



Bulk WMD

bulk water management device



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The Utility Systems Bulk Water Management Device (Bulk WMD) is available in several diameter options.

The electronics in the highly successful water management device (WMD) are adapted to integrate into larger valves, so that the WMD is also available in 25, 40 and 50 mm diameters. The electronics and display are housed separately from the valve and are connected to both the valve and water meter by means of wire harnesses.

The Bulk WMD can be configured to

- Dispense a fixed daily quantity of water (pre-negotiated)
- Provide meter readings via RF transmission to a data collector
- Can be reconfigured or shut off remotely

The introduction and implementation of the Bulk WMD can overcome some of the common challenges faced by conventional billing systems.

Operational benefits

- Is able to operate as a conventional bulk meter, or programmed to dispense a fixed daily amount of water at full pressure.
- Accurate zonal water balancing through synchronised meter readings
- In-field programming, testing, and interrogation
- Automatic Meter Reading (AMR) option allows interrogation via radio link
- Automatic Metering Infrastructure (AMI) option allows:-
 - Parameter configuration and data collection via radio link
 - Efficient disconnection/reconnection of supply when used as a consumer connection
 - The Mobile Data Collector can be mobile or fixed
 - No Proprietary Billing System required - data is available in .csv format

Benefits to the Consumer

Consumers can:-

- Budget daily / monthly spend
- Save unused allotments for future use *
- Monitor consumption online *

* Dependant on service provider

Data logging feature

- Records hourly consumption

- Detects leaks (night-flows)
- Allows load profiling
- Helps in payment dispute resolution

Features

- Two configurable daily opening times
- Laptop interrogation, testing and re-programming in the field using the low cost Field Service Terminal (FST)
- Optional Automatic Meter Readings by radio link
- Supplied pre-programmed to order, and can be reprogrammed in the field or stores
- Can be set to daily or monthly limitation
- Individual customer leak detection
- Hourly consumption logging (90 days FIFO)
- Incorporates tamper-proofing measures
- Can be set to indefinite daily / monthly carry-over
- Management of delinquent customers
- Remote data capture and meter control (AMI)
- Water management by volume and / or time
- Logging

Technical Specifications

GENERAL PARAMETERS

- Working pressure: 0.3 -10 bar
- Ambient temp. max: 60°C
- Fluid temp. max: 60°C
- Plastic parts: Reinforced nylon
- Diaphragms: EPDM

Flow Rates and pressure drops

HEAD LOSS

Below is listed the head loss in meters with respect to the flow rate in m³/hr

Flow (m ³ /hr)	1	2	3	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
15 mm	1.00	1.30	2.00	2.50	4.50														
25 mm	1.00	1.30	2.00	2.40	4.00														
25 mm	0.36	0.36	0.42	0.43	0.72	1.06	1.49	2.04	2.68	3.44	4.30	5.26	6.33	7.50	8.77	10.15	11.63	13.22	14.90
50 mm	-	-	-	0	0.38	0.83	1.34	1.93	2.60	3.34	4.16	5.07	6.06	7.15	8.33	9.60	10.97	12.45	14.02

Further Information

Please visit our website at www.utility-systems.co.za

For related information please see our Water Management Device (WMD), Metering Systems, Field Service Terminal (FST), and Flow Limiter brochures.