



A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

R900[®] Gateway v4 Fixed Network Data Collector



Streamline Measurement and Boost Efficiency

Maximize the efficiency of your workforce – not only by automating meter reading but also by freeing up time for other tasks. Like the other components of Neptune's R900[®] System, the R900[®] Gateway fixed network data collector is designed for quick installation, ease of use, and flexibility. The R900 Gateway collects metering data as well as daily leak, reverse flow, and days of no flow alerts from all E-CODER[®]-equipped meters. The R900 Gateway's software-defined radio technology can process eight (8) meter readings simultaneously and gather 360 readings per second – optimizing your fixed network with high throughput reading performance; especially in high-density R900[®] deployments. The data you collect is accurate, timely, and simple to share with other departments – so you can turn it into meaningful information that will help identify hidden causes of loss and optimize efficiency.

Migrate Backward and Forward With Total Confidence

Get the most value from your current assets, both infrastructure and workforce, through Neptune[®] systems that allow you to migrate at your own pace from mobile automatic meter reading (AMR) to advanced metering infrastructure (AMI). Providing fixed network functionality, the R900 Gateway is easily integrated into the system with mobile methods of reading your existing R900 endpoints, so that you can choose the technology you need, where you need it – without a need for special programming or reprogramming of MIUs. The R900 Gateway supports the R900 System's 1 Watt fixed network message from endpoints, reducing infrastructure costs.

Resolve Customer Issues Proactively with Detailed Data

The R900 Gateway gives your utility simplified access to information that will help you identify and resolve water-related issues quickly and easily. You'll be able to track detailed hourly water consumption for individual accounts and receive alerts that will help you proactively improve service to your customers. Save them – and your utility – time and money, and inform customers of excessive water usage to head off high bill complaints, reduce delinquent payments, and eliminate write-offs.

KEY BENEFITS

Facilitates Migration to AMI

- Supports the 1 Watt fixed network message from R900 endpoints, reducing infrastructure costs
- Migrate at your own pace – your system can be read by any combination of mobile and fixed that you choose
- No reprogramming of endpoints required to migrate to fixed network reading

Simple Access to Powerful Data

- On-demand read capability – obtain a reading whenever you need it
- Daily leak, reverse flow, and days of no flow alerts from E-CODER-equipped meters

Improves Meter Reading Efficiency

- Software-defined radio (SDR) technology capable of processing eight (8) readings simultaneously
- Optimal performance in high-density R900 environments – capable of 360 readings per second

No Stranded Assets

- Maintains compatibility with existing R900s deployed
- Utilizing the power of our software-defined radio technology, all existing R900 Gateway v3 units can be easily updated to obtain R900 Gateway v4 functionality

Specifications

Receiver

- 910-920 MHz
- 50 channels
- Processes 8 readings simultaneously
- Processes 360 readings per second
- Capable of handling up to 25,000 R900s

Installation Options

- Rooftop
- Pole (2" – 16" diameter)
- Wall
- Water towers
- Street lights

Power Supplies

- 100-140 VAC
- 150W Solar
- 220W Solar

Battery Backup

- AC version – UPS provides 8 hours battery backup
- Solar version – 3-day backup battery

Backhaul Options

- Multi-carrier cellular modem
- EVDO Rev A (CDMA)
- 1xEVDO Rev 0 (CDMA)
- 1xRTT (CDMA)
- UMTS/HSPA (GSM)
- EDGE/GPRS (GSM)
- Ethernet
- Private LAN compatibility via Ethernet connection

Environmental

- NEMA 4X enclosure
- Operating temperature: -22°F to +140°F (-30°C to +60°C)
- Storage temperature: -40°F to +158°F (-40°C to +85°C)
- 0-95% non-condensing humidity

