

Small transmitters, great benefit: Intelligent Beacons

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The new Fliegl beacons recognize, count and save

They are small and technically simple but can do a lot: beacons are one of the most exciting developments in recent years. Currently, new application areas are being opened up for the Bluetooth transmitters, also in agriculture and livestock farming. Fliegl has provided its new generation of beacons with the ability to count and save. In combination with its more robust design, Fliegl beacons are the basis for intelligent farm management, accurate documentation and secure billing.

What makes beacons innovative is not their technical complexity, but their simplicity: a small Bluetooth transmitter in a box, a battery, that's it. In certain intervals, the beacon sends its ID via Bluetooth Low Energy (BLE) which can be received and read by receivers, such as mobile terminals, at close range. Beacon communication is the basis of many applications, for example for the simple, secure and complete vehicle detection Fliegl Tracker.

Fliegl proves with its new beacon family that they can do even more: each Fliegl beacon has been enhanced by new features. The packaging is also new now: Fliegl beacons now have a potted board – the Beacon is completely closed and protected against splashing water, but also against dust, dirt and shocks in accordance with protection class IP69K. The fact that the better mechanical design is recommended for agricultural use is obvious: the beacons are much more robust than all predecessors.

PURE: The Fliegl Beacon PURE is able to send out its Universally Unique Identifier (UUID) at fixed intervals. Mounted on vehicles or machines of any kind, PURE allows its clear identification within a radius of approximately 30 meters. With its potted board, the beacon is splashproof and dustproof and protected from shocks. Depending on the transmission power, the PURE AA battery will last two to five years

BASIC: The Fliegl Beacon BASIC also has a tilt and acceleration sensor and is therefore able to function as a vibration counter. Mounted on a vehicle, BASIC recognizes whether it is moving or standing. Mounted on a working device, BASIC detects whether it is in the working or transport position - for example, whether a cultivator is swung out or retracted. BASIC can not only provide information about the current status, but also count operations (tank fillings, loads, etc.) and display operating hours - linear, precise, easy to read and process. Its board is potted, which makes it water-resistant and resistant to dust and shocks. BASIC "sleeps"

when in idle state which increases the battery life to four to twenty years depending on the usage.

COUNTER: The Fliegl Beacon COUNTER combines the classic vibration counter function with a calendar and a memory function: COUNTER can not only distinguish between working and idle status and count operating hours, but also store all data in an EEPROM memory with 1 Mbit. The big advantage: COUNTER can be read out at a later time, even at fairly long intervals. This allows correlations to be identified without having to permanently connect the beacon to an external reader and read it out (for example via a smartphone App). In the pay sector, operating hours can be documented without gaps and tamperproof. COUNTER is completely encapsulated, thus protected against splashing water, dust and vibration. An intelligent energy saving mode which switches off the beacon when idle, increases the battery life to four to twenty years.

SENSOR PLUS: The Fliegl Beacon SENSOR PLUS is not only able to recognize tilt and acceleration, but also reacts to movements that occur in a plane without any inclination. Fliegl SENSOR PLUS can be installed, for example, on a manure tanker or cultivator. The beacon detects whether grain slides or manhole covers are open or closed and can count workflows. Besides three internal REED contacts, SENSOR PLUS has a further external contact, via which multiple signals can be read. The Beacon is fully encapsulated and therefore waterproof, dustproof and shock-resistant.

GIGA: Der Fliegl Beacon GIGA combines the beacon functions identification and counting with a large memory volume: GIGA has an SD card holder and is supplied with an SD card with a capacity of 2 GB. In order to realize the SD slot, GIGA is not fully encapsulated but has a front foil. GIGA offers the possibility to locally store large amounts of data. The SD card can be inserted into a reader or can be read out via a mobile device. It is specially designed for the industrial temperature range from -40 to +85 °C. GIGA enables numerous new functions which require a more comprehensive data memory – a step into the future.

As a pioneer in the beacon technology, Fliegl promotes all efforts to achieve standardization. The goal must be to establish ISO standards in order to be able to, among other things, uniformly define interfaces and the communication between beacon and reader as well as between beacon and App.

With its new beacon technology, Fliegl sets standards - and very deliberately not only in agricultural technology: Fliegl Beacons are small, robust, wireless, failure unsusceptible, maintenance-free for years, affordable and universally applicable. They can be mounted on harvesting vehicles such as combine harvesters and forage harvesters, on cultivators, liquid manure tankers or attachments, on transport vehicles, trucks and containers. The user himself defines for what he wants to use beacons.

Source: Fliegl