



R900G Endpoint



True to our vision to provide a complete AMR solution for water, electric and gas utilities, Neptune has developed the R900G radio frequency endpoint retrofit module for various residential and commercial diaphragm natural gas meters. The R900G endpoint combines the field-proven R900® technology into a fully integrated field retrofit module for natural gas meters that is the backbone of Neptune's ARB® Utility Management System™.

The R900G endpoint combines unlicensed 900 MHz, frequency-hopping, spread-spectrum technology with an easy-to-install platform to meet the performance and application requirements of any size utility. The R900G endpoint provides customers with a reliable and economical RF meter reading solution through improved meter reading accuracy and efficiency, increased meter reading safety, and enhanced customer care. The R900G provides customers with a low cost of ownership by offering high output power to maximize range and read success rate as well as reduced meter reading time.

The R900G endpoint reuses the existing gas meter index to allow for field installation even while gas is flowing through the meter, making the AMR upgrade seamless to the customer as well as easy to install and justify. During installation, the R900G endpoint is programmed with the gas meter manufacturer, pressure compensation, test hand index, and current gas meter reading so that account history is maintained. The R900G endpoint encodes gas consumption, MIU ID number, tamper information, and value-added data from the gas meter and transmits the data to a remote handheld or mobile data collection device.

In addition to the four-, five- or six-digit meter reading, the R900G provides advanced tamper detection. The R900G endpoint provides tamper detection in the form of the following: 1) index removal from the meter; 2) magnetic tampering; 3) reverse flow indication; and 4) maximum number of consecutive days of no flow. The reverse flow detection and the maximum number of consecutive days of no flow over the previous 35 days enhance customer service and improve operational efficiencies for gas utilities.

KEY FEATURES

- High output power
- No FCC license required
- Easy to install
- Environmentally protected electronics
- Field-replaceable battery
- Long-life lithium battery with capacitor
- Value-added data (tamper, reverse flow, and no consumption)
- 20-year warranty (10 full/10 prorated)

KEY BENEFITS

- Provides advanced tamper detection
- Improves meter reading accuracy and efficiency
- Addresses "hard-to-read" meters
- Increases meter reader safety
- Minimizes meter read time
- Enhances customer care
- Reduces cost of ownership
- Reduces installation cost and time





TECHNICAL SPECIFICATIONS

- Electrical Specifications:
 - Power: Lithium battery with capacitor
- Transmitter Specifications:
 - Transmit period: Every 14 seconds
 - Transmitter channels: 50
 - Channel frequency: 902 to 928 MHz spread spectrum
 - Output power: Meets FCC Part 15.247
 - Product identification: Numeric and bar coded MIU ID number
- Environmental Specifications:
 - 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: 0 to 95% non-condensing
- Regulatory and Standards:
 - FCC verification: Part 15.247
 - Safety approvals: Intrinsically safe per FM and UL Class I, Division 1, Groups C and D
- Physical
 - Residential Direct-Mount
 - Materials: Polycarbonate housing and cover
 - Commercial Direct-Mount
 - Materials: Polycarbonate housing
- Compatibility

RESIDENTIAL MODELS

American® Meter
AL/AR/AC/AM-175/250/425

Sensus®/Invensys®/Rockwell®/Equimeter®
R-175/200/250/275/315/415

Actaris®/Sprague®
175/250/400A METRIS

COMMERCIAL MODELS

American® Meter
AC-630, AL-800/AL-1000, AL-1400/2300/5000

Sensus®/Invensys®/Rockwell®/Equimeter®
R-750/1600/3000/5000, 10000

Actaris®/Sprague®
675A, 800A, 1000A

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