

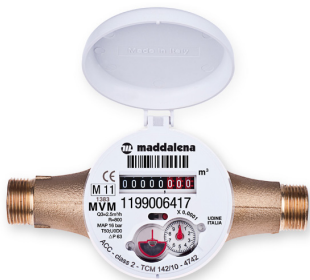
Maddalena exceeds growth with first-to-market water meter using Kerlink reference designs

February 2018 | Version 1.2

Maddalena – an Italy-based state-of-the-art water metering and instrumentation company – needed to quickly design, test and build a connected water meter to support blossoming sales opportunities in Europe. But Maddalena required cost-effective, secure Internet of Things (IoT) technology for its high performance water meter supporting long-range transmission in difficult urban and suburban topographies. So Maddalena turned to Kerlink for best-in-class reference designs and support services. With Kerlink's help, Maddalena created a high quality, first-to-market solution that has already sold 100,000 units and is growing exponentially.

Maddalena leads with IoT

Maddalena S.p.A. is a 100 year old Italian manufacturer of water metering and instrumentation equipment. With more than 65% of its annual production exported, Maddalena has become a global leader supporting a wide range of solutions to meet the needs of sub-metering applications



Company name: Maddalena S.p.A.
Headquarters: Udine, Italy
Year founded: Founded 1919
Sales volume: 3 million metering instruments per year
Employees: 125
Industry sector: water metering and instrumentation

and public utilities. A dedicated and experienced staff of 125 employees produce approximately 3 million instruments per year. Maddalena is a leader in its field by combining deep knowledge of meter manufacturing with the latest technological innovations. As such, Maddalena is a member of Aqua, the European association of water and heat meter manufacturers, the LoRa Alliance™ and several other low-power wide-area network (LPWAN) organizations.

Maddalena has had many years of experience in producing radio solutions and supporting its customers' use of remote meter reading communications technologies. Traditional radio technologies, though often used in sub-metering applications, were not able to meet the needs of Maddalena's utility sector customers. These customers require high-quality, long-range, cost-

effective communications technologies with long battery lives to support stationary, outdoor meters. In addition, these utility customers often have more than just utility metering needs. They want to ensure that any metering connectivity solution can support other devices, sensors and equipment as needs evolve from smart metering to more complex smart cities solutions. The communication's element of a smart meter should be flexible enough to support multiple devices and applications.

Kerlink provides the answer with a reference design solution

So Maddalena turned to Kerlink to provide an industry-leading reference design and professional services. The combination of 169MHz WMBus and 868MHz LoRaWAN™ reference designs and support services was the right offering to allow Maddalena to quickly, reliably and affordably create ARROWWAN compact radio modules designed for use on Maddalena MVM water meters. When communicating over a LoRaWAN™ network, these radio modules guarantee long-range transmission both in urban and suburban areas. The modules are battery powered with a maximum 15-year service life.

"Maddalena was the first on the market to offer a compact smart water meter solution with the relevant application protocol stack. This helped us win contracts in France and Italy," stated Mr. Giovanni Maddalena, Maddalena's Marketing Director. The reference designs from Kerlink allowed Maddalena to quickly develop

its metering connectivity solution to meet utility customers' requirements of high performance, battery longevity and cost effectiveness.

"Kerlink offered us its reference design service with the most updated specifications available."

*Mr. Giovanni Maddalena
Marketing Director, Maddalena S.p.A*

Maddalena sought Kerlink because of its complete range of base stations and services that covers all of the most relevant IoT scenarios. "Kerlink offered us its reference design service with the most updated specifications

available. We choose this road to drastically reduce our time to market by relying on Kerlink expertise," continued Mr. Maddalena. Maddalena had several choices for this development, but Kerlink's excellent technology, broad range of services, customer contacts and industry knowledge made a big difference.

Maddalena sells 100,000 units and growing with IoT

Maddalena believes that IoT solutions will continue to drive its business growth. This past year, Maddalena was the first water meter manufacturer to receive LoRaWAN™ certification for its MVM compact radio water meter. Having this certification allows Maddalena to participate in several important international smart cities projects in 2018 and beyond. In the future, Maddalena plans to continue working on new products with integrated LoRaWAN™ and LPWAN communications to ensure Maddalena's position of being a leading global supplier of metering and instrumentation equipment.

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