



THE STS PRE-PAID METERING SYSTEM

Standard Transfer Specification (STS) Pre-paid water meters manufactured using standard cryptography keys.

The STS pre-paid water meters are designed to communicate via secure message protocol with a Point of Sale. Water credit can be purchased from any designated vending system supplier.

The meter consists of an intelligent electronic module for the delivering of prepaid water. The module is mounted in either an above-ground - or wall-mount water meter box.

Mounted inside the consumer's house is a keypad that communicates with the electronic module via radio communications link.

This product complies with the STS Association, NRCS and ICASA specifications. Credit can be purchased from any participating STS compliant vending supplier.

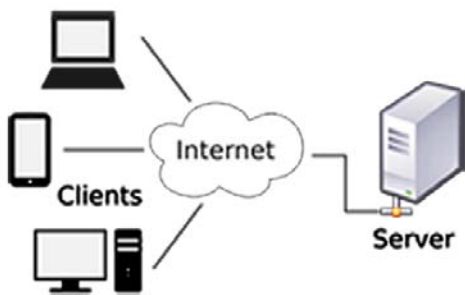
Zonke lite or Wallmount Prepaid STS Water Meter.



How the System Works

Consumer purchase of water credit.

Token code transfers credit to DWD.



Prepaid Meter Modes

- Debit -
- Fixed Water Dispenser - or
- Conventional Mode

A convex shaped above ground meterbox or wallmounted meterbox.

The meterbox consist of:

- Maximum admissible pressure: 16 Bar
- A 15mm (or 20mm) Class "C" or Class "D" polymer semi-positive rotary piston water meter.
- UV stabilized polymer protective casing.
- Shut off valve
- A municipal 3- ways ballcock positioned before the meter and consumer 2-way ballcock positioned downstream of the water meter (Available on request).
- Dual key operated locking mechanisms operated by unique keys, and is removable for meter maintenance.
- Reinforced 20mm female threaded outlet connectors
- Electronic module which includes a reed switch, tamper switch, battery and all process components.

Electronic Controller:

- Built in display
- Bi-directional 868mHz radio communications link
- Records and stores consumption data over an extended period
- Able to indicate possible water leaks
- IP68 certified
- Battery life up to 10 years
- Various credit registers
 - Purchased Credit
 - Free Basic Water
 - Social grant
 - Lifeline
 - Emergency and Test Credit



Consumer Keypad:

- Liquid crystal display (LCD)
- Displays the credit type being delivered, i.e. Paid Credit, FBW, Emergency, Lifeline, etc.
- Displays credit available in Cubic Meters (m³) to a minimum resolution of 0.001 m³
- Allows for additional messages such as:
 - Error code, locked, leak, etc.
 - Notifies the consumer of low credit or free basic water (FBW)
 - Battery status of the CIU
 - Valve open or closed status
 - Possible water leak indication
 - RF communication link status
- Battery life up to 5 years
- User replaceable batteries (subject to keypad model)



Automatic Meter Reading (AMR) capabilities:

- User defined fields, where the user can select from a list of data fields and only download the required data
- No duplication of meter date (the same meter will not be read more than once)
- Support Walk-by, Drive-by or Fixed Network data collection
- Detection of un-read meters (Meter tick list)
- Date/Time Stamp for each record uploaded
- Data can be imported into customer's financial system for consumption reporting

Specifications

Smart Water Management device

A plastic meter box with convex side walls for additional stability that is 800 mm high x 280mm long x 100mm wide with a LCD display positioned inside the lid of the meter box. The meter box contains a class "C" 15mm polymer bodied volumetric water meter complete with pulse output approved by S.A Trade Metrology to SANS 1529-1:2003. The working pressure of the meter box assembly is 1600 Kpa. All internal joints are fusion welded. All internal plumbing pipes are SANS 15874 approved 25mm Ø (OD).

The Electronic Controller is fitted with a Pulse Sensor connected to the water meter. The Pulse Sensor pulses per the volume of water consumed. A latching or motorized ball valve is used to control the water supply through the meter. The built in AMR module has an internal antenna with no loose hanging wires and can achieve line of site range of 600 meters.

The Consumer keypad is mounted inside the consumer's house and is fitted with replaceable AA batteries. It links up with the Electronic controller via RF communication.

Approval

STS Association: IEC 62055-41 and 62055-51

NRCS: SANS 1529-1:2006 and SANS 1529-9:2008

ICASA: EN 300 220, EN 301 489-1, 3 & EN 60950

Warranty

- All goods are tested and inspected prior to dispatch.
- In the event of defects resulting from faulty workmanship or materials, such goods will be replaced/ repaired at our discretion, free of charge at the factory, but no responsibility will be accepted for any direct or consequential damage.
- This warranty covers the malfunction of a correctly installed item due to a manufacturing fault, but does not cover wear and tear considered normal at the locality of installation.
- Product warranty 12 months from date of delivery, which shall be the date on the invoice.

Elster Kent Metering (Pty) Ltd

PO Box 201, Auckland Park 2006

JOHANNESBURG	Tel: (011) 470-4900	Fax: (011) 474-0175
DURBAN	Cell: 082 455 3553	
CAPE TOWN	Cell: 082 455 3551	
BLOEMFONTEIN	Cell: 082 457 5945	
PORT ELIZABETH	Cell: 082 458-3439	

© 2015 Honeywell International Inc.
All Rights Reserved. The company's policy is one of continuous improvement and the right is reserved to modify the specifications without notice.

www.elstermetering.co.za
www.honeywell.com

Honeywell