

# SlimCom IoT-LR

## Groundwater and water quality monitoring via LoRaWAN™ radio transmission

### Description:

- Remote data transmission via LoRaWAN™ technology
- The option to connect (modular system) SEBA data collectors with sensors for measuring water level, water temperature and conductivity
- Long battery life
- Slim design (installation starts from a pipe diameter of 2")
- Suitable for above- and below-ground measuring points
- Existing SEBA data collectors (Dipper-PT/Dipper-PTEC) can be easily retrofitted
- Highly reliable in operation thanks to redundant energy supply and
- XXL buffer storage



Longtime Monitoring



Groundwater Monitoring site



Measuring site installation



Fresh water reservoirs



Flow measurement



Configuration with SEBA-HDA-Tablet



## SlimCom IoT-LR

Do you have a LoRaWAN™ network and are you looking for robust, field-compatible sensors for monitoring groundwater levels and water quality parameters? Then we've got just the solution! The „**SlimCom IoT-LR**“ remote data transmission module has been specially developed and optimised for LoRaWAN™ networks. The slim design of the „**SlimCom IoT-LR**“ means it can be installed in above-ground measuring points, starting from a pipe diameter of 2“, as well as in below-ground measuring points or well shafts.

There are two tried and tested SEBA data collectors to choose from for the „**SlimCom IoT-LR**“, including sensors for measuring water level and temperature (**Dipper-PT**) and conductivity (**Dipper-PTEC**).

The smart SEBA modular system makes it possible for existing **Dipper-PT/PTEC**s to be easily retrofitted with the „**SlimCom IoT-LR**“ by the user on site.

Maximum operational reliability is guaranteed by the „**SlimCom IoT-LR**“ redundant energy supply and SEBA data collectors, as well as through storage of > 1 million measured values. Faults in the „**SlimCom IoT-LR**“ or the LoRaWAN™ network do not have any influence on ongoing measurement operations. The data is secure and, if required, can be conveniently read out wirelessly on site using a Bluetooth module (**BlueCon2**) with a smartphone/iPhone or a USB cable with a notebook (Windows).

## Technical specifications for the SlimCom IoT-LR

<b>General:</b>	Modem for LoRaWAN™ technology data transfer. Compatible with Dipper-PT and Dipper-PTEC with firmware ≥ 1.36
<b>Modem:</b>	SlimCom IoT-LR
<b>Supported transmission:</b>	LoRaWAN™ 1.0.2 (Class A)
<b>Frequencies:</b>	868 MHz (EMEA)
<b>Aerial:</b>	Pluggable, SMA connection, robust and weatherproof (Possible to connect an external antenna, e.g., for underfloor installation)
<b>Interfaces:</b>	1x RS 232 interface for configuration, 1x RS 485 interface for connecting the Dipper-PT/PTEC; Option: Bluetooth through additional SEBA BlueCon 2 RS232 module
<b>Power supply:</b>	1. Standard: 4 x 1.5V alkaline-manganese batteries (Baby / C) 2. Option: 4 x 3.6V lithium batteries (Baby / C)
<b>Operating temperature:</b>	-40°C...+70°C
<b>Storage temperature:</b>	-40°C...+60°C
<b>Housing:</b>	Aluminium
<b>Dimensions:</b>	Ø 35 mm, length 448 mm
<b>Protection classes:</b>	Standard version: IP67 (when plugged in) Flood-proof version: IP68 (when plugged in)



## Technical specifications for the Dipper-PT/PTEC

Please refer to the technical data for the measurement data collectors in the **Dipper-PT** and **Dipper-PTEC** brochures.



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