastlondon
MPT Rental	Nestle East London Generator B
Vodacom SA	VDC Florida New
MPT Rental	PrimeMedia Sandton
Wingu	Ethiopia Express
MPT Rental	Bedfordview ITSSA
MPT Rental	Elxlabs
MPT Rental	Viljoenskroon 1
MPT Rental	Viljoenskroon 2
MPT Rental	Tigane CBS
MPT Rental	Tigane CBS 2
MPT Rental	Lichtenburg Nutrifeeds 1390
Vodacom Mozambique	Nacala
MPT Rental	Mafikeng 1
MPT Rental	Mafikeng 2
MPT Rental	Mafikeng 3
MPT Rental	The Villa Via
OADC	Mini AIVA POC
Vodacom SA	Polokwane Cube New
MPT Rental	Unilever
Wingu	Memnon
Master Power Technologies	Master Power Head Office
Vodacom SA	Ermelo New
Sasol	Secunda
Stellar-IX	Madagascar
Vodacom Lesotho	Maseru West Old
Wingu	Tanzania Main BMS
Stellar-IX	TNR2
Vodacom Lesotho	Lekokoaneng New
Stellar-IX	TANM029
Stellar-IX	TANM166
Stellar-IX	TANM073
Stellar-IX	TANM424
Raxio	Ethiopia
OADC	Rondebosch
OADC	Brackenfell

AIVA AT A GLANCE

OUR GOAL IS TO ENSURE THAT YOU GET THE MOST OUT OF YOUR BACKUP POWER

- Protecting over 150 sites across 11 countries in Africa.
- Developed to IEC Standards.
- Setting the industry standard for the past 10 years.
- Fully developed in-house and manufactured in South Africa.
- Helps prevent costly and unplanned downtime.
- Monitoring both individual battery cells and strings.
- AIVA is a vital component of site safety and reliability.
- Empower customers to understand their infrastructure.

MEET THE TEAM

BEST IN THE BUSINESS

MENNO PARSONS
Managing Director

MATTHEW BEZUIDENHOUT
Electrical Engineer,
Monitoring & Management
Department

AIVA

Powered by

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