



APPENDIX H : USER'S MANUAL

User Information

(Model Name : BD-PS-EMR)

Contents

1. Overview and Specification

- (1) Overview
- (2) Specification

2. Customer Support

1. Overview and Specification

(1) Overview

