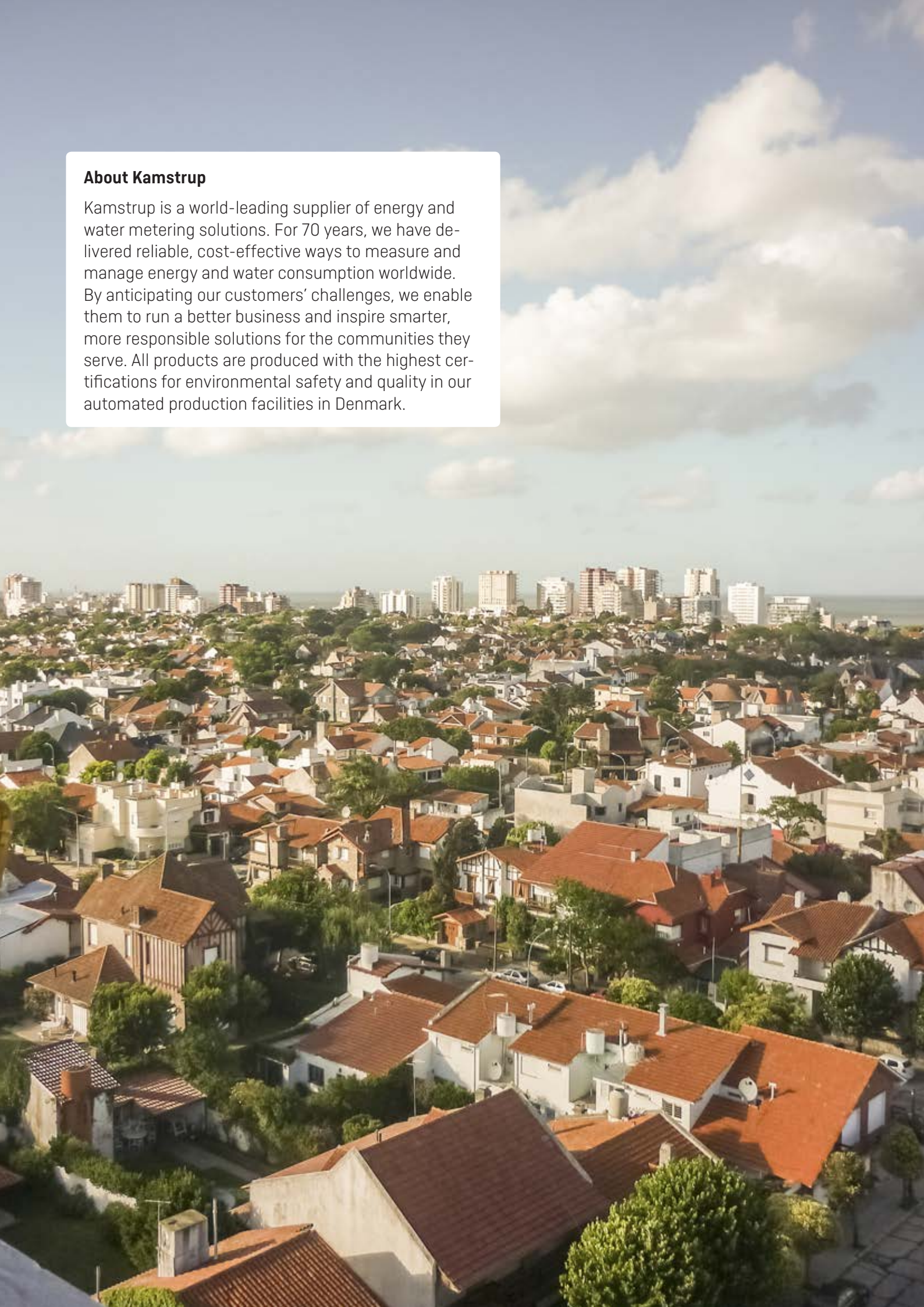

Meters & Meter Reading Solutions







About Kamstrup

Kamstrup is a world-leading supplier of energy and water metering solutions. For 70 years, we have delivered reliable, cost-effective ways to measure and manage energy and water consumption worldwide. By anticipating our customers' challenges, we enable them to run a better business and inspire smarter, more responsible solutions for the communities they serve. All products are produced with the highest certifications for environmental safety and quality in our automated production facilities in Denmark.







