

Generator Monitoring White Paper



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Introduction

As sales of standby emergency power generators continue to grow, so do the sales of generator monitoring devices and the revenue opportunity that comes along with them. Generator monitoring provides substantial benefits to both end users and generator maintenance companies. This white paper provides an overview of generator monitoring and is written for generator maintenance companies that are new to generator monitoring or are considering offering generator monitoring to their customers.

1. What is Generator Monitoring?

At the most basic level, generator monitoring is exactly what it sounds like, the monitoring of a generator. There are many different methods and technologies used in the monitoring of generators and several manufacturers of generator monitoring devices. This paper focuses on remote monitoring of permanent standby emergency generators, for residential, commercial and industrial end users. However, many of the topics covered in this paper also apply to the remote monitoring of portable generators as well as generators that may be used in non-emergency power situations. Remote monitoring means that the monitoring is done off-site or away from the physical location of the generator being monitored. In order to achieve remote monitoring, a generator monitoring device is connected to the generator that is being monitored. This generator monitoring device collects data from the generator (e.g., generator run and generator stop) and then transmits the data to a central location, where the data signal is immediately processed and then sent to a preset destination. There is typically an upfront charge for the equipment (i.e., the generator monitoring device) and a recurring charge for the ongoing monitoring service.

There are two business models of generator monitoring: “direct-to-end-user” and “dealer-controlled.” Under the direct-to-end-user business model, the monitoring device is installed by the end user or his generator maintenance company and the data signals typically go to the end user only. The end user is billed for the ongoing monitoring service directly by the monitoring device manufacturer. Under the dealer-controlled business model, the monitoring device is installed by the dealer/generator maintenance company and the data signals go to the dealer and if desired, also to the end user. The dealer is billed by the monitoring device manufacturer for the ongoing monitoring service and the dealer in turn marks up and bills the end user. The dealer is part of the information chain and has more responsibility in the dealer-controlled business model, but accordingly, also shares in the revenue and profit derived from providing the monitoring service.

The manufacturers of generator monitoring devices fall into two camps: the “OEMs” and the “Universals.” Several of the generator OEMs such as Generac and Kohler manufacture and sell a generator monitoring device. OEM monitoring devices only work with the same OEM generators; so for example, a Generac Mobile Link monitoring device will not work on a Kohler generator. OEM generator monitoring devices tend to follow the direct-to-end-user business model. Universal manufacturers, such as CRN Wireless, sell generator monitoring devices that are universal and work on all brands of generators. Universal devices work on older generators installed in the field whereas OEM devices work only on newer models. Universal manufacturers tend to follow the dealer-controlled business model.

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2. Why Should I Care about Generator Monitoring?

There are several reasons why you should care about generator monitoring and why you should consider adding it to your service offering, not the least of which is that your competition may already be offering it. However, the main reason to offer generator monitoring is the benefits that it provides to both you and your customer (the generator end user).

Benefits to Your Customer

- **Instant Alerts.** All reputable generator monitoring devices provide instant alerts of generator activity to the end user and/or the dealer. When seconds count, your customer knows if there is a problem right away.
- **Peace of Mind.** Your customer can rest assured knowing that their generator is being monitored 24 hours a day.
- **Improved Reliability.** Monitoring allows end users and dealers to proactively address potential generator problems and reduce incidents of failure during power loss.
- **Investment Protection.** 24 hour monitoring means greater investment protection for your customer's generator and everything it powers during an outage.
- **Customized Reports.** Your customers can receive customized reports that they can use for management functions, third-party reporting to government or oversight bodies, etc.

Benefits to You

- **Increase Revenue.** You can generate significant incremental revenue by including this valuable service as part of your maintenance contract. (Discussed in more detail below.)
- **Increase the Bottom Line.** You can accurately plan maintenance needs using information from the monitoring device and schedule maintenance visits more efficiently.
- **Improve Customer Satisfaction.** You can proactively address generator problems, thereby reducing incidents of generator failure during power loss and greatly improving customer satisfaction.

The first bullet point above regarding increased revenue is worth further discussion. As a generator maintenance company, you have probably heard of Recurring Monthly Revenue, or RMR, since the service contracts that you have with your customers are a form of RMR. Under the dealer-controlled business model, generator monitoring offers you significant incremental RMR opportunities. You install the device and the device does the rest, sending you alerts as needed. You bill your customers for the equipment, installation and recurring service. For example, if you charge customers \$20 per month for each generator you monitor you can see from the table below how quickly the RMR dollars add up.

Revenue Potential from Generator Monitoring

Number of Generator Monitoring Devices Installed	10	100	500
Lifetime Revenue (a)	\$29,000	\$290,000	\$1,450,000

(a) Assumes \$500 installation (equipment and labor) charge and recurring revenue of \$20 per month for 10 years.

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While commercial end users of generators tend to have deeper pockets and are often more receptive to generator monitoring, there are scores of residential end users who want to have their generator monitored, including many of your own customers that you already have a maintenance contract with for generator service. Start by marketing the monitoring service to commercial, industrial and higher end residences and work your way down. Consider listing generator monitoring on your web site. Add generator monitoring as a line item to your standard service contracts and sell it upfront when doing new generator installations.

There is also another substantial financial benefit to generator monitoring. Besides increasing your monthly revenue and cash flow, you will also significantly increase the value of your business entity. If you want or plan to sell your business one day, the more RMR you have, the greater the price a buyer will pay for your company.

3. Questions to Consider When Selecting a Generator Monitoring Device

There are several OEM and Universal manufacturers of generator monitoring devices and each has unique aspects whether it is the business model, the technology contained in the device, the device's features, etc. Since an overview of each of the devices is outside the scope of this paper, we have listed some questions to consider when selecting a generator monitoring device.

Questions related to the Business Model

- Who (i.e., the dealer or the end user) is responsible for installing the unit?
- Who is responsible for servicing the unit?
- Will I participate in the recurring monthly revenue (RMR)?
- Who is responsible for overseeing the generator monitoring signals?
- Who is responsible for responding to alerts sent by the generator monitor?
- Who bills the end user for the ongoing monitoring service?
- Are there hidden fees, such as activation fees or data overage charges?
- Does the manufacturer provide sales and marketing support?

Questions related to Installation and Technology

- Do I want to standardize on a universal generator monitor or learn how to install and manage several different kinds of generator monitors?
- Does the generator monitor work on both old and new models? (Important to know if the monitoring device is being installed on an older model already in the field.)
- How will the monitoring signals travel from the generator to the destination (e.g. cellular, internet, etc.) and how reliable is that signal path?
- How long will it take to install the monitoring device?
- What alerts/features does the device offer and what is best for the generator being monitored?
- Is there any software that needs to be downloaded in order to operate the monitoring device?
- What kind of technical support does the device manufacturer offer?

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Summary

In summary, generator monitoring provides substantial benefits to both end users and dealers while offering dealers a significant incremental recurring revenue opportunity. There are different business models as well as several manufacturers of generator monitoring devices, so dealers should find the business model and manufacturer that is best suited for them.

The team at CRN Wireless is always available to answer any questions you may have. Please feel free to call us at 631-696-2769 or email us at info@crnwireless.com.

