Boosting productivity; enabling effective maintenance and enhancing safety using wireless test tools

Application Note

What would you use a wireless system of test tools for?

Automating more processes and operations in today’s factories and commercial buildings is helping to reduce energy consumption and increase safety and productivity as never before. However, automation has also added a large dose of complexity for technicians who monitor and troubleshoot systems.

When asked about the greatest challenges amongst technicians today, two pain points are observed: Wide range of variables to be tested and exhaustive number of tools being used to complete multiple tasks. For example, when inspecting an electrical cabinet, he also needs to manipulate controls on the panel – requiring another set of hands to just hold a tool and monitor the readings.

With the application of Fluke Connect™, the number of hands required in monitoring can be reduced. Fluke Connect™ allows readings from Fluke tools to be sent directly to your smart phone. By downloading an App and connecting your smart phone to any Fluke Connect™ device, Fluke Connect™ combines wireless functionality with the accuracy and rugged performance of our legacy products –

digital multi-meter; AC voltage module; iFlex AC current clamp module, AC current clamp module, and K-type temperature module to capture, store, share data without leaving the field. What’s more, by connecting to our thermal imaging cameras, Fluke Connect™ provides instant access to data and measurements from smart phones to review images, check reports, spot trends, and more, helping teams get their job done better and faster – boosting productivity
Detect a motor overload condition using Fluke Connect™ enabled tools

Connect the wireless voltage module to the motor starter within the motor control center (MCC), a wireless AC current module to a field switch adjacent to the motor and a temperature module at the motor. When connected to a smart phone, the Fluke Connect™ App allows maintenance technicians to view and record voltage, current and temperature readings at a distance away (<20meters) while the motor is in operation. By being able to monitor readings remotely, Fluke Connect™ enables effective maintenance that can be carried out through TrendIt™, EquipmentLog™ and AutoRecord™. In today’s industry, such readings provide value not only to asset owners, but to OEMs as well. Fluke Connect™ is a wireless system of test tools tailored towards observing installed assets and push needed information to the user regardless of their location. In addition to early problem detection and prevention, the data collected allows OEMs to optimize their own machine designs.

Commission an air handler unit

Connect the voltage module to the supply fan over-current protective device, iFlex AC current module to the supply fan T’ leads at the variable frequency drive (VFD), and temperature module in the discharge air plenum. In this application, multiple operation parameters can be verified, thus simplify calibrating a 0 to 10Vdc analog input signal from the discharge air sensor to the VFD for supply fan speed reference. In many of todays’ application, personal protective equipment (PPE) is required by modern standards. While power should always be de-energised with lock-out/tag-out provisions, the situation is not always permissible. Fluke Connect™ can be connected to potentially dangerous voltage, safely guarded behind closed panel doors, and easily monitored via Fluke Connect™ App to vastly reduce exposure to hazardous conditions, enhancing safety. This is a win-win! Furthermore, make decisions on the spot and get help troubleshooting by sharing what’s seen in the field with other team members with ShareLive™.
Basic voltage, current; temperature wireless modules cover many testing and troubleshooting scenarios. Imagine using additional modules such as thermal imaging, video, vibration testing, insulation testing to capture potential electrical failures and hazards. Fluke Connect™ enables one person to perform multiple tasks safely with modules placed in separate enclosures and readings obtained anywhere in the vicinity. With a PC adapter, view up to 12 live measurements on your PC simultaneously or download logged readings from the modules.

Fluke Connect™ allows maintenance technicians to create and securely share cloud-based histories of measurement data from more than 20 Fluke test tools. The solution reduces the errors associated with manual data entry, reduces the time to collect, and improves data consistency, availability, and usefulness.

“In the newest system from Fluke, wireless test tools send measurement data directly to the Fluke Connect™ app on a smart phone or tablet, where the user can tag and save the data to a cloud database structured to match existing maintenance systems,” says John Neeley, Fluke Connect™ architect. “In cases where longer-term monitoring is merited, the test tools can be left behind to log for multiple months and checked at appropriate intervals, again via the mobile device app.”

For more information on Fluke Connect™, please click here.

#Within provider’s wireless service area

**Fluke. Keeping Your World Up and Running.**

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