

WMD

A Utility Systems Innovation



WATER MANAGEMENT DEVICE

The Utility Systems water management device, the WMD, is a remote communicating electronic water control valve. It is Standard Transfer Specification (STS) Association approved, now standard with an in-field replaceable battery pack.

When linked to a pulse output water meter, the WMD enables two-way communication, configuration and valve control as well as the option for STS-approved prepaid water supply. This cost effective, smart meter is then able to provide:

- » Free basic water
- » STS prepaid water metering
- » Automated Meter Reading (AMR)
- » Emergency and lifeline water
- » Leak and tamper detection

*Now standard with in-field
replaceable battery pack*

The WMD can be configured to

- » Dispense between 10 – 50 000 litres of water, at two scheduled times daily, thereby providing the ability to limit a consumer to a finite (or negotiated) level of supply. This is especially useful in the case of low income consumers who may never be able to afford to pay for water, but nonetheless have the right to receive a basic level of service
- » Be linked to a fixed (flat rate) tariff to provide consumers with the option to voluntarily limit consumption according to their budget. As with the free basic water allocation, this facilitates budgeting not only by the individual consumer, but by social service agencies, government departments, and NGOs
- » Provide meter readings by radio signal or the global system for mobile communications (GSM) to a drive-by or walk-by collector, or through a fixed network
- » Operate at a reduced daily or monthly quantity; this is very useful in managing problematic customers

Benefits to the service provider

- » Low cost of acquisition
- » Prevents wastage and loss of treated potable water
- » Capital recovery possible within months by curbing water wastage
- » Battery life: approximately 10 years dependant on use, with replaceable battery pack
- » Mounting can be vertical or horizontal
- » Above or below ground installation
- » IP68 waterproof rating
- » Radio Frequency 433 MHz
- » Operating range at ambient temperatures from -10°C to 60°C
- » Accurate water balancing across a zone using synchronised meter readings, in-field programming, testing, and interrogation
- » Radio link receiver can be fixed, vehicle mounted or carried by personnel
- » No proprietary billing system required – current billing systems can be used as data collected from the meter by means of the mobile data collector (MDC), which can be seamlessly integrated into most existing utility and municipal billing systems

Benefits to the consumer

- » Consumers can budget their daily or monthly consumption through prepayment and/or a capped daily and/or monthly allowance
- » Consumers cannot over use or over spend if they are on flow-limitation or prepaid options
- » Daily or monthly carry-over where service providers allow it
- » Accumulation of un-used daily allowance, which encourages responsible water usage