

# iPERL™ Water Management System

## Specifications

### TYPE

Solid state, battery operated electromagnetic flow measurement system with a hermetically sealed, glass covered, electronic register with a programmable 9-digit display.

### CONFORMANCE TO STANDARDS

Must conform to American Water Works Standard C-700 and C-710 as most recently revised with respect to accuracy and pressure loss requirements, or other appropriate American Water Works Standard.

Must be compliant with ANSI/NSF Standard 61 Annex G.

### REGISTER

The register must be an electronic device encapsulated in glass with 9 programmable digits utilizing a liquid crystal display (LCD). It will have indicators for flow direction, empty pipe, battery life and unit of measurement. The register must be hermetically sealed with a heat tempered glass cover and be tamper-resistant. The register shall not be removable from the measuring sensor. The register shall utilize a magnetic coupling technology to connect to a touch read, radio read or fixed base meter reading system in either an inside or pit set installation.

### MEASURING ELEMENT

The measuring element shall be made of a non-corrosive, lead-free glass fiber reinforced, PPS (polyphenylene sulfide) based resin. A battery powered magnetic flow sensor utilizing silver/silver chloride electrodes will be utilized to measure the velocity of the water which is linearly proportional to the volume. The measuring element will have no moving parts and will be specific for each size.

### EXTERNAL HOUSING

The register and measuring element will be an integrated unit housed within a thermal plastic external casing. This integrated unit will not be removable from the external housing. The systems shall have the size and direction of water flow through the system imprinted on the external housing.

### STRAINERS

Each system must be provided with a replaceable, corrosion-resistant synthetic polymer strainer screen.

### ACCURACY AND HEADLOSS TESTS

Systems shall conform to current AWWA C-700 and C-710, current revision, or other appropriate American Water Works Standard, test flows, head-loss and accuracy standards.

### PRESSURE CAPABILITY

System shall operate up to a working pressure of 200 pounds per square inch (psi), without leakage or damage to any parts. The accuracy shall not be affected by variation of pressure up to 200 psi.

### PERFORMANCE WARRANTIES

In evaluating bid submittals, warranty coverage will be considered. All bidders are required to submit their most current nationally published warranty statements for water meter maincases, registers and measuring chambers.

### SHIPMENT VERIFICATIONS

A statistically controlled sample of each shipment will be tested by the utility to insure each shipment meets the utility performance and materials specifications.

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