

SmartBowser™

Water Filling Station System



SmartBowser™

The **SmartBowser™** Water Filling Station System provides state of the art electronics and metering technology to control and regulate Water Filling Station processes. This bespoke system centres around the tried and tested metering and prepayment technologies, to provide a system suitable and scalable to the customers' needs.

The SmartBowser™ Water Filling Station System

SmartBowser™ provides a complete solution for Water Filling stations from managing customer accounts and credit to dispensing accurate volumes of water to waiting bowzers.

Installations are flexible and expandable so can cater for single un-manned sites to large stations with utility staff operating many filling lanes.

Each component of **SmartBowser™** combines to form a sophisticated, reliable and accurate system to control the delivery and billing of every drop of water.

Customer accounts and billing is handled by the user-friendly **SmartBowser™** software at Head Office or individual filling station offices. Crucially, the software tightly controls credit and can be configured to suit individual customer payment methods.

On site, Pump Control Units (PCU) manage the delivery of water. Operators must authorise their visit using a swipe card, key fob or pin and credit levels are immediately checked with the **SmartBowser™** software. The PCU activates the flow of water to fill authorised bowzers and provides receipts to confirm delivery.

Market leading electronic **SmartFlow™** water meters guarantee accurate measurement of water, as it moves from water storage areas to each filling point.

- Accurate billing
- Excellent revenue protection
- Flexible customer payment schemes
- Immediate customer credit checks
- Scalable station installations
- Staffed or un-staffed filling stations
- Management reports
- Range of filling authorisation methods

Pump Control Unit

The Pump Control Unit (PCU) is directly connected to the meters and valve authorising flow.

The PCU is the central component of the system linking the prepayment software, the electromagnetic meters, control valve and pump.

The PCU maintains a tight control over water delivery by communicating with filling lane meters and SmartBowser™ software to ensure only authorised water volumes are delivered.

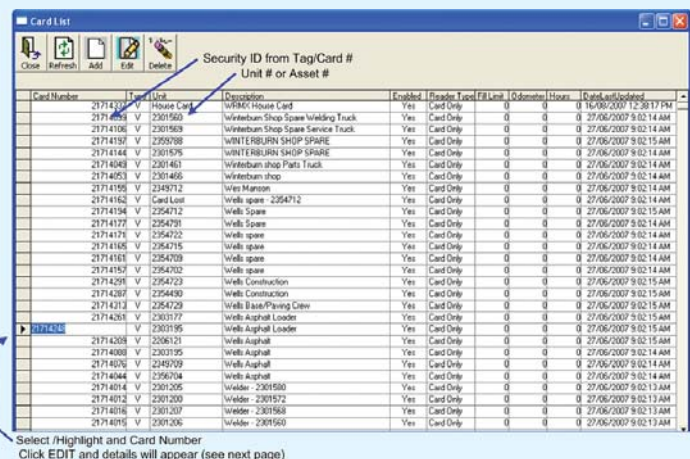
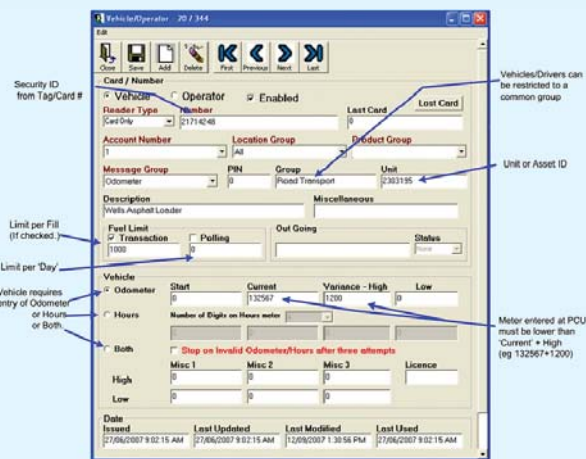
Pump Control Unit



- Activated by either unique access code, swipe card, or key fob
- Real time credit check against customer account before delivery starts
- Can be sited in station office or filling lane
- Customer needs to specify volume of water required before delivery
- PCU printer available to produce receipts

- LCD on PCU displays the following:
 - Credit on Card
 - Remaining water available
 - Water supply valve - open / closed

SmartBowser™ Software



SmartBowser™ software is an essential part of the filling station system providing a user-friendly way to manage customer records and billing.

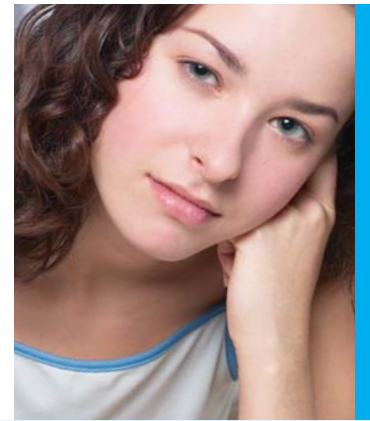
Real time transactions provide good revenue protection for utilities and clear credit information to customers.

