

## Generator Management Solution

Ayantra - a leading developer of remote asset management products - has created a unique solution tailored for managing out-of-sight industrial generators.

### The Challenge:




Providing reliable power is a key priority for many organizations, leading to the increasing use of onsite generators. Generators are often rented, and are occasionally moved between sites. To ensure optimal performance, each generator's location, utilization and ongoing engine run-hours should be carefully monitored. Unfortunately, current methods for tracking utilization by Jobsite are often manual, inefficient, time-consuming, and error-prone. As a result, many enterprises lose a significant portion of their generators' value due to abuse, misplacement, under-utilization, faulty maintenance, or even theft.







Managing a fleet of out-of-sight generators can be a daunting task - but Ayantra can help.

### The Solution:

Ayantra's MAT 404G is a cost-effective wireless monitoring solution that enables organizations to easily manage their out-of-sight generators. The total solution consists of:

-  An Ayantra monitoring unit installed on the generator
-  An Ayantra-provided website to deliver Location Reports, Engine Run-Hour Reports, Maintenance Reminders, Service Logs, History Logs, and more
-  Real-time Alert Notifications delivered as text (SMS) messages to cell phones, and/or via e-mail

### Web Service and Alert Notifications:

-  All reports and alerts are accessible through a simple web interface. The latest report from each generator is immediately displayed upon login.
-  Alert Notifications are targeted to specific recipients according to the type of violation. Alerts can be sent in the form of SMS messages to cell phones, and/or as e-mail messages. The Ayantra solution generates Alert Notifications for the following events: **General Fault/Common Alarm; Engine ON; Excessive Temperature; Oil Pressure Violation; Low Battery/Battery Disconnect**
-  The simple-to-use web interface is powerful, but easy to use.
-  A History Log reports all communications to and from each generator.

### Hardware Specifications:

- ❖ Power: 8 - 32 volts DC
- ❖ Power Draw:
  - Normal: 70 mA (typ) @ 12V
  - PowerSave: 30 mA (typ) @ 12V
- ❖ Built-in back-up battery
- ❖ Environment:
  - Operating: -20°C → +60°C
  - Storage: -45°C → +85°C
- ❖ Humidity: 0 - 95 RH @ 40C
- ❖ Data port: RS-232



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## Features & Benefits:

- 🔗 **Jobsite Utilization Reports:** Ayantra automatically reports each generator's utilization by Jobsite, thereby enabling you to automate your Billing Operations, your Jobsite Reporting, and more. Key features include:
  - ❖ **Create Custom Jobsites:** You can easily specify up to 99 custom Jobsites.
  - ❖ **Jobsite Utilization Reports by Generator:** You can easily ascertain which generators have been utilized at each Jobsite - and how many Engine Run-Hours each generator has accumulated at each Jobsite.
  - ❖ **Generator Utilization Reports by Jobsite:** You can easily identify at which Jobsite each generator has been utilized - as well as **when** it was utilized at each Jobsite, and how many Engine Run-Hours it accumulated at each Jobsite.
- 🔗 **Engine ON/OFF Reports:** Ayantra automatically reports each time a generator is turned ON and OFF, and can issue real-time Alert Notifications as desired.
- 🔗 **Location Reports:** Location reports are automatically updated on either a Daily, Weekly, or as-needed basis, and are available anytime via the web. "Up-to-the-minute" updates are also available anytime.
- 🔗 **Engine Run-Hour Reports:** Engine Run-Hour Reports are automatically updated on either a Daily or a Weekly basis, and are available anytime via the web. "Up-to-the minute" updates are also available anytime. The Engine Run-Hour Reports enable you to:
  - ❖ **Reduce costs** – schedule timely maintenance services to prevent costly repairs and avoid breakdowns
  - ❖ **Save manpower** – eliminate wasted time and labor to collect hour-meter readings
  - ❖ **Increase utilization efficiency** – monitor utilization to ensure effective operation
  - ❖ **Ensure accuracy** – eliminate errors by collecting automated Engine Run-Hour Reports
- 🔗 **Maintenance Reports / Reminders:** Ayantra automatically issues "Maintenance Due" reminders to advise you in advance of any scheduled maintenance activities. These reminders help you to avoid costly breakdowns, achieve optimal performance, and extend the lifespan of your generators.
- 🔗 **Alerts and Alarms:** Ayantra provides real-time alerts to inform you of the following:
  - ❖ **Threshold Violations** - by interfacing with existing monitoring systems, Ayantra can send immediate Alert Notifications to your cell phone and/or email for key performance metrics, including:  
**General Fault/Common Alarm; Engine ON/OFF; Excessive Temperature; Low Battery/Battery Disconnect; Oil Pressure Violation or Low Fuel**
  - ❖ **GeoFence Violation** – you can define a customized "virtual security fence" around any generator. If the generator moves beyond the boundary, a "GeoFence" Alert Notification to be sent to your cell phone and/or email. Ayantra will also track the generator's location and will send updates every five minutes, providing an excellent theft-prevention and asset-recovery capability.
  - ❖ **Low Battery** – Ayantra will monitor each generator's battery level, and will issue a Low Battery Alert or a Battery Tamper Alert if the battery level falls below pre-defined thresholds.
  - ❖ **Maintenance Reminder** – Ayantra will automatically remind you when service is due for any generator. You can specify the service intervals for each generator, and direct the Alert Notifications to specific recipients.
- 🔗 **Live Track:** Ayantra enables you to track any generator for a one-hour period, featuring updated Location and Run-Hour Reports every five minutes.
- 🔗 **Real-Time Updates:** You can collect up-to-the minute updates from any machine, at any time.
- 🔗 **PowerSave Mode (GPS Off):** Twenty minutes after the generator has been turned off, the MAT 404G will automatically go into PowerSave mode by shutting off its GPS circuitry. While in PowerSave mode, all Alert Notifications and regularly-scheduled reports will continue without interruption. The MAT 404G will even maintain vigilance while in PowerSave mode by powering-up its GPS system every sixty minutes and checking for GeoFence violations. If the generator has moved beyond its GeoFence perimeter, the MAT 404G will immediately issue a GeoFence Alert Notification and will return to Normal mode. In addition, the MAT 404G will automatically return to Normal mode when the generator is turned on again.

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*Note: this product incorporates unique Patented and Patent-Pending technologies developed by Ayantra  
Specifications subject to change*

*4G (September 2006)*