



# Comparison guide: 4 ways to measure your property's water consumption

**FIND OUT THE PROS AND CONS OF 4  
ALTERNATIVE WATER MEASUREMENT  
PRACTICES AND CHOOSE THE RIGHT ONE FOR  
YOUR PROPERTY BUSINESS**

# Be smart about water management

As water rates continue to rise, it's no wonder that most European property owners consider water conservation a priority.

With increasing concern for water scarcity and growing demand for [environmentally sustainable practices](#), it's good to remember that even small improvements in water consumption can make a big impact over time. But to realize those incremental savings and make sure that your water saving initiatives have the desired effect, you'll need to improve the accuracy of reporting.

In addition to saving in day-to-day consumption, accurate and frequent water measurement helps you catch possible plumbing leaks before they cause permanent damage to the building.



# A quick guide for choosing the best water consumption monitoring system for your property business



Manual water consumption monitoring



Water meter with a pulse outlet



Ultrasonic flow meter



Optical water monitoring system

Requires manual water meter reading	X	X		
Requires manual data entry into a property management system	X	X		
Requires a hefty initial investment		X	X	
Requires replacing the water meter		X	X	
Requires technical installation		X	X	
Produces real-time data			X	X
Produces accurate data			X	X



# Manual water consumption monitoring

The most traditional of the four approaches, manual water consumption monitoring, is really quite simple. It typically involves a technician or a maintenance team, a traditional water meter, a pen, and a piece of paper where the results of the reading can be recorded temporarily before the figures are manually entered into a property management system.

## Benefits

The benefits of manual water meter reading are threefold:

First, the pen-and-paper approach requires no hefty capital investment. Quite literally anyone with access to the main water meter can do it without any fancy technology or expensive tools.

Second, manual water meter reading only takes a moment, and it isn't particularly difficult. That's why the task can be delegated to less experienced team members, thus saving in labor costs.

Third, a manual reading can be performed as frequently or as rarely as required. This gives property owners the freedom and flexibility to choose how closely they want to monitor water consumption.

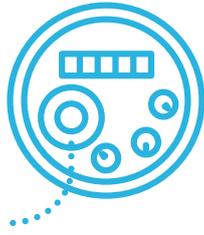
## Disadvantages

While manual water consumption monitoring with a traditional water meter certainly has its perks, the somewhat old-fashioned approach also comes with a number of downsides:

First and foremost, considering the steadily rising price of water – not to mention increasing concerns for water scarcity, relying on manual water consumption monitoring can prove to be much more expensive than an automated process. With no systems in place to alert the maintenance team of a possible leak, manual water consumption monitoring can seriously damage a property – and its bottom line – if and when a plumbing leak occurs.

Additionally, a manual reading is only ever as accurate as the person performing it. Maybe that's why the approach is notorious for its poor accuracy, often caused by human errors like unclear handwriting, lapses in concentration, or typos.

Finally, while it's true that there are no limitations to how often a manual reading can be performed, it is also good to acknowledge that manual consumption monitoring can get pretty expensive if the readings are performed on a daily – if not hourly – basis, as they should be.



# Water meter with a pulse output

Pulse outputs measure the volume of water that flows through a conduit. They make it possible to measure water consumption on an hourly basis. While some newer water meters come with a pre-installed pulse output, it's also possible to get one retro-fitted into an existing water meter.

## Benefits

Compared to manual water meter reading, measuring water consumption with a pulse output differs in one meaningful way:

Pulse outputs can be used to automatically collect hourly water consumption data, which obviously translates in better water management capabilities through more accurate measurement and fewer hours spent on manual meter readings.

## Disadvantages

However, pulse outputs also suffer from some serious disadvantages:

First, while they allow the collection of hourly water consumption data, this frequency of measurement doesn't help identify leaks—especially in residential properties as well as in [bigger commercial real estates](#).

Second, the data collected through pulse outputs isn't accurate enough to render manual water meter reading completely useless. Thus, even though the flow sensor will do the hourly tracking for you, you'll still need to send someone to measure the actual consumption from the meter itself.

Third, while installing a pulse output isn't particularly difficult or time-consuming, it still requires an initial investment and a technical implementation. And for the reasons presented above, we believe that time and money would be a complete waste for properties where water consumption isn't limited to traditional business hours, like hotels and residential units.



# Ultrasonic flow meter

Ultrasonic flow meters use sound waves to determine the velocity of water that flows through a pipe. As opposed to pulse outputs and optical water monitoring systems, ultrasonic flow meters require replacing your existing water meter with a new one.

## Benefits

Compared to traditional water meters with or without a pulse output, ultrasonic flow meters have several benefits:

First, they offer a whole different level of data accuracy. Instead of relying on hourly estimates, they provide real-time data.

Second, they allow remote monitoring, which means that you can truly say goodbye to manual water meter reading.

Third, with precise data, the smartest ultrasonic flow meters can also be programmed to detect plumbing leaks and alert the maintenance staff when they detect deviations in water consumption.

Fourth, instead of having to manually enter material from the readings into a property management system, an ultrasonic flow meter can do it for you.

## Disadvantages

While ultrasonic water meters have a lot going for them, they also have a few serious downsides that make them less attractive – especially in the eyes of budget-conscious property owners:

Firstly, there's no denying that ultrasonic flow meters require a bigger financial investment than any of the other water measurement alternatives discussed here.

Secondly, since voluntarily closing your residential or commercial property down for renovations is not an option, there are really only two situations where it makes sense to choose an ultrasonic flow meter: when you're building a new property from ground up, or when you're looking to replace your old water meter anyway.

Thirdly, as utility companies typically own water meters, you may have limited influence in its model even if you did wish to replace it.



# Optical water monitoring system

An optical water monitoring system like [Smartvatten](#) consists of a small camera-like device that is attached to your main water meter and a cloud-based service that analyzes water consumption in real time. Unlike an ultrasonic water flow meter, it doesn't require a large initial investment or technical set up.

## Benefits

The first four benefits of Smartvatten are identical to the benefits of ultrasonic water flow meters:

The system automatically collects accurate, real-time data that you can use for remote monitoring, allowing you to stop performing manual water meter readings altogether.

The optical water monitoring systems also detects plumbing leaks, and sends automatic text messages to your maintenance team members as soon as it detects a leak.

Finally, the data from Smartvatten can also be directly transferred to your property management system.

But in addition to these benefits that Smartvatten shares with ultrasonic water meters, it has a few more upsides of its own:

Smartvatten is sold as a service, which means that there is no initial investment involved. Instead, you'll pay €2/day/water meter for the service.

Additionally, since the device itself is only a camera, setting up the system will only take about 2 minutes of your time. And you won't even need a screwdriver to do that.

## Get in touch

Whether you're ready to place an order or you still have some questions, please don't hesitate to [get in touch!](#)



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