



# ENHANCED R900®

WALL OR PIT MIU

R900 Wall MIU

The R900® MIU provides water utilities with a reliable and economical RF reading solution.



R900 PIT MIU

### BUILD ONTO YOUR EXISTING TECHNOLOGY INVESTMENT

As part of Neptune's R900® System, the R900® meter interface unit (MIU) was designed for flexibility. Like its fellow system components, the R900 MIU works seamlessly with prior generations of equipment. At the same time, it allows your utility to incorporate innovations as you need. A single radio frequency unit that can transmit meter reading data using any reading method – walk-by, mobile, or fixed network – the R900 MIU never has to be reprogrammed. That makes migrating to new technologies simple whenever your utility is ready to implement them. When it's time to add new features or functionality, you can do it at your own pace, confident of continual system support without stranded assets.

### CONSERVE RESOURCES, SIMPLIFY OPERATIONS

With the pressures your utility faces, Neptune knows you don't have time, personnel, water, or revenue to waste. That's why we designed the R900 MIU and the rest of the system for ease of use. In addition, the R900 MIU's interleaved, high-power, 1-watt fixed network message reduces infrastructure costs while allowing reading in any mode – without separate reading systems, site visits, or any type of MIU reconfiguration. The R900 MIU provides fixed network transmission capability at all times, while it also transmits readings for walk-by or mobile methods. Making operations even easier, the user-friendly, intuitive R900 System design requires only minimal training, providing you flexibility to adapt to changes in your workforce and reallocate staff to different departments as needed.

### REDUCE COMPLAINTS, DELINQUENCIES, AND WRITE-OFFS

Neptune's R900 MIU greatly improves access to meter readings, while delivering detailed consumption profile information as well as alerts for leak or backflow, helping your utility more proactively identify and resolve customers' questions. This accurate, timely data can be used to head off high bill complaints, reduce delinquent payments, and eliminate write-offs.

Because detailed data logging information from the last 96 days is always available, just waiting to be transmitted by the R900 MIU when needed, personnel can take care of a customer's issue then and there, in a single site visit. Not only can the data boost efficiency and customer service, but it will also help your utility make better-informed decisions going forward.

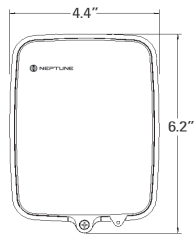
### KEY BENEFITS

- Facilitates Migration to AMI:
  - *NEW* 1 Watt fixed network message reduces infrastructure costs
  - Interleaved mobile and fixed network messages facilitate migration without changing the "modes" in the MIU
- Reduces Non-Revenue Water:
  - Provides leak history/diagnostics
  - Enables proactive leak notification
  - Provides hourly consumption data
  - Improves meter reading accuracy
  - Eliminates estimated reads
- Identifies Potential Theft:
  - Tamper detection
  - Reverse flow detection
  - Identifies significant periods of zero consumption
- Simplifies Installation Process
  - Easy to install/no programming required
  - Reduces labor cost

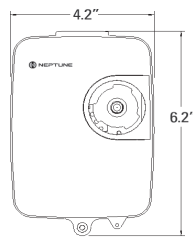
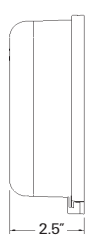
### TECHNICAL SPECIFICATIONS

- Electrical Specifications:
  - MIU power: Lithium battery with capacitor
- Transmitter Specifications:
  - Two-way MIU
  - Transmit period (interleaved mobile and fixed network messages):
    - Standard mobile message every 14 seconds at 100 mW
    - Standard fixed network message every 7½ minutes at 1 Watt
  - FCC verification: Part 15.247
    - Transmitter channels: 50; frequency-hopping, spread-spectrum
    - Channel frequency: 910 to 920 MHz
  - Encoder register reading interval:
    - Every 15 minutes
  - Data logging interval:
    - 96 days of hourly data

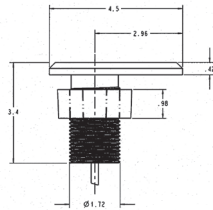
**DIMENSIONS**



**R900 Wall MIU**



**R900 Pit MIU**



**R900 Pit Antenna**

The R900 works with route management software to provide a complete meter reading solution with advanced functions for water utilities.



**TECHNICAL SPECIFICATIONS**

- Environmental Conditions:
  - Operating temperature: -22°F to +149°F (-30°C to +65°C)
  - Storage temperature: -40°F to +158°F (-40°C to +70°C)
  - Operating humidity: 100% condensing
- Antennas
  - Wall MIU: standard internal antenna
  - Pit MIU: standard through-the-lid antenna
    - 18" Coax
    - 6' Coax
    - 20' Coax
- Encoded Register Compatibility:
  - Neptune ARB® V, ProRead™, and E-Coder®
  - Sensus ECR II, ICE, iPerl, Electronic Register and OMNI
  - Hersey/Mueller Translator
  - Badger ADE and HR E/LCD
  - Elster/AMCO InVision (Sensus protocol version)

**OPTIONS**

- System Compatibility
  - Handhelds with R900® Belt Clip Transceiver - walk-by RF
  - MRX920™ - mobile RF
  - R900® Gateways - fixed network RF

**WARRANTY**

- 20 years (10/10); refer to specific Warranty Statement

Neptune engages in ongoing research and development to improve and enhance its products. Therefore, Neptune reserves the right to change product or system specifications without notice.

Neptune Technology Group Inc.  
1600 Alabama Highway 229  
Tallahassee, AL 36078  
USA  
Tel: (800) 633-8754  
Fax: (334) 283-7293

Neptune Technology Group (Canada) Ltd.  
7275 West Credit Avenue  
Mississauga, Ontario  
L5N 5M9  
Canada  
Tel: (905) 858-4211  
Fax: (905) 858-0428

Neptune Technology Group Inc.  
Avenida Ejercito Nacional No 418  
Piso 12, Despacho 1203  
Colonia Polanco V Sección  
C.P. 11560  
Delegación, Miguel Hidalgo  
Mexico D.F.  
Tel: (525) 5203-4032 / (525) 5203-6204  
(525) 5203-5294  
Fax: (525) 5203-6503

