RadPoint Reader

Installation Guide

Table of Contents

Overview	2
Equipment	2
Technical Specifications	2
System	2
Environmental	2
Physical	2
Accessories	2
Hardware Installation	3
Software Installation	3
Configuration	4
Operation	4
Certification	4
European Conformity	4
FCC Grant	4
OEM Installation	5
Contact	5

Overview

The RNU-C01 RadPoint Reader is high performance fully NFC compliant card reader that enables a connected host computer to read loyalty (VAS) data from Type 2 and Type 4 NFC Tags, Apple Wallet cards, and Google Pay cards.

Equipment

Included in the received equipment you should find the following

- 1. RadPoint Reader Hardware
- 2. 2 meter USB-A to USB-C cable.

Technical Specifications

System

- USB: USB 2.0 (Type-C with screw locking terminals), CDC interface
- NFC: Integrated reader supports ISO/IEC 14443 A
- Smart Wallet: Supports Apple Wallet Loyalty passes and Google Pay Loyalty cards
- Bluetooth: Built-in Bluetooth LE module with internal antenna

Environmental

- **Temperature:** Operating: -22°F to +185°F (-30°C to +85°C), Storage: -22°F to +185°F(-30°C to +85°C)
- EMI/EMC: FCC Class B, Part 15B, Part 15C

Physical

- Dimensions: H: 0.45" (11.4mm), W: 4.05" (103mm), D: 4.05" (103mm)
- Weight: 0.19lbs(85g)•Warranty: Standard 1-year manufacturer's warranty
- Power: 4.5W (5V/0.5A)

Accessories

USB Cables: 1m USB-A to USB-C cable, optional USB-A to USB-C screw-locking cable

Hardware Installation

Connect the RNU-C01 RadPoint Reader to a host computer using the supplied USB-A to USB-C cable. The reader should be enumerated as a USB CDC/ACM device on your computer.

Software Installation

The RadPoint Reader Utility can be used to configure and validate the operation of your RadPoint Reader. The utility is available for download at www.radiusnetworks.com/reader and is shown in Figure 1 below.



Figure 1: RadPoint Reader Utility

Configuration

Using the installed RadPoint Reader Utility, select your reader from the drop down and in the configuration section set the following configuration items.

- 1. Apple Wallet Private Key: A 32-byte encryption key used for secure access to Apple Wallet items.
- 2. Apple Wallet Merchant ID: A 32-byte identifier for Apple Wallet items of interest.
- 3. Google Wallet Private Key: A 32-byte encryption key used for secure access to Google Wallet items.
- 4. Google Wallet Collector ID: A variable byte length identifier for Google Wallet items of interest.

Operation

You can validate operation of your RadPoint Reader by tapping the reader an NFC card (DESFire or Ultralight-C) or a valid iOS or Android device that has been loaded with a matching Wallet item. You should see the results of the NFC read event the read section of the utility window. The data shown should include the Card Type, the NFC ID and the Card Data.

Compliance and Regulatory Statements

The RNU-C01 reader is certified to the following US and European standards.

European Conformity Statement

The RNU-C01 RadPoint Reader meets applicable tests and performance criteria for residential, commercial and light industrial environments in European standards:

- EN61000-4-2: Electrostatic Discharge (ESD) Immunity
- EN61000-4-4: Electrical Fast Transient / Burst Immunity
- EN61000-4-5: Surge Immunity

FCC Compliance Statement (USA)

This device complies with Part 15 rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This transmitter complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter should be installed and operated with a minimum distance of 20 centimeters between the radiator and any human body and must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with accepted multi-transmitter product procedures.

The related FCC ID is: 2ABYU-RNUC01.

Contains FCC ID: 2AA9B10

OEM Installation

The RNU-C01 RadPoint Reader can be reused as a module for integration into end devices following the instructions/restrictions below:

- Changes or modifications to this device, not expressly approved by Radius Networks, Inc. could void authority to operate this device under FCC regulations.
- The end product's user manual must include following statements:

Contains FCC ID: 2ABYU-RNUC01

o Contains FCC ID: 2AA9B10

• The end product must be labeled, in a visible area, with the following:

o Contains FCC ID: 2ABYU-RNUC01

o Contains FCC ID: 2AA9B10

Contact

Radius Networks, Inc.
3255 Grace Street NW
Washington, DC 20007
sales@radiusnetworks.com
support@radiusnetworks.com