

Smartphone-like handling on the rise

The battery-operated handheld CANTouch from Gemac (Germany) can be controlled via touchscreen. Its controlling is comparable to a smartphone's and it connects directly to the CAN network.

BATTERY-OPERATED AND READY FOR USE at a moment's notice, touchscreen operation, smileys for a fast status overview and a handy format are not actually properties you immediately associate with industrial-suited products. But the trend is growing: This handheld device comes with touchscreen operation and mobile availability without additional PC. In similar manner to a smartphone, the user takes their CANTouch directly to the CAN system, connects it with a cable and receives measurement results - without stopping the system.

The CANTouch is ready for immediate use in the CAN system (Photo: Gemac)

Error warning and rectification can save time and money. The measuring functions are operated interactively and dynamically by way of applications ("apps") based on finger gesture control.

A simplified evaluation system using a combination of traffic lights and smileys assists the user in quick assessment of the measurement results. The 4,3 inch color display gives ample scope for graphical representation. The measuring functions are provided as a series of apps, depending on the particular system configuration and the customer's requirements. Expansions can be enabled at any time. The device is tailored to the needs of service technicians performing commissioning, analysis, monitoring and maintenance work on CAN-, CANopen-, Devicenet- and J1939-based systems.

The product is a mobile complement to the CAN Bus Tester 2 from the same company. In addition to its predecessor's functions, the handheld device also measures the common-mode voltage. To this end, it measures the absolute signal levels of all CAN modules relative to its position and determines the widest spread among all nodes - the "absolute maximum common-mode voltage". Even though state-of-the-art CAN transceivers permit higher values than those of the specified range, higher common-mode voltages can result in errors in the communication and finally in destruction of the transceivers.

The physical measuring functions and the representation of the logical data traffic have been taken over from CAN Bus Tester 2. Thus, sporadic bus interference, such as external EMC interference or a slowly deteriorating signal quality attributable to worn plug connections, can be detected in time. In this context, the physical layer diagnosis offers advantages: According to the company, it reveals error sources in the physical bus characteristics at an early stage. The device can detect errors before actual faults in the communication occur. The product was shown for the first time at the Hanover Fair 2014.