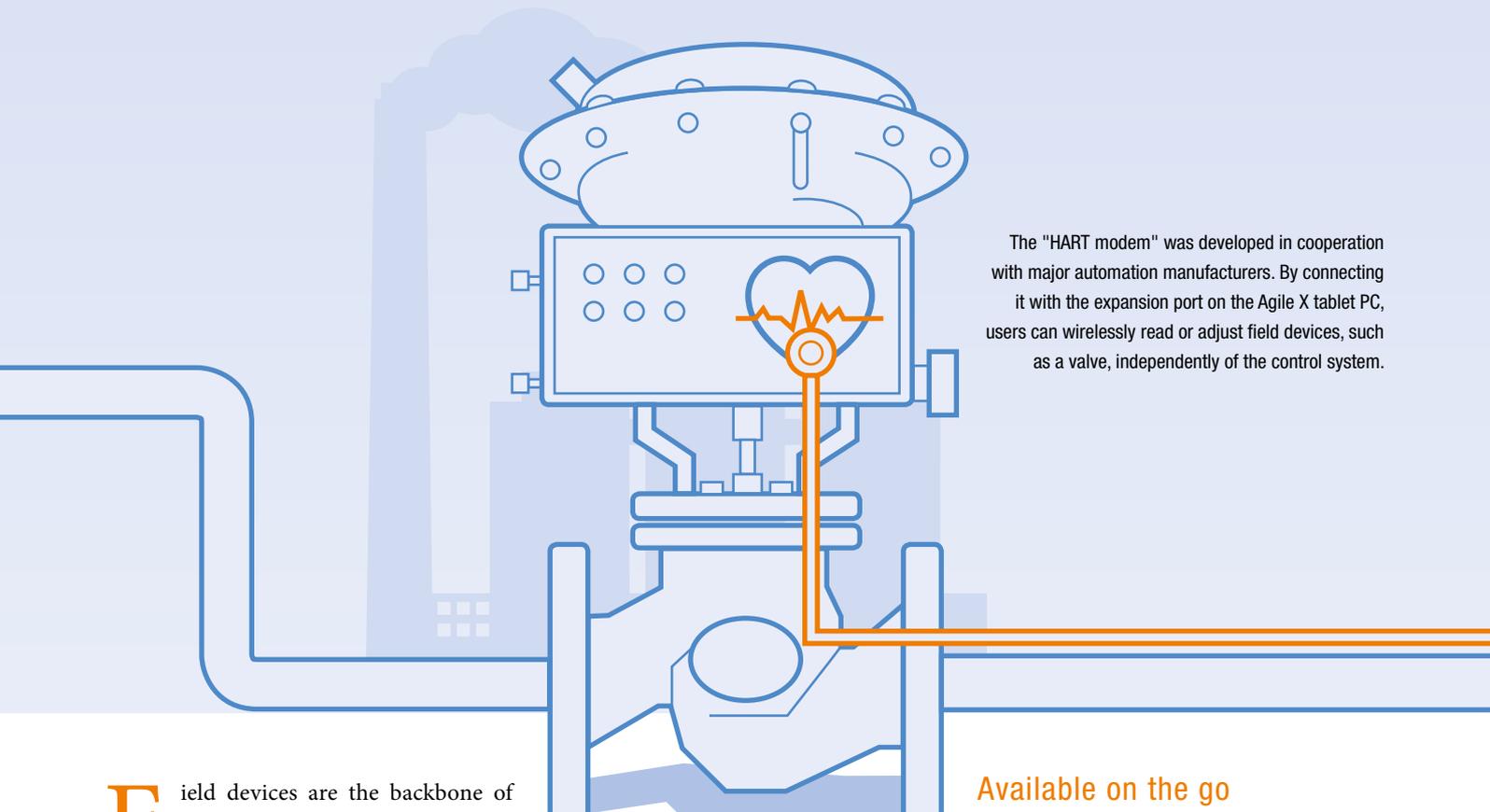# MOBILE FIELD DEVICE

Together with the FDT Group and leading automation manufacturers, BARTEC is constantly working on mobile solutions for diagnosing and parametrising field devices.

The "HART modem" was developed in cooperation with major automation manufacturers. By connecting it with the expansion port on the Agile X tablet PC, users can wirelessly read or adjust field devices, such as a valve, independently of the control system.

Field devices are the backbone of the process industry. Measurement probes detect fill levels, pressure or flow rates, for example, whilst actuators control processes according to certain parameters. The problem is that field devices are used in great numbers across large areas. Depending on the manufacturer, they communicate with the higher-level automation technology in very different ways.

Universal communication ...

