



New autarkic VEGA sensors – the key for IoT in logistics and production

Level measurement has never been so simple

The Internet of Things (IoT) is currently revolutionizing the entire world. Logistics is one of the areas where it is especially picking up speed. Here, comprehensive networking of goods and IT infrastructure along the entire supply chain offers a lot of untapped potential: From warehousing to ordering processes to transport. Optimizing the supply chain therefore brings real competitive advantages. At the same time, it can help to noticeably reduce costs.

The core of the Internet of Things is the data exchanged over a growing communications network. It serves as a decision-making basis for improvements. For this reason, IoT relies on sensors that provide the required data. However in most logistics systems the sensors are located in places and positions where the power supply for devices cannot be obtained from a fixed source.

Autarkic sensors for optimized logistics

VEGA is now developing a completely new series of measuring systems especially for these situations: Autarkic level sensor systems based on powerful 80-GHz radar technology. The new autarkic radar sensors will be available on the market from mid-2020 – optimized for logistics or control processes. Energy efficiency was at the forefront of this development. Measurement performance, wireless data transmission and energy consumption are perfectly matched to each other for this purpose. In combination with optimized measuring cycles, the batteries can provide energy management that ensures up to 10 years operation.

The stand-alone sensors from VEGA are wireless, inexpensive, flexible and reliable – and can be installed quickly via plug-and-play. They can therefore be used reliably in a wide variety of scenarios, wherever levels have to be measured. Regardless of whether the measurement involves storage containers with chemicals, containers with cleaning agents that have to be replaced regularly or residual material containers waiting for collection.

Ideal for IBC containers

The autarkic VEGA sensors can be quickly and easily mounted on IBC containers. Thanks to radar, measurement from the outside is possible, so the IBC plastic vessel does not have to be opened or modified. Installed in a few simple steps, this solution can remain permanently on the container and transmit the respective level status, whether in the plant or during transport. Even when stacked high, the autarkic VEGA sensors detect the current level and position in each individual container several times a day – and transmit the data wirelessly to the cloud.

Accessible everywhere

The connection is also modular: At the moment, the standards NB-IoT and LoRa are supported.

VEGA relies on a multi-communication model: The sensor is equipped a choice of low-power wireless standards and selects the one that's available in each respective situation. At the same time, future standards can also be implemented quickly.

The combination with VEGA Inventory System brings additional potential: This visualization and logistics software determines the optimal order quantities and future planning targets on the basis of the data obtained autonomously. The autarkic VEGA radar sensor offers many other smart options. For example, the measurement data can be easily integrated into other platforms and systems.

Characters m. L.: 3,383

Published on
Friday, November 22, 2019

Length
4352 characters

For more information
www.vega.com