# NB-IoT District Ultrasonic Water Meter

## Product Description

District ultrasonic water meter is designed for reliable flow measurement for municipal, commercial and industrial applications,

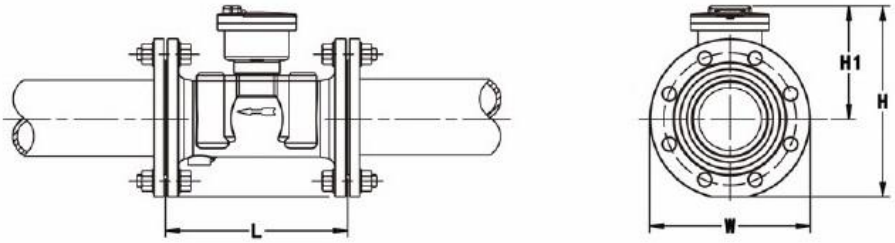
Nominal diameter: DN50-DN300

Applications: Tap Water Distribution System (Municipal, commercial, Industrial etc.)

## Product Features

- Optional communication interfaces: M-BUS, RS485, LoRa Wireless, Pulse ect, GPRS and NB-IoT.
- Meter offers a complete range of NB IoT Automatic Metering Reading (AMR) solutions, which provides a unified platform for meter reading and data management remotely.
- Automatically records the daily total of the last 2 years and monthly total of the last 24 months
- Low starting flow
- No moving parts, wear-free ultrasonic technology,Maintenance-free
- No optical-electrical conversion needed, digital remote communication
- Multi-channels design, reduces straight-pipe run requirement
- Bi-directional flow
- Conforms with GB/T 778-2007 and CJ/T 434-2013 Ultrasonic Water Meter standards

## Overall Dimensions



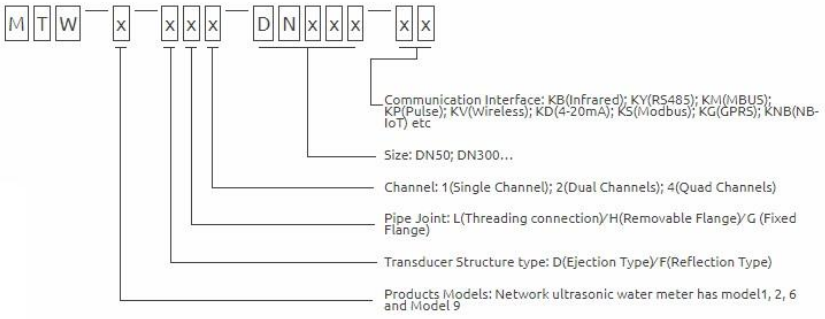

| Nominal Diameter | DN50 | DN65 | DN80 | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 |
|---|---|---|---|---|---|---|---|---|---|
| L mm | 200 | 200 | 225 | 250 | 250 | 300 | 350 | 450 | 500 |
| W mm | 165 | 185 | 200 | 220 | 250 | 285 | 340 | 405 | 460 |
| H1 mm | 150 | 158 | 175 | 181 | 199 | 217 | 246 | 272 | 320 |
| H mm | 235 | 248 | 264 | 287 | 320 | 355 | 410 | 452 | 550 |