One widespread way in which various field devices are diagnosed and parametrised with a single application is field device tool (FDT) technology. This technology is developed by the FDT Group, an independent non-profit alliance of international companies founded under Belgian company law (AISBL) in 2005. Using universal device drivers known as device type managers (DTM), together with suitable frame applications for operation, FDT standardises the communication and configuration interfaces between all kinds of field devices and host systems.

Available on the go

This forms the basis for a common environment for accessing functions, with each field device now able to be fully configured, controlled and maintained via a standard interface. In the next stage of development, the FDT Group aims to provide these features for mobile devices as well, so that users can retrieve and display settings, measurement curves or the status of the field devices on a tablet PC, for example. As this is particularly relevant for work in hazardous areas, BARTEC is now involved with the FDT Group as a new member of a new working group.

MANAGEMENT
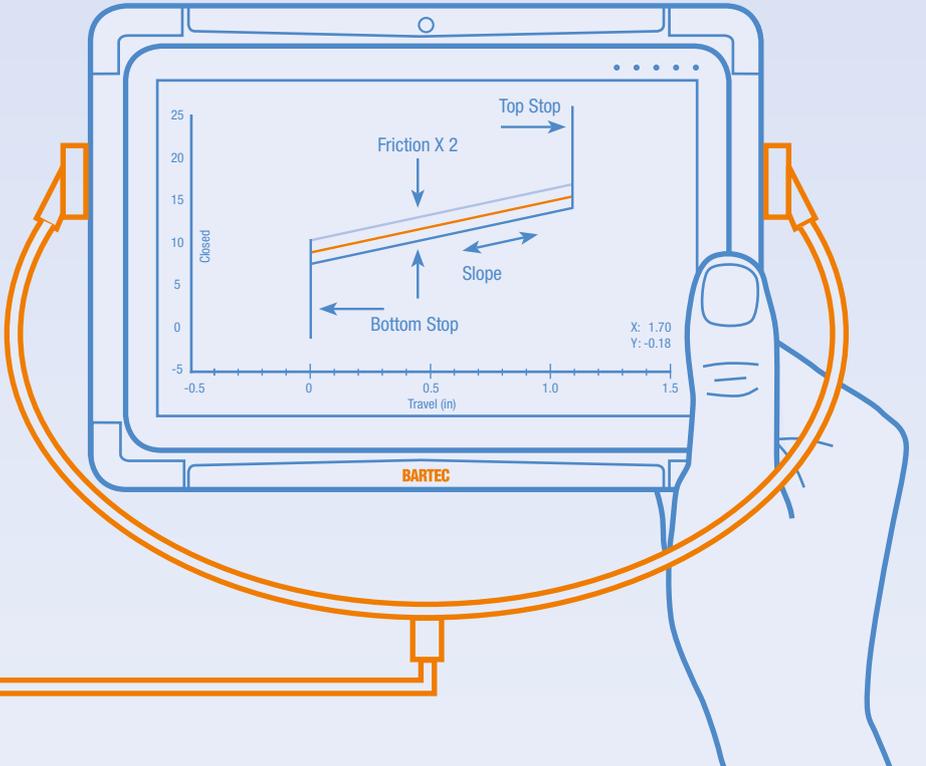
Glenn Schulz

Managing Director
FDT Group AISBL:

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1. With the new working group, the FDT Group aims to expand its technology to mobile devices. What are the reasons for this?

Schulz: This initiative is the next logical step towards making workflows better and safer in the field. Aside from interoperability, the focus is also on the use of integrated additional functions like cameras or GPS. Position data, for example, lets us check whether the inspector is close enough to the site.

2. You surveyed demand before the project. What were the results?

Schulz: The survey helped us gain a good starting position for our work. We now know, for example, that there is no clear platform preference and we have to support all common systems like Android, iOS and Windows. On top of that, we have to think about offline scenarios with subsequent data synchronisations.

Cooperation project 2: The HART modem

In another cooperation project, BARTEC developed a "translator" for HART-compatible field devices (highway addressable remote transducer). The "HART modem" was developed in cooperation with major automation manufacturers. By connecting it with the expansion port of the Agile X tablet PC, users can wirelessly read or adjust field devices, such as a valve, independently of the control system. Thanks to its intrinsic safety, users now have an integrated and efficient solution that is also suitable for mixed operation. This makes it possible to conduct consecutive flow rate measurements when loading fuel and in a treatment plant outside the explosive area, meaning even greater efficiency! ///

3. What role does the cooperation with BARTEC play here?

Schulz: The first meeting took place in the initial stage of our considerations. We were very impressed at how well-developed the mobile solutions are. Just a few weeks later, we presented BARTEC's explosion-proof tablet PC as a demo device with an FDT-based asset management application, which ran straight away. BARTEC's expertise in mobile platforms is certain to be of great use to our working group.

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