pcProx® Plus BLE

DUAL-FREQUENCY KEYSTROKE AND NON-KEYSTROKE CARD READERS WITH BLUETOOTH® LOW ENERGY TECHNOLOGY

The pcProx® Plus BLE is a dual frequency programmable card reader with integrated **Bluetooth**® low energy technology. In addition to reading both proximity (125/132 kHz) and contactless (13.56 MHz) smart cards, the reader also interacts with sensors and mobile devices that are enabled with Bluetooth low energy. Depending on the end user's application software, pcProx Plus BLE can be configured to utilize Bluetooth low energy beaconing to serve a wide variety of use cases, such as in-building location, item tracking and secure authentication. Mobile devices equipped with Bluetooth low energy technology can be used as secure authentication and identification credentials, making it ideal for a variety of applications in every industry. Combined with third party wayfinding software and beacons, the pcProx Plus BLE helps staff find the nearest secure printer, determine a person's location, track assets and more.

Freedom of Bluetooth Development

The Bluetooth functionality of the pcProx Plus BLE is enabled through the Bluegiga BLE113 Bluetooth® Smart Module[1]. Users have complete freedom in developing Bluetooth low energy applications for the pcProx Plus BLE reader using the Bluegiga Bluetooth Smart Software available for download from the SiliconLabs website.[2]

Simplify Authentication

RF IDeas card readers enable customers seeking to leverage their existing card system or mobile device for applications beyond building access. Badge-based reader solutions eliminate the need to manually enter user names and passwords, streamlining workflow and eliminating errors for identification. Other features include:

- Card reader and Bluetooth low energy module in one device, saving a USB port for other peripherals
- Instant identification and authentication using either your mobile device or employee ID badge
- Four ID badge (card) configurations to accommodate multi-card systems
- User-selectable volume control including a beeper on/off setting selection

Seamless Integration

Backward compatible, the pcProx Plus BLE reader easily integrates into existing badge systems, eliminating the need to add another badge or additional readers when increasing the number of applications that use badge systems for employee identification. Connecting directly into the USB port, the reader emulates a keyboard and keystrokes the badge ID and/or site code to the cursor's location on the screen.

The RF IDeas Universal Software Developers Kit (SDK) enables independent programmers to easily integrate the pcProx Plus readers into their application software programs, using the Card ID or CSN reference number directly from proximity, contactless IC or magnetic swipe cards. Software developers can now easily provide a solution that leverages the use of employee ID badge data, resulting in added benefits to their applications such as single sign-on, QA tracking, cashless cafeteria, industrial vending or meeting attendance.

[1] http://www.silabs.com/products/wireless/bluetooth/bluetooth-low-energy-modules/ble113-bluetooth-smart-module

[2] http://www.silabs.com/products/development-tools/software/bluegiga-bluetooth-smart-software-stack

Common Applications

The introduction of the badge reader with Bluetooth low energy technology paves the way to an unlimited number of applications. Below are just a few of the most common applications, by key industry, where RF IDeas badge readers with Bluetooth low energy technology are utilized.

	HEALTHCARE	GOVERNMENT	MANUFACTURING	ENTERPRISE
Single Sign-on	+	+	+	+
Time & Attendance	+	+	+	+
Training Compliance	+	+	+	+
Secure Printing	+	+	+	+
Location Tracking	+	+	+	+
Inventory Monitoring	+	+	+	+
Environmental Monitoring	+	+	+	+

STANDARD FEATURES	
Model Series	RDR-30581AKU Desktop Keystroking Reader
	RDR-30582AKU Desktop SDK Non-Keystroking Reader
	RDR-30081AKU Desktop Keystroking Reader w/iCLASS™ ID & Seos™
	RDR-30082AKU Desktop SDK Non-Keystroking Reader w/iCLASS ID & Seos
Operating Frequency	125/132 kHz and 13.56 MHz
Interface	USB
pcProx Plus SDK	DK-PCPRX-DOWNLOAD available for writing apps for the reader
Badge configurations	Up to 4, user-definable

PHYSICAL CHARACTERISTICS	
Dimensions (inches)	Height 0.6" (1.52cm) x Width 2" (5.08cm) x Length 3 3/8" (8.57cm)
Weight	4.0 ounces (113.40g)
Form Factors	Desktop, Black
Cable Length	6' standard; 6" and 16" lengths available
Indicators	LED indicator (green, amber, red)
Volume Control	User-selectable beeper volume (low, medium, high) plus beeper on/off setting
Power Supply	USB powered
Power Consumption	Reader only: 70 mA typical, 100 mA maximum Reader and Bluetooth on: 85mA typical, 120 mA maximum

ENVIRONMENT	
Operating Temperature Range	-22° to 150°F (-30° to 65°C)
Operating Humidity Range	5% to 95% relative humidity, non-condensing
Storage Temperature Range	-40° to 185°F (-40° to 85°C)

OTHER	
Certifications	FCC-United States; CE Mark-Europe; RCM-Australia; IC-Industry Canada. Environmental: RoHS, REACH. Certified in various additional countries worldwide; contact RF IDeas for additional details.
Compatible Operating Systems	Windows XP®/7®/8.1®, 10®, and Linux
Card Types	Supports nearly all card types worldwide; contact RF IDeas for specific card type questions.

FEATURES OF THE BLUEGIGA BLE113 MODULE	
Bluetooth v 4.0, single mode compliant	Supports master and slave modes; Up to eight connections
Integrated Bluetooth Smart stack	GAP, GATT, L2CAP and SMP; Bluetooth Smart profiles
Radio performance	TX power: 0 dBm to -23 dBm; Receiver sensitivity: -93 dBm
Host interface	UART 57600 Baud
Bluegiga Bluetooth SDK for writing Bluetooth Smart applications	Bluegiga Bluetooth Smart Software download from http://www.silabs.com/products/development-tools/software/bluegiga-bluetooth-smart-software-stack Contains a complete SDK for developing Bluetooth Smart applications.

RF IDEAS

RF IDeas, Inc.
4020 Winnetka Avenue
Rolling Meadows, IL 60008

Toll Free: 866-439-4884
Voice: 847-870-1723
Fax: 847-483-1129

www.RFIDeas.com