High accuracy smart water meters



<p>MULTICAL® 21 – Residential water meter</p> <p>The MULTICAL® 21 is the ideal ultrasonic water meter for measuring household consumption. Not only does it guarantee pinpoint accuracy and longevity, it also helps utilities ensure that the water they provide is of the right quality. All of these features are of great benefit to utilities, consumers and the environment. By contrast, to a traditional meter, the ultrasonic meter operates with low start and stop flows during the entire life of the meter. It has no moving parts and is, thus, resistant to wear and tear and impurities in the water.</p>	
<p>flowIQ® 3100 – Commercial and industrial water meter</p> <p>The advanced ultrasonic measurement technique makes flowIQ® 3100 an ideal choice for measuring cold water consumption in households, water works and industry. Ultrasonic flow measurement guarantees a combination of pinpoint measuring accuracy, longevity and long range communication, which significantly reduces operating costs and minimises unexpected expenses. Like other ultrasonic meters, it has no moving parts, which makes flowIQ® 3100 resistant to wear and tear and impurities in the water.</p>	
<p>MULTICAL® 62 – Multi-communication water meter</p> <p>MULTICAL® 62 is an ultrasonic water meter, which is used for measurement of cold water consumption up to 50 °C and hot water consumption up to 90 °C. The meter can be used in trade, industry and housing and is the excellent choice for smart metering systems and building management systems with its complete range of communication modules and integral Real Time Clock (RTC).</p> <p>Being a static meter prolongs the sensor's lifetime considerably as it is immune to particles and not subject to wear. And even at low flows the sensor maintains its pinpoint accuracy throughout its entire lifetime due to its ultrasonic measuring method</p>	
<p>Sensors – Kamstrup Pressure Sensor and Eventlab water quality sensor</p> <p>Kamstrup PressureSensor is a waterproof meter, which continuously measures the pressure in the distribution network – both the overall pressure level and possible harmful pressure shocks. This knowledge helps you to optimise the pressure, extend the lifetime of the network, save energy and reduce loss from leakages. Further, adding an Eventlab sensor to your network lets you detect all water quality changes with one sensor. The sensor continuously responds to all chemical substances and provides you with an overall assessment of the water quality – allowing you gain control over the water quality in the network.</p>	

Heat and cooling meters with proven long-term stability and accuracy



<p>MULTICAL® 302 – Compact heat/cooling meter</p> <p>The compact all-around heat/cooling meter MULTICAL® 302 can be rotated during installation within narrow dimensions, enabling optimal reading of the display at all times – even in the most confined spaces. This makes it an ideal choice where room is limited for example on heat interface units and in apartments. The meter is designed with Kamstrup’s unique ultrasound technique, which ensures extremely long lifetime – also in magnetite-containing heating systems.</p>	
<p>MULTICAL® 403 – Compact heat/cooling meter</p> <p>The MULTICAL® 403 is the most flexible meter on the market. Everything from inlet/outlet position to energy unit, cut-off dates and much more can be configured individually via the meter’s front panel. The meter selection ranges from qp 0.6 to qp 15 m³/h, and can therefore be used in applications ranging from apartments and houses to shopping centres and office buildings. Furthermore, the meter supports remote configuration through the built-in 2-way communication, allowing you to read the meter’s log without having to disturb the customer unnecessarily.</p>	
<p>MULTICAL® 603 – Heat/cooling meter</p> <p>The flexible MULTICAL® 603 can be configured individually on site directly via the front buttons on the meter. The meter selection ranges from qp 0.6 to qp 1000 m³/h and can therefore be used for most types of applications. Each meter can be fitted with a selection of advanced communication modules including wireless or wired M-Bus and more to match your needs. It is also possible to configure the data logger to deliver data to match the exact needs in a given situation – offering you the maximum level of flexibility.</p>	
<p>MULTICAL® 803 – Heat and cooling metering for trade and industry</p> <p>MULTICAL® 803 for heating and cooling is an all-in-one solution that meets the high requirements for advanced industrial measurement with accurate, stable energy meters with long life and many communication and remote reading functions.</p> <p>With automatic detection of both the Pt-type of the temperature sensors and the meter factor of the connected ULTRAFLOW® units, it is only necessary to have one calculator in stock – MULTICAL® 803.</p> <p>In addition, the meter is IP65-approved and thus demonstrably resistant to dust and moisture.</p>	

MID approved Electricity Meters for all applications



OMNIPOWER® – Single and three phase meters for households and industry

The OMNIPOWER® electricity meters are designed with high precision and long-term stability in mind. The meters are prepared for smart home applications and optimised for smart metering systems. The high level of reliability and precision enables utilities to track all relevant grid information and utilise this to increase and maintain a trouble-free operation. The meters are equipped with a wide range of communication modules and offers the flexibility you need by providing 4-quadrant metering, power quality registration and remote disconnect functions.

