

# Quickly Communicate Critical Data

## Neptune® E-CODER® Solid State Absolute Encoder



The Neptune® E-CODER® solid state absolute encoder register provides consumption data, including insight into flow direction, flow rate, and leak status – all without the need for a battery. The integrated-circuit design of the E-CODER register ensures one data source for both visual and remote reads with no possibility of mismatch.

- Provides superior water delivery insight
- Easy installation that requires minimal operator training
- High-resolution reading to detect ultra-low flows
- Leak, tamper, and reverse flow flags for improved operational efficiency
- Easy-to-read 9-digit LCD
- On-screen flow rate and flow direction for streamlined diagnostics

## Options

### Sizes

- Available for all sizes and makes of current Neptune mechanical meters

### Electronic Accessory Equipment

- R900 Wall and Pit Endpoints
- Cellular Wall and Pit Endpoints
- LoRaWAN Wall and Pit Endpoints

### Data Collection Systems

- Pocket ProReader
- Advantage II Probe
- Trimble Ranger 3
- Trimble Nomad / R900 BCT
- Belt Clip Transceiver
- Mobile Data Collector
- R900® System Gateways

### Units of Measure

- US Gallons (GPM), Cubic Feet (GPM), Cubic Metres (LPM)

### 9-digit local registration

### 8-digit remote registration

### 4-8 digits remote registration (TouchCoupler version)

## High Resolution (8-digit reading)

	Size	G	ft <sup>3</sup>	m <sup>3</sup>
T-10 (includes disc side of TRU/FLO)	5/8" x 3/4", 1"	0.1	0.01	0.001
T-10 (includes disc side of HPPIII)	1 1/2", 2"	1	0.1	0.01
HP Turbine (includes FS Turbine, HPPIII, Turbine Side of TRU/FLO)	1 1/2", 2", 3", 4"	1	0.1	0.01
HP Turbine (includes FS Turbine, HPPIII, Turbine Side of TRU/FLO)	6", 8", 10"	10	1	0.1

## Technical Specifications

### Materials

- Inside Set Housing: polycarbonate
- Pit Set Housing: copper shell and glass lens
- Connecting wire: 3-lead #22 AWG
- Remote receptacles: ABS, nylon, and polycarbonate

### Distance

- A single register may be located with up to 500 feet (152 m) of wire from receptacle or endpoint.

### Environmental Conditions



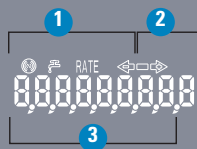
- Operating temperature: 14°F to 149°F (-10°C to 65°C)
- Storage temperature: -40°F to +158°F (-40°C to +70°C)
- Operating humidity: 0 to 100% (pit version)

## Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

## System Compatibility

- Compatible with Neptune R900 System. Also available as E-CODER®)R900i™ for an integrated radio solution and E-CODER®)TC for Sensus TouchCoupler compatibility.

	<p><b>FLOW INDICATOR</b> Shows the direction of flow through the meter:</p> <p>ON Water in use. OFF Water not in use. Flashing Water is running slowly. (-) Reverse flow. (+) Forward flow.</p>
	<p><b>LEAK INDICATOR</b> Displays a possible leak:</p> <p>OFF No leak indicated. Flashing Intermittent leak indicates that water has been used for at least 50 of the 96 15-minute intervals during the previous 24-hour period. On Continuously Indicates water use for all 96 15-minute intervals during the previous 24-hour period.</p>
<b>RATE</b>	<p><b>RATE OF FLOW</b> Average flow rate is displayed every twelve (12) seconds on LCD display.</p>
	<p><b>LCD DISPLAY</b> Nine-digit LCD displays the meter reading in billing units of measure: U.S. gallons, cubic feet, Imperial gallons, or cubic metres.</p> <p>1 E-CODER Basic Reading/Customary 6-digit remote reading 2 Customary sweep hand digits 3 E-CoderPLUS Reading (8-digit remote reading)</p>



- Solar Panel 1
- Date of Manufacture 2
- LCD Display 3



Neptune Technology Group  
1600 Alabama Highway 229  
Tallahassee, AL 36078  
800-633-8754 f 334-283-7293