

# PREPAID WATER METERING

- **Water Demand Management**
- **STS Compliant Prepaid Water**
- **Free Basic Water**
- **Lifeline Credit**

## Customer Interface Unit (CIU)

A wireless Consumer Interface Unit (CIU) installed inside the house raises water usage awareness by providing credit remaining, consumption monitoring and entering of credit tokens.

## Remote Monitoring

Using the Field Maintenance Terminal (FMT) software application with the PWC400 USB device provides remote meter configuration, diagnostic interrogation and Drive-AMR data collection.

## Fixed Network AMI

Sigfox is a nationwide IOT network aimed at the metering market. The Sigfox enabled CIU transmit a data packet once a day over this network to a cloud server. Utilities and management companies can log in on the SKYVIEW remote monitoring platform to monitor the performance of their installed prepaid meters from the convenience of their desks. Information includes meter reading, consumption, possible leak, valve and credit status.

## Modes of Operation

- Prepaid
- Postpaid
- Free Basic Water
- Conventional

## Credit Registers

- Paid Credit
- Free Basic Water
- Life Line
- Indigent Grants
- Emergency Water

## Programmable for

- Daily/Monthly Allowance
- Time to open/close
- Accumulate unused water
- Lifeline delivery
- Emergency Water quantity
- Conservation Limit

## Consumer Management on CIU

- Credit type being used Paid Credit, Free, Lifeline, etc.
- View unique Prepaid Number to purchase more credit
- Electronic meter totalizer reading
- History of last 10 tokens, with credit value and Date
- Consumption for the current day and month
- 3 Month Average Consumption
- Monthly consumption history over the last 3 months
- Identify possible water leaks on property
- Lock and unlock the meter, stopping water when not at home
- Resettable User Totalizer for event specific measurement
- Credit-to-date and consumption-to-date Totals
- Activate Emergency Credit



Wallmount Meter Box

## Features

- Split Meter System
- IEC 62055-41 & -51 Compliant (STS)
- Daily or Monthly Free Basic Water
- Lifeline Mode
- Emergency Water
- Leak Detection with Leak Size (L/h)
- 90 Days Hourly Data Logger
- Water Conservation Limit
- Up to 10 Year Battery Life
- Field Replaceable Battery Pack
- Tamper Detection
- Utility and Consumer Lock



Above Ground Meter Box (AGB)



PWC250 CIU

### CIU Features

- Sigfox Ready (Option)
- Indicates Valve Status & Battery Low
- Leak indication with Size of Leak
- STS Prepaid Water Credit Tokens
- Credit Low indication
- Wall-mount or Handheld
- Secure Encrypted Communications
- Keypad Lockout
- Up to 5 year Battery Life
- User Replaceable Batteries

### CIU Specifications

- Large 1.5" LCD with user friendly icons
- 868 MHz Radio Frequency
- Bi-directional radio communications
- Internal Antenna
- Radio range up to 500m Line of Sight
- Wall mount or Handheld
- IP52 Dust / Water Resistant Rating
- Dimensions: 78mm(w) X 142mm(h) x 21mm(d)
- Temperature Range -10 °C to 55 °C



PWC200 LCD

### PWC200 Specifications

- Large 1.8" LCD
- Optical Communications Bi-directional Port
- Internal Antenna
- IP68 (Submersion 1 meter for 2 hours)
- Temperature Range -10 °C to 55 °C
- Field replaceable battery with up to 10 year life
- Max flow rate 3600 Litres/hour
- Totalizer resolution 0.0005m<sup>3</sup>
- Measurement – Cubic Meters (m<sup>3</sup>)
- Pressure Range: 0.5 to 15 Bar



PWC200 with Shut-off Valve



PWC400 Data Collector

### SENSUS 220C Water Meter Specification

- Volumetric Piston Type
- SANS 1529-1 / ISO 4064 / OIML R 49
- Class C Accuracy
- Inlet and outlet diameter 15mm
- Minimum Flow Rate (Q<sub>1</sub>) 15.6 L/h
- Transitional Flow Rate (Q<sub>2</sub>) 25.0 L/h
- Permanent Flow Rate (Q<sub>3</sub>) 2.5m<sup>3</sup>/h
- Overload flow Rate (Q<sub>4</sub>) 3.125m<sup>3</sup>/h
- Temperature Range up to 40°C
- Pressure Class (PN) 16bar
- Magnetic Pulse Output 0.5L/pulse

### Daily Uplink on Sigfox Network

- Electronic Meter totalizer reading in m<sup>3</sup>
- Credit Status – Sufficient, low or no credit
- Credit mode – Paid, FBW, Special, Lifeline, Emergency
- Meter mode – Prepaid, Post paid, Conventional, FWD
- Valve position - Open or Closed
- Tamper status, with date/time stamp of last tamper
- Leak indication, with leak size in Litres/h
- Battery status on both PWC and CIU
- Lock status – Utility or Consumer lock
- Error code, if present
- Month to date & previous month consumption



Surface Box

 Serial Nr.: 1864	 <b>READY</b>	 IEC62055-41 & IEC62055-51	<b>N.R.C.S.</b> SANS1529-1:2006 & SANS1529-9:2008	 EN300 220, EN301 489-1, 3 & EN60950
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