Wireless transmission of consumption data and price information to in-home displays makes the OMNIPOWER® meters the optimal solution for applications focusing on consumer engagement. Furthermore, the meters are equipped with a MUC module, allowing it to collect data from heat/cooling and water meters as well, hereby constituting the core element in a multi-utility solution.



OMNIPOWER® CT – Electricity meter for commercial and industrial application

OMNIPOWER® CT is a 3-phased current transformer electricity meter without movable parts, especially suitable for commercial and industrial application. The energy registration is not affected by shock or impact during transport and mounting which makes it a robust and durable electricity meter.

Furthermore, measurements are correct no matter the physical mounting direction and the meter makes accurate measurements whether it measures 1, 2 or 3 phases. As default, the OMNIPOWER® CT meter offers real-time load profile generation for all 4 quadrants, voltage quality measurement and logging of events as standard features.



Easy and reliable meter reading for all applications



Different needs require different meter reading solutions. Therefore, we offer a wide variety of automated meter reading and smart metering systems, ranging from handheld devices to long distance networks - cabled or wireless - together with user-friendly data management programs. Generally, our smart meters for energy and water, work with a wide range of communication types. This means that you can select the method of data collection that best suits your meter reading needs.

USB Meter Reader – Meter reading via USB flash drive

USB Meter Reader is a quick and easy way to read data from heat, cooling, water and electricity meters. With this solution you get a low-cost, fast and economical set-up which allows for different meter types to be read using one tool. The USB Meter Reader is ideally suited for landlords, property management companies and where it is difficult to access the meters to read them manually.

USB Meter Reader is compact and fits comfortably in a pocket even with the power pack, making it easy to transport when taking readings from the meters. Within seconds, consumption readings are received and this data is easily transferred to a pc.



READY – Remote reading via smartphone or network

READY is an effective solution for remote reading of intelligent water meters and heat meters. You get fast and easy access to consumption data and the system gives you access to tools for analysing and optimising your distribution network.

Depending on your needs, the remote reading of your meters with a READY system can take place in two ways. You can either read your meters on the go through mobile reading with your smartphone as you drive around your supply area, or have your meters read automatically on a daily or hourly basis through a network.

No matter whether you choose mobile meter reading or a network, the handling of your meters and meter data takes place in the PC program, READY Manager. READY Manager has a simple user interface with a start screen and icon-based navigation that makes the program intuitive and easy to use. READY Manager supports many different data formats and offers flexible import and export of data.





"Of course, the most important factor for us was to be able to provide our customers with correct, monthly billing of their actual consumption as payment on account is not very customer-friendly. But we also had an eye for how to utilise the technology to reap more advantages, among other things to get better insight in the supply network,"

*– Mats Håkansson,
Managing Director, Mälarenergi, Sweden*

"All the knowledge we get from the many metering points make up our basis for optimising the distribution network, our production and the entire system here at the utility."

*– Michael Christensen,
Operations Manager, Trustrup-Lyngby
heat and water utility, Denmark*

"The quality and density of the data we are able to collect wirelessly from the meters are, quite simply, incomparably better than the equivalent provided by the mechanical meters."

*– Hermann Schon, Operations Manager,
Water Company Warndt, Germany*

"It is possible to read all of the meters in a matter of minutes. The real-time data gives us everything we need to know."

*– Albert Stöcker, Technical Advisor,
Baston Wonen, Netherlands*

A flexible solution

Kamstrup's solutions are built to grow with your company. If you choose READy mobile reading, you get the perfect solution for mobile reading of meters, you get the perfect solution for mobile reading of meters that can be expanded to a network with automatic meter readings – without you even having to get in the car.

Besides simplifying the meter reading, a READy network solution opens the door to new possibilities for more effective pressure management, tracking of water waste and surveillance of your distribution network.

Kamstrup service and hosting solutions

When you choose Kamstrup as your service partner, you get a dedicated specialist who is focused on giving you exactly the help you need. Our System Support solution gives you a trouble-free daily operation provided through fast and effective personal support for your meter reading system, when needed.

With a System Hosting Solution you are secured optimal IT performance with a minimal effort. You leave server operation, software installation, maintenance and data back-up to us. Choosing a Kamstrup hosting solution for your meter reading system allows you to spend more of your time and resources on what you do best – quite simply.



Think forward

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