

OPTILEVEL WIRELESS - The smart wireless solution

INDISPUTABLE AND WIRELESS

This wireless solution can be installed anywhere it is impossible or just too expensive to lay cables or install empty tubes for connecting conventional probes at a later date. The wireless technology means that no excavation work is required to continuously accumulate fill level data and forward it to superordinate systems. An HLS Wireless probe and OPTILEVEL WAVE are required to set up a radio link.

The wireless module, which includes a fill level monitoring probe, receives the energy it needs from a battery built into the headshell. All the components are located inside the probe headshell. Only the radio antenna is located on the outside and this can be located in the manhole pit in the most convenient place for the customer. This enables a maximum level of protection to be provided - that also meets IP68. This also means that adverse environmental influences have hardly any impact on the technology.

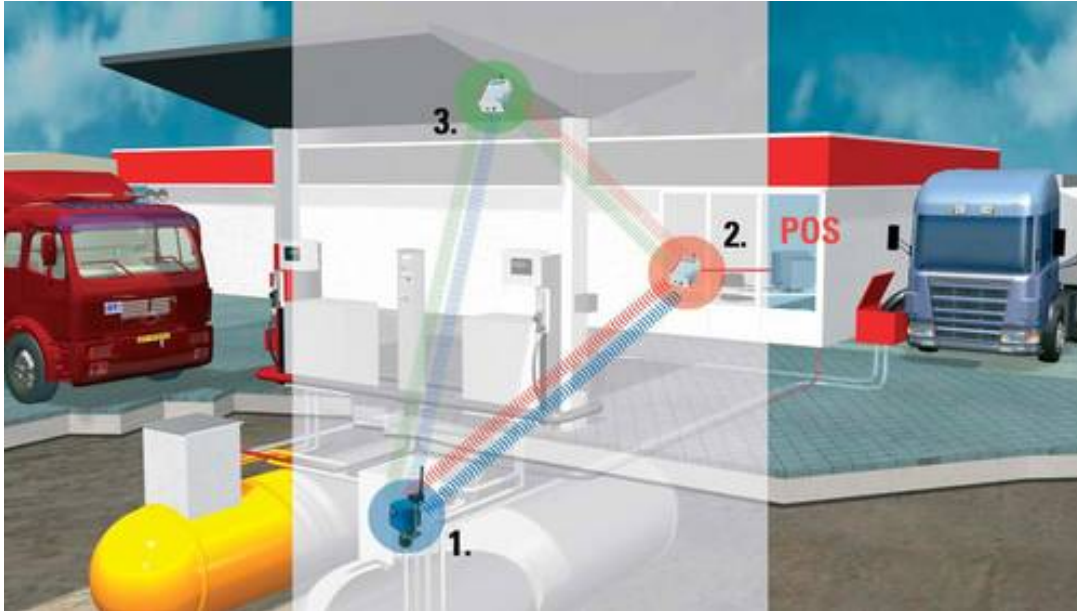
OPTILEVEL WAVE - the central collection point

OPTILEVEL WAVE is the central collection point for all the fill level monitoring probes. This is where the wireless data sent by the probes is stored and forwarded via serial interfaces to superordinate systems. To ensure compatibility, an asynchronous balance mode (ASM) for both types of probe (wired and wireless) can be enabled.

This allows wireless probes to be integrated into an existing network of wired probes. The connection is made via the TTL interface for OPTILEVEL WAVE and the supply. Wireless repeater - the booster To increase the range of the wireless signal, a wireless repeater can be optionally integrated into the wireless network. This acts as a booster for the radio link. Under optimal conditions this enables a distance of up to one kilometer to be bridged.



HOW THE OPTILEVEL WIRELESS SYSTEM WORKS



1. The probe wirelessly sends the data to OPTILEVEL WAVE.
2. OPTILEVEL WAVE continuously forwards the data to the superordinate system.
3. As the distances get larger, a wireless repeater needs to be integrated into the radio link as a booster. This receives data from both the wave and the probe and forwards it.

Benefits of the system

- All wireless technology components in the probe are integrated into the headshell.
- IP68-type housing protection
- Compatible with all OPTILEVEL devices (ASM possible)

TECHNICAL DATA

- in the 2.4GHz frequency band
- conforms to the IEEE802.15.4 standard

- IP68
- Medium: -25°C to +100°C*
- Environment: -25°C to 60°C
- Transmission frequency
- Transmission mode
- Protection rating
- Temperature range
- The probe battery life is approximately three years with a poll cycle of five minutes.

*max. 60°C when used in explosion-risk areas