CONTROL EXCLUSIVE

## Handheld communicator does more with less

We've recently seen a number of new products featuring connectivity, functionality and look-and-feel inspired by commercial technology, and the latest example is Emerson's new AMS Trex Device Communicator. The Trex handheld is designed to do everything the company's 475 Field Communicator does and more, with less ancillary equipment, and is packaged to please the next generation of process control engineers and technicians.

"The Emerson 475 communicator has been immensely successful," says Nick Meyer, handheld communicators product manager, Emerson. "It's built-for-purpose, and you could rely on it to get the job done, last all day, and more. But the increasing interest in the mobile space, in more capabilities, and in satisfying the expectations of a new generation of users led us to this new design."

AMS Trex is designed to provide the convenient user experience of modern consumer products in a device built to withstand harsh industrial environments. The intrinsically safe communicator is certified to go anywhere a technician can go, with no need to shut a process down or get a hot work permit.

Functionally, "We decided to go beyond the digital electronics to troubleshoot the entire point, to deal with other unknowns by being able to isolate the instrument, make sure it's OK, and check the wiring and power," Meyer says.

Using a Trex communicator's built-in Foundation fieldbus and HART device diagnostic software, technicians can isolate and repair problems, while the devices continue to run. Simple issues can be addressed on the spot, allowing technicians to validate in the field without taking a device out of service to bring it back to the shop.

Diagnostic tools allow users to validate loop and fieldbus segment characteristics



EASE OF USE, ANYWHERE

Emerson's AMS Trex Device Communicator delivers advanced diagnostic capabilities and eliminates the need for several specialized tools.

for easy troubleshooting. With ValveLink Mobile, technicians can quickly perform key valve diagnostics in the field including valve signature, dynamic error band, PD one-button sweep, and step response, with the ability to analyze results more clearly on the communicator's larger screen. This helps technicians avoid unnecessary, and potentially destructive, invasive physical investigation of the problem.

"AMS Trex can power the device and isolate it from the loop for diagnostics," Meyer says. "This can all be done within the Trex unit—no need to pack your bag with a separate loop validator, multimeter or power supply. No separate loop resistor, wiring or power conditioner. In addition to being able to isolate a device from a loop, configuration tasks on a new project can be taken off the critical path. Technicians no longer need to wait for power, wiring, or system configuration to be complete to start setting up the field devices."

Featuring a large, full-color touchscreen display driven by an intuitive, task-based graphical user interface, the Trex communicator streamlines activities in the field. "The form factor and large, touch-and-swipe display make it intuitive to the new generation, and the large keyboard makes it easy for people without extensive experience," Meyer says. "The complete picture is on one screen, a dashboard of information like AMS Device Manager that walks the user through simple checks and speeds the learning curve.

"We developed Trex using market research, and validated it with customer usability testing at Emerson Exchange, with students in training classes, and in beta testing. The menu choices are there, but the dashboard gives immediate information: here's the problem, here are recommended steps, with an alert on the highest issue and hot spots to drive the user to issues with priority."

The adjustable backlight aids troubleshooting in areas where ambient light makes other devices difficult to read. Unlike many consumer-grade devices, the rugged tool is protected against moisture and extreme temperatures, and is designed to take the bumps and drops of normal plant use.

Connectivity options include Bluetooth, USB, WiFi and near-field communications so updates and apps will be easy to download and install.

"Emerson once again redefines field communicator technology by delivering an industrial handheld that mimics a familiar consumer experience," adds Duncan Schleiss, vice president, product marketing, Emerson Process Management. "With the Trex communicator, technicians can work more effectively in the field—with fewer tools to manage—anywhere in the plant they need to go." ■

For more, see www.emerson.com/trex