

Neptune's latest walk-by data collector, the R900® Belt Clip Receiver (R900 BCR), provides the most advanced feature set of any walk-by product on the market. From basic meter reading functions to exciting new smart phone apps,



the R900 BCR is yet another example of Neptune's commitment to maintain legacy product compatibility while continuing to introduce new features and technology.

Historically, receivers for walk-by meter reading were integrated into the handheld; but with this separate Bluetooth-paired transceiver, Neptune can ensure utilities' longer-term compatibility with rapidly changing handheld technology. Additionally, utilizing a separate device allows the capabilities of the receiver to be increased. In fact, the R900 BCR has a 50-channel receiver capable of processing eight readings simultaneously and 70 readings per second. With such a powerful receiver, readings in range are processed more quickly which increases efficiency and maximizes Message Success Rate (MSR), especially in high-density R900 environments.

With Neptune's ARB[®] Utility Management Systems[™], utilities can read their meters using a variety of data collection technologies – walk-by, mobile, or fixed network. The R900 BCR, when connected to a Trimble Nomad or CE5320B handheld, allows the meter reader to collect readings from Advantage and Pocket ProReader probes or via radio frequency (RF) from the R900 MIU. This walk-by solution can be used as the primary method of data collection or to supplement an R900 mobile AMR or R900 fixed network AMI system.

The N_SIGHT[™] R900[®] software remains as simple to use as ever – the only difference is that the handheld now pairs via Bluetooth with the receiver. Once pairing has taken place the first time, the handheld will automatically pair with the same receiver the next time the product is powered on.

In addition to its use for route-based meter reading with a Trimble Nomad or CE5320B and N_SIGHT R900 software, the R900 BCR has these advanced features:

RF Test with Android Device

The new RF Test application for Android allows utilities to connect to the R900 BCR from an Android phone or tablet device and receive reading/flag information for one specific R900 or from all R900s within range. The intuitive user interface clearly displays the MIU ID, reading, MIU type, a count of how many times the reading is received, and E-Coder[®] flag status.

Unattended Operations (Beta Feature)

Many utility functions require personnel to spend a great deal of time in the field. These employees are often driving or walking within range of many R900s. When an R900 BCR is placed in Unattended Operations mode, it simply

R900[®] BELT CLIP RECEIVER

 Bluetooth pairing with meter reading handheld

FEATURES

KEY

BENEFITS

KΕΥ

- SD card backup of meter reading data
- USB charging and communications
- Software Defined Radio (SDR) technology
- Android application for RF Test mode functionality
- Unattended Operations mode
- Optimal RF performance in high-density R900 environments – reduces meter reading time
- Use Android phone or tablet for RF test functionality – eliminates the cost of rugged handhelds for simple test functions
- Supports full work day with highcapacity battery
- Unattended operations mode allows utility personnel to read R900s while performing other non-meter-readingrelated job functions
- Fully capable of operations in harsh environmental conditions



RF Test Splash Screen

RF Test Reading Screen

listens for R900 transmissions and stores the readings it hears onto its SD card. From there, the readings can be extracted to the N_SIGHT R900 software for transfer to billing. Consider the possibilities of this mode with city-owned and contracted services such as waste management service vehicles. These vehicles usually drive by each residence once a week; theoretically, they could read a utility's entire system while performing their normal function! The utility would only need to visit the R900 BCR briefly to extract the data. This mode comes standard with the R900 BCR at no extra cost.

Mode Overview

	Normal	Unattended Operations	USB Mass Storage
Bluetooth Pairing to Handheld	Required	No	Used only for firmware updates and transfer of data via USB from SD card to N_SIGHT R900 host PC
Trimble Nomad 900B and 900LE Compatible	Yes	No	
DAP CE5320B Compatible	Yes	No	
Android App Compatible	Yes*	No	
R900 Compatible	Yes	Yes	
Advantage / Pocket ProReader Compatible	Yes	No	
Data Logging Compatible	Yes	No	
SD Card Data Storage	Yes	Yes	

*Advantage/Pocket ProReader and data logging not supported in Android RF Test app.



Battery Door



SD Card and USB Port Door



Bluetooth, RF Status, Mode, and Battery LEDs

- Communication: Bluetooth 2.1 and USB
- Handheld Software Compatibility: N_SIGHT R900 version 4.6 or later (when paired with a Trimble Nomad or DAP CE5320B handheld)
- Handheld Compatibility: Trimble Nomad 900B, Trimble Nomad 900LE, and DAP CE5320B
- Memory: 4GB SD card

SPECIFICATIONS

- Indicators: Four LEDs identify Bluetooth communication, RF status, mode status, and battery status
- Power Supply: Rechargeable lithium ion battery pack – 5000 mAh capacity
- Field-replaceable battery
- Dimensions
 - Height: 3.58" (9.1 cm)
 - Width: 1.66" (4.22 cm)
 - Length: 5.75" (14.6 cm)
 - Weight: 1.1 lbs. (499 g) including rechargeable battery
- Temperature Range
 - Operating: -4°F to 122°F (-20°C to +50°C)
 - Storage: -40°F to 185°F (-40°C to +85°C)
- Environmental: Tested to MIL-STD-810F and IP67
- Receiver Channels: 50
- Number of Simultaneous Channels: 8
- Approvals: FCC Class B, IC
- Accessories
 - Spare battery
 - Spare battery charger
 - Belt clip
 - SD card
 - 12V "cigarette" to USB vehicle power cable
- Warranty: One-year comprehensive warranty, hardware maintenance contracts available

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