

# ARROW<sup>WAN</sup> LPWAN MULTI-PROTOCOL WATER METER END POINT

Maddalena S.p.A, the Italian manufacturer and global player in the water metering field, offers a wide range of solutions for smart communication to meet the needs both of sub-metering and public utilities. This is the result of our long experience in the field and commitment to continuous innovation and search for new technological solutions. This is also a proof of our passion for the Internet of Things technologies, which are enhancing the spread of smart meters for the management of increasingly indispensable information, especially in the water sector that has been generally neglected in past years.

Maddalena for some years now, has been directly testing the new low power wide area network (LPWAN) technologies

designed for the Internet of Things. Traditional radio technologies, although widely used in sub-metering (indoor divisional meters), are not able to meet the needs of the utility sector: an efficient and sustainable outdoor fixed wide area network.

The LPWAN solutions allow long-range connectivity and respond to these needs by reducing the cost of infrastructure (AMI). Another important aspect to consider is the possibility of using the same network for several other devices and sensors (smart cities).

Maddalena is now ready to launch the very first multi-protocol water meter end point solution for water utilities.

ARROW<sup>WAN</sup> is the new, compact, multi-protocol radio that found the range of Maddalena MVM volumetric water meters to be the perfect measuring devices for coupling. This solution provides a flexible smart water end point adopting a consolidated top-range mechanical meter (MID approved up to R 800).

ARROW<sup>WAN</sup> is compatible with the current wM-Bus standard (EN 13757 and AFNOR E17Z) and it can also support new LPWAN solutions such as LoRa and Sigfox. The transmission mode can be selected directly by the user through the integrated NFC interface using a smartphone.

- ARROW<sup>WAN</sup> will be available in two versions:
- ① 169 MHz, multi-protocol: wM-Bus, LoRa
  - ② 868 MHz, multi-protocol: wM-Bus, LoRa, Sigfox (available end Q1 2017)

This smart water meter end point has already allowed Maddalena to sign important contracts to date with European water utilities (200,000 items in total). **MI**



*the very first multi-protocol  
water meter end point solution  
for water utilities”*



Water measurement world is constantly evolving, Maddalena is always at the forefront



## ARROW<sup>WAN</sup> LONG RANGE RADIOS



**868 MHz**



**LoRa**



**169 MHz**



**LoRa**