Bluetooth Security @ VEGA

The wireless connection to VEGA sensors has already been realized since 2016 by means of Bluetooth. With the help of the PLICSCOM indicating module, older sensors back to 2002 can be retrofitted with Bluetooth. In addition, Bluetooth is directly integrated in further sensors and instruments.

The adjustment tools VEGA Tools App and PACTware/DTMs provide the graphic interface for communication via Bluetooth.

When connecting the sensor to the VEGA Tools App or PACTware/DTM via Bluetooth, secure connection establishment is a basic requirement:

- Challenge Response procedure, developed with Fraunhofer AISEC.
    - thus no direct, open transmission of the Bluetooth access code
- User authentication at the sensor with a Bluetooth access code
- Bluetooth access code can be changed by user (recommended)
- Increasing waiting times if Bluetooth access code is entered incorrectly
- AES-128 encryption standard between terminal and sensor

Each sensor is delivered with a random and individual Bluetooth access code.

The parameterization of the sensors can also be further protected by the following measures:

- Freely selectable device code to protect the parameterization.
- When the sensor is locked, parameters can only be read out, but not changed (only on site, but not via Bluetooth)
- Device code protects the sensor over all interfaces
- Increasing waiting times if the device code is entered incorrectly
- Instrument code must be entered each time the sensor is used on site

Available VEGA product lines with Bluetooth

PRO	BASIC	AIR
Unlimited variety in highest quality and precision.	Compact and precise all-rounders.	Reliable data security even without cables.