



# Communication capabilities.

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# Communication.

- All the water meters are with communication modules:
- Available as „add-on“ or „external“ module:
  - wM-BUS (OMS) 868MHz for walk-by / drive-by
  - wM-BUS 169MHz for fixed reading
  - LoRaWAN
  - NB-IoT
- IP68 protection
- Battery lifetime more than 10 years



## wM-Bus (OMS)

- Fixed readings with wM-BUS GW/Bridge/Data collectors
- Walk-By/Drive-By
- Radio transmission modes (OMS - Open Metering System) (T,S,C)
- Radio interface – 868MHz, 433MHz, 169MHz
- Different telegram structure frames
- Transmission distance – 500m (line of sight)
- Battery life - 10+ years





# LoRaWAN

- Fixed readings – Private and Public networks
- LoRaWAN network – Base Stations (GW) and Network Management Software
- Different Classes of End devices – A, B, C
- ISM bands – different Radio interfaces (region dependencies) – EU 433/868MHz, US 915, AU 915, CN 470/779MHz, IN 865MHz and 169MHz
- Transmission distance – 1km -12km (line of sight)
- Battery life - 10+ years



# NB-IoT

- Fixed readings – Telecom operator network
- SIM or eSIM card needed (local or global operators)
- Typically – 5MB/year data plan (sending data once per day)
- Different bands
- Different telegram structure frames – device producer defined
- Battery life - 10+ years





**THANK YOU.**



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