

PROFESSIONAL REVIEW

Marquis Medical wins with Three-Phase Power Monitor

Knowing that power failed saved the company about \$70K

Job role: Field Service Engineer

Company: Marquis Medical

Tools: Fluke 3540 FC Three-Phase Power Monitor

Key benefits:

- Three-phase monitoring and streaming
- Easy to install and remove
- Wirelessly connected

Medical equipment is essential, with its health often meaning the difference between a successful diagnosis and asset malfunction. Louisiana-based Marquis Medical is a servicer of GE Health Care and Siemens health-care systems. Its team repairs, maintains, and orders parts for these machines across the U.S.

Recently, Marquis Medical needed to renew a power meter service contract, or replace the power monitor. Because many power monitors need to be hardwired to an Ethernet connection, replacing the equipment might be problematic because the hospitals were hesitant to approve new wiring. However, a new, wireless, cloud-based power monitor provided an alternative for Matthew Turner, a field service engineer with Marquis Medical, which is based in Kansas.

Semi-fixed, wireless three-phase power monitor

The need to have a flexible measurement option without wiring was an important feature for Turner, a long-time user of the Fluke Multimeter.

“We’ve always used the Fluke Multimeters for any of our own testing, even the Thermocouple for the temperature, as well as

direct-current voltage and AC voltage sets,” Turner says.

Recently, the team encountered red tape with a power monitor from another company that had a distributor in the area. The company told Turner the distributor would handle the issue, but the distributor said the company needed to handle it. When Turner needed to install another power monitor on a similar CT unit in another location, he decided to research alternatives.

“I just happened to be browsing through [the Fluke] website, and I saw where you offered a wireless Three-Phase Power Monitor. So, I brought it up to my boss, like, ‘Hey, look, I think this would be a game changer,’” Turner says.

Turner liked many of the features, particularly that the requirement to put in a requisition for an Ethernet line was eliminated. Turner’s boss gave him the green light to try it.

Power surges cause the loss of a generator box

A CT system has a lot of expensive and sensitive computer boards and electronics. Marquis Medical had experienced some intermittent power fluctuations and was losing parts as a result. Turner noticed that the



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hospital was having some power flickers, and he was onsite troubleshooting.

“I just kind of assumed that maybe we needed to check the incoming power because a system has to have a certain amount of steady power flow,” Turner says.

About a week after installing the Fluke 3540, the hospital took a huge power hit where the voltage went from the regular 280 volts per leg down to zero. The power came back on and went back off at least three times in a row. As a result, the team ended up losing the generator box in the CT, which costs from \$70,000 to \$100,000 to replace. Because Marquis Medical is a full-service provider, it was responsible for the loss. However, its contract states that it must have uninterrupted power. Because of the power fluctuations, Turner knew that the system lost power, but could he prove that?

The proof is in the power

Using the Fluke Connect® Condition Monitoring software and Mobile App, part of the Fluke Accelix™ suite, Turner was able to prove that the power was

interrupted. Although some intermittent website issues occurred (which have been corrected) and Turner was unable to run a report using the software, he was able to take screenshots of the information with his smartphone. The cloud access and the Mobile App were difference makers for Turner and Marquis Medical, allowing them to prove that continuous power was not provided.

Turner expressed that sometimes his email alerts for other monitors were delayed, making the push notifications of the Fluke Connect Mobile App a valuable option.

“Sometimes it may be hours, and then all of a sudden, you get 15 email alerts at once. The Fluke Connect app actually alerts your cell phone. You can set it to alert it for any kind of power drop, any kind of current drop, and I like that about it,” Turner says.

We learned about Matthew Turner’s story when he commented on a post on our Pilots of Change Facebook group. If you love technology and learning more about what’s possible, request to join this closed group.”