- Multiple payment methods are available:
- Prepayment at the filling station offices
 - Prepayment on company account
 - Post pay on company account
 - Manages customer records and credit balances
 - Located either in local office or networked to a head office
 - Communicates with PCU, either by hard cable or modem

- Customer payments are made within the system, updating available credit in real-time
- Updates transactions and limits to PCU, which in turn, returns sales data to update records
- Produces invoices for customers' water usage

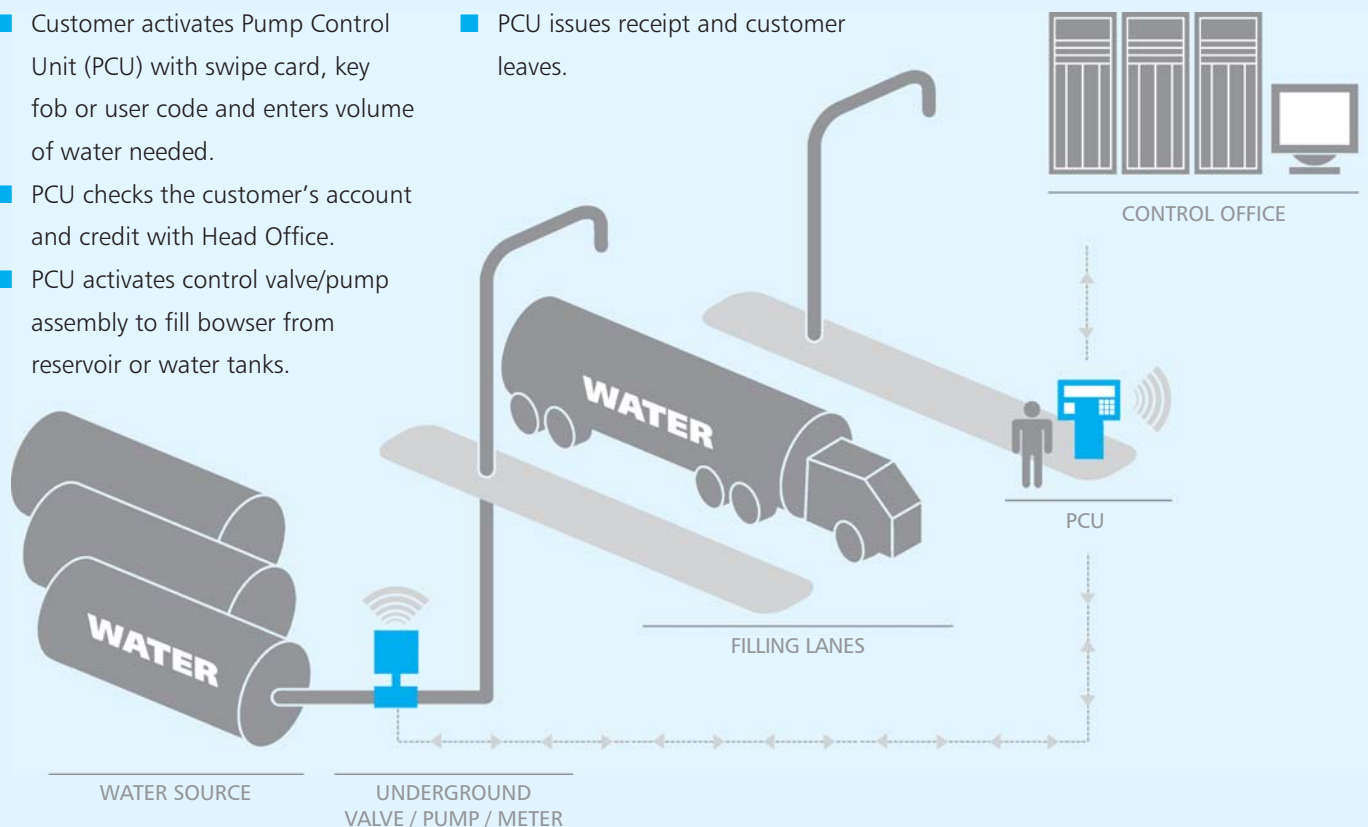
SmartBowser™ Features

- Each PCU can operate up to 8 lanes simultaneously
- Each lane has a meter, together with a control valve and pump (if required)
- Each lane can accommodate any flow rate from 3m³/hr up to 1000m³/hr
- Water reservoirs can either be a ground storage facility or a water tower
- The delivery method is by an 'up and over' system for filling the tanker from above
- Installations can vary in size and delivery volumes
- The water filling station will typically consist of an office, a computer for access to **SmartBowser™** software to manage customer accounts and perform transactions
- Full transaction audit trails
- Real-time credit updates and checks
- Over-ride shut off valves in case of emergencies
- Water meters unaffected by grit and do not measure air, which provides for accurate billing and delivery



SmartBowser™ Operation

- Customer positions Bowser under filling nozzle.
- Customer activates Pump Control Unit (PCU) with swipe card, key fob or user code and enters volume of water needed.
- PCU checks the customer's account and credit with Head Office.
- PCU activates control valve/pump assembly to fill bowser from reservoir or water tanks.
- PCU stops flow when authorised volume reached.
- PCU issues receipt and customer leaves.



Metering Technology

Unaffected by particulates and with no moving parts to wear the water meter used in SmartBowser installations are 100% accurate for their lifetime.

Guaranteed not to record air, customers know that they are only every billed for the water they use.

The advantages:

- Unaffected by grit and particulates
- Does not measure air
- Retains 100% accuracy throughout its entire lifetime
- Prevents losses in billing revenue
- No spare parts required
- No unnecessary maintenance required





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