



User Manual

SmartPair Beacon™

Part #77-S230





Table of Contents

1. Introduction	2
2. Hardware Features and Specifications	3
3. Mechanical Details	4
3.1 Front/Side/3D Views with Dimensions	4
4. Company Information	5
Federal Communication Commission Interference Statement	6
IMPORTANT NOTE: FCC Radiation Exposure Statement	6
Industry Canada Statement	7
Radiation Exposure Statement:	7



1. INTRODUCTION

The SmartPair Beacon™ from Phillips Connect Technologies, in conjunction with a Phillips Asset Tracking Gateway, comprise the main components of the Tractor Trailer Pairing System. The SmartPair Beacon is typically affixed to the Tractor and is programmed with a unique Tractor ID number.

Bluetooth advertisements from SmartPair Beacons are received and collected by the Phillips Gateway located on the Trailer, then parsed until it can be determined that one SmartPair Beacon has been successfully associated with one Gateway. Changes in pairing status are reported by the Gateway to a Remote Listener System, which collects data for tracking and analysis.

SmartPair Beacon features include:

- IP67 Waterproof Standard
- 2-minute Installation with VHB Tape
- Bluetooth Low Energy (BLE) Beacon

A typical application is illustrated in #19 below:





2. HARDWARE FEATURES AND SPECIFICATIONS

Supported features and specifications include the following:

BATTERY PACK AND LIFETIME

77-S230:

- High-capacity lithium battery
- 5-year lifetime
- 5000 pairing events

BLUETOOTH WIRELESS INTERFACE

- Bluetooth LE 5.0 class II transmitter
- Public key 224-bit ECC encryption

ENVIRONMENTAL

- IP67 enclosure for electronics and battery
- Operating temp: -50C to 70C
- Recommended storage: 0C to 40C

PHYSICAL DIMENSIONS

- 77-S230: 4.3" height x 2.75" width x 1" depth

CERTIFICATIONS

- FCC / IC
- BQB Bluetooth



3. MECHANICAL DETAILS

3.1 FRONT/SIDE/3D VIEWS WITH DIMENSIONS



FRONT VIEW



3D VIEW



SIDE VIEW



4. COMPANY INFORMATION

**Technology that
moves us forward**



Phillips Connect Technologies LLC

*5231 California Ave. Suite 110
Irvine, CA 92617*

Technical Support

1-833-213-5839
Support@Phillips-Connect.com

Sales

1-833-213-5839
PCT-Sales@Phillips-Connect.com

COPYRIGHT NOTICE

© 2022 Phillips Connect Technologies LLC. All rights reserved.

Phillips Connect Technologies LLC reserves the right to modify the units, specification, or this document without prior notice in the interest of improving performance, reliability, or servicing. Reasonable efforts have been made to assure the accuracy of this document; however, Phillips Connect Technologies assumes no liability resulting from any inaccuracies or omissions in this document, or from use of the information herein. Product updates may result in differences between the information provided in this document and the product shipped. Please contact Phillips Connect Technologies LLC for access to the most current documentation.

No part of this document or information within this document may be copied, reproduced, distributed, merged, or modified without the express written consent of Phillips Connect Technologies LLC.



FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE: FCC Radiation Exposure Statement

This equipment complies with the FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **20cm** between the radiator and your body.

The transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.



INDUSTRY CANADA STATEMENT

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). operation is subject to the following two conditions:

- (1) This device may not cause interference
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicable aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique sub, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radiation Exposure Statement:

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **20cm** between the radiator and your body.

Déclaration d'exposition aux rayonnements

L'équipement respecte les limites d'exposition aux rayonnements d'ISDE établies pour les environnements non contrôlés. Lors de l'installation et du fonctionnement de cet appareil, la distance minimale entre le radiateur et le corps doit être de 20 cm.