## Technical Parameters

| Model Nominal | Diameter | DN50 | DN65 | DN80 | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 |
|---|---|---|---|---|---|---|---|---|---|---|
| MTW-9 | R100 $Q_3/Q_1$($m^3/h$) | 25/0.25 | 40/0.4 | 63/0.63 | 100/1 | 160/1.6 | 250/2.5 | 400/4 | 630/6.3 | 1000/10 |
| MTW-6 | R160 $Q_3/Q_1$($m^3/h$) | 25/0.16 | 40/0.25 | 63/0.39 | 100/0.6 | 160/1 | 250/1.6 | 400/2.5 | 630/3.9 | 1000/6 |
| MTW-6 | R250 $Q_3/Q_1$($m^3/h$) | 25/0.1 | 40/0.16 | 63/0.25 | 100/0.4 | 160/0.6 | 250/1 | 400/1.6 | 630/2.5 | 1000/4 |
| MTW-6 | R315 $Q_3/Q_1$($m^3/h$) | 25/0.08 | 40/0.13 | 63/0.2 | 100/0.3 | 160/0.5 | 250/0.8 | 400/1.3 | 630/2 | 1000/3 |
| MTW-6 | R400 $Q_3/Q_1$($m^3/h$) | 25/0.06 | 40/0.1 | 63/0.16 | 100/0.25 | 160/0.4 | 250/0.6 | 400/1 | 630/1.6 | 1000/3 |
| MTW-6 | R500 $Q_3/Q_1$($m^3/h$) | 25/0.05 | 40/0.08 | 63/0.13 | 100/0.2 | 160/0.3 | 250/0.5 | 400/0.8 | 630/1.3 | 1000/2 |
| MTW-2 | R160 $Q_3/Q_1$($m^3/h$) | 63/0.39 | 63/0.25 | 100/0.6 | 160/1 | 250/1.6 | 400/2.5 | 630/3.9 | 1000/6 | 1600/10 |
| MTW-2 | R250 $Q_3/Q_1$($m^3/h$) | 63/0.25 | 63/0.25 | 100/0.4 | 160/0.6 | 250/1 | 400/1.6 | 630/2.5 | 1000/4 | 1600/6 |
| MTW-2 | R315 $Q_3/Q_1$($m^3/h$) | 63/0.2 | 63/0.2 | 100/0.3 | 160/0.5 | 250/0.8 | 400/1.3 | 630/2 | 1000/3 | 1600/5 |
| MTW-2 | R400 $Q_3/Q_1$($m^3/h$) | 63/0.16 | 63/0.16 | 100/0.25 | 160/0.4 | 250/0.6 | 400/1 | 630/1.6 | 1000/3 | 1600/4 |
| MTW-2 | R500 $Q_3/Q_1$($m^3/h$) | 63/0.13 | 63/0.13 | 100/0.2 | 160/0.3 | 250/0.5 | 400/0.8 | 630/1.3 | 1000/2 | 1600/3 |
| MTW-1 | R160 $Q_3/Q_1$($m^3/h$) | | 100/0.6 | 160/1 | 250/1.6 | 400/2.5 | 630/3.9 | 1000/6 | 1600/10 | 2500/16 |
| MTW-1 | R250 $Q_3/Q_1$($m^3/h$) | | 100/0.4 | 160/0.6 | 250/1 | 400/1.6 | 630/2.5 | 1000/4 | 1600/6 | 2500/10 |
| MTW-1 | R315 $Q_3/Q_1$($m^3/h$) | | 100/0.3 | 160/0.5 | 250/0.8 | 400/1.3 | 630/2 | 1000/3 | 1600/5 | 2500/8 |
| MTW-1 | R400 $Q_3/Q_1$($m^3/h$) | | 100/0.25 | 160/0.4 | 250/0.6 | 400/1 | 630/1.6 | 1000/3 | 1600/4 | 2500/6 |
| MTW-1 | R400 $Q_3/Q_1$($m^3/h$) | | 100/0.25 | 160/0.4 | 250/0.6 | 400/1 | 630/1.6 | 1000/3 | 1600/4 | 2500/6 |
| Starting Flow $m^3/h$ (changeable) | | 0.02 | 0.025 | 0.03 | 0.035 | 0.05 | 0.07 | 0.1 | 0.15 | 0.25 |
| Channels | | Quad Channels | | | | | | | Six Channels | |
| Pipe Joint | | Flange (Body Pressure: PN16( Default); other pressures | | | | | | | | |
| Accuracy Class | | Class 2( Class 1 Optional) | | | | | | | | |
| Pressure Class | | MAP16(MAP10, MAP25) | | | | | | | | |
| Environmental Class | | C | | | | | | | | |
| Electromagnetic Class | | E1(E2) | | | | | | | | |
| Pressure Loss Class | | ▲P25 (▲P63, ▲P40, ▲P16, ▲P10) | | | | | | | | |
| Flow Field Sensitivity Class | | U5/D3 (U10/D5, U3/D0, U0/D0) | | | | | | | | |
| Temperature Rating | | T30 (T50, T70, T90) | | | | | | | | |
| Recording | | Automatically records the daily total of the last 2 years and monthly total of the last 24 months | | | | | | | | |
| Communication Interfaces (Optional) | | Infrared, M–BUS, RS485, 4–20mA, Lora, GPRS , Pulse, NB–IoT | | | | | | | | |
| Power Supply | | DC3.6V (Non-rechargeable Lithium Battery) | | | | | | | | |
| Metering Cycle | | 1 time/S | | | | | | | | |
| Average Operating Current | | ≤20μA | | | | | | | | |

## Selection Description

- MTW District Ultrasonic Water Meter follow below order specifications:




**Example:**

**MTW-1-DG4-DN65-KB stands for Model 1-DN65 quad channels Infrared ultrasonicwater meter with ejection type transducerand fixed flange**