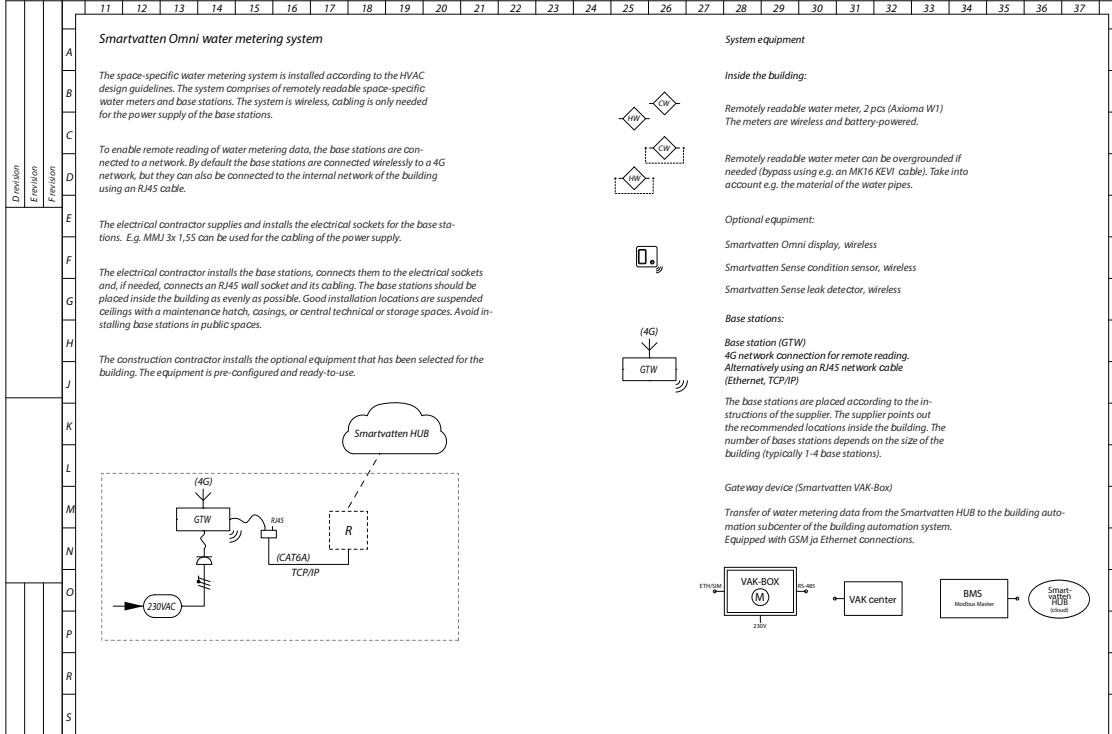


Smartvatten
Smartvatten Omni water metering system
Diagram example

Water metering system
Principle drawing, VE1

Engineer /
Drawn by /
Appr. /
Ensemble /
Sheet 2 /
Drawing number /
(VE1)



Smartvatten Omni water metering system

The space-specific water metering system is installed according to the HVAC design guidelines. The system comprises of remotely readable space-specific water meters and base stations. The system is wireless, cabling is only needed for the power supply of the base stations.

To enable remote reading of water metering data, the base stations are connected to a network. By default the base stations are connected wirelessly to a 4G network, but they can also be connected to the internal network of the building using an RJ45 cable.

The electrical contractor supplies and installs the electrical sockets for the base stations. E.g. MMJ 3x 1,5S can be used for the cabling of the power supply.

The electrical contractor installs the base stations, connects them to the electrical sockets and, if needed, connects an RJ45 wall socket and its cabling. The base stations should be placed inside the building as evenly as possible. Good installation locations are suspended ceilings with a maintenance hatch, casings, or central technical or storage spaces. Avoid installing base stations in public spaces.

The construction contractor installs the optional equipment that has been selected for the building. The equipment is pre-configured and ready-to-use.

System equipment

Inside the building:

Remotely readable water meter, 2 pcs (Axioma W1)
The meters are wireless and battery-powered.

Remotely readable water meter can be overgrounded if needed (bypass using e.g. an MK16 KEVI cable). Take into account e.g. the material of the water pipes.

Optional equipment:

- Smartvatten Omni display, wireless
- Smartvatten Sense condition sensor, wireless
- Smartvatten Sense leak detector, wireless

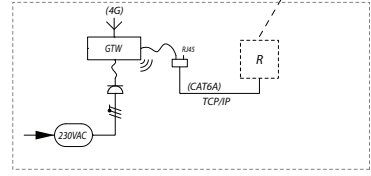
Base stations:

Base station (GTW)
4G network connection for remote reading.
Alternatively using an RJ45 network cable (Ethernet, TCP/IP)

The base stations are placed according to the instructions of the supplier. The supplier points out the recommended locations inside the building. The number of base stations depends on the size of the building (typically 1-4 base stations).

Gateway device (Smartvatten VAK-Box)

Transfer of water metering data from the Smartvatten HUB to the building automation subcenter of the building automation system. Equipped with GSM ja Ethernet connections.



Smartvatten
Smartvatten Omni water metering system
Diagram example

Water metering system
Principle drawing, VE1

Engineer /
Drawn by /
Appr. /
Ensemble /
Sheet 2 /
Drawing number /
(VE1)