# Revenue Digital Water Meter





## **Advantages**

- Meet ISO 4064 Class C (can detect very small amount of water flow) and R250 ratio standard
- Gold Medal Winner of 2013 INPEX(Invention & New Product Exposition) in Pennsylvania
- The world's first magnet-free electronic water meter
- Tamper-proof to make water theft impossible
- Direct reading LCD display-IP68 electronic registers and protected from fogging

### **Applications**

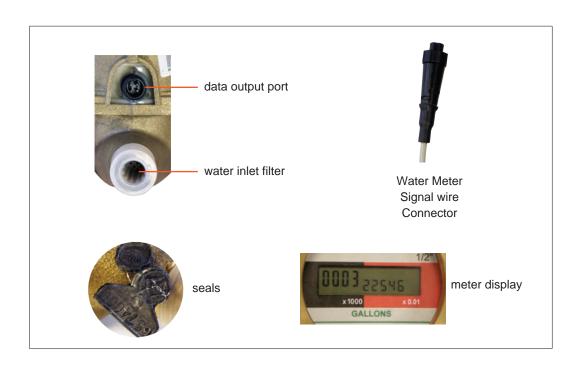
- Water metering for smart buildings, apartments, universities, and commercial applications
- Measurement of low and high flow rates
- For leakage detection, control and prevention

#### **Features**

- Ready for use with DAE AMR100-D (Display and communication module for single digital water meter) and AMR-D (for 8 water meters) for remote reading
- Build-in 8-year lifespan battery
- Gear-free with electronic sensing devices
- Multi-point flow rates calibration
- Suitable for submerged condition; Protection class IP68
- Used materials are temperature resistant up to 140°F (60°C)
- Max. working pressure: 284 psi
- Max. ambient temperature: 158°F (70°C)
- Meter body: Corrosion proof copper alloy
- Intelligent Management Functions (Totalizer mode; Forward totalizer mode; Reverse totalizer mode; Flow rate mode; Management mode; Leakage days; Reverse flow days; Tamper-proof days; Low voltage days; Monthly water consumption logs; MNF (Minimum Nighttime Flow) logs)

#### Models

| Model  | DN<br>mm (inch) |  |  |
|--------|-----------------|--|--|
| TH15CU | 15 (½")         |  |  |
| TH20CU | 20 (3/4")       |  |  |
| TH25CU | 25 (1")         |  |  |
| TH50CU | 50 (2")         |  |  |



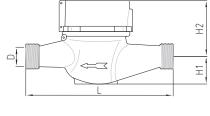
## **Specifications**

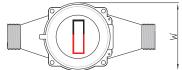
| Model                   | TH15CU   | TH20CU                 | TH25CU                 | TH50CU                 |  |  |  |  |
|-------------------------|--|------------------------|------------------------|------------------------|--|--|--|--|
| DN (inch)               | 1/2"   | 3/4"                   | 1"                     | 2"                     |  |  |  |  |
| ISO4064:1993 (Class C)  |  |                        |                        |                        |  |  |  |  |
| Qt~Qs ±2% (GPM¹)        | 0.099~13.2   | 0.165~22               | 0.23~30.8              | 0.99~132.1             |  |  |  |  |
| Qmin~Qt ±5% (GPM)       | 0.066~0.099  | 0.112~0.165            | 0.154~0.23             | 0.40~0.99              |  |  |  |  |
| Nominal Flow Rate (GPM) | 6.6  | 11                     | 15.4                   | 66.1                   |  |  |  |  |
| Maximum Flow Rate (GPM) | 13.2   | 22                     | 30.8                   | 132.1                  |  |  |  |  |
| Display Digits          | 1234 <sub>567.12</sub>   | 1234 <sub>567.12</sub> | 12345 <sub>678.1</sub> | 12345 <sub>678.1</sub> |  |  |  |  |
| Fluid Temperature       | Cold Water Meter: < 140°F (60°C)   |                        |                        |                        |  |  |  |  |
| Ambient Temperature     | -13°F ~ 158°F (-25°C ~ 70°C)   |                        |                        |                        |  |  |  |  |
| Maximum Pressure        | 284 psi  |                        |                        |                        |  |  |  |  |
| Ingress Protection      | Conforms to IEC60529 IP68 ingress protection against dirt and water; unrelated to magnetic interference of impeller                |                        |                        |                        |  |  |  |  |
| Suitable for Fluid Type | Clean water  |                        |                        |                        |  |  |  |  |
| Body Material           | Copper alloy   |                        |                        |                        |  |  |  |  |
| Battery Life            | Built in lithium battery, estimated battery life of 20 years, calculated based on a constant polling cycle of once every 2 minutes |                        |                        |                        |  |  |  |  |
| Communication Distance  | Up to 164 feet (50 meters) to AMR100-D or AMR-D  |                        |                        |                        |  |  |  |  |

<sup>1</sup>GPM, gallon per minute.

#### **Dimensions**

| Model | D<br>mm (inch) | Length (L)<br>mm (inch) | Width (W)<br>mm (inch) | Height (H1)<br>mm (inch) | Height (H2)<br>mm (inch) | Weight<br>kg (lb) |
|-------|----------------|-------------------------|------------------------|--------------------------|--------------------------|-------------------|
| TH15  | 15 (½")        | 165 (6.5)               | 90 (3.5)               | 40 (1.6)                 | 80 (3.1)                 | 1.8 (3.96)        |
| TH20  | 20 (3/4")      | 190 (7.5)               | 90 (3.5)               | 37 (1.5)                 | 80 (3.1)                 | 1.9 (4.18)        |
| TH25  | 25 (1")        | 210 (8.3)               | 90 (3.5)               | 42 (1.7)                 | 85 (3.3)                 | 2.2 (4.84)        |
| TH50  | 50 (2")        | 270 (10.6)              | 123 (4.8)              | 58 (2.3)                 | 138 (5.4)                | 6.38 (14.04)      |





### **Related Products**

## **Display and Communication Module for Digital Water Meter**



AMR100-D Single Channel



AMR-D 8 Channels

- Supports digital water meter
- Display always in sync with meter even during power outage
- Modbus over RS485 interface for communication with host computer
- Communication distance between module and digital water meter should be up to 164 feet (50 meters, using UL2464 shield twisted pair)
- \* Please see AMR100-D & AMR-D datasheet for details.

<sup>\*</sup> Specifications are subject to change without notice, this is a preliminary datasheet and for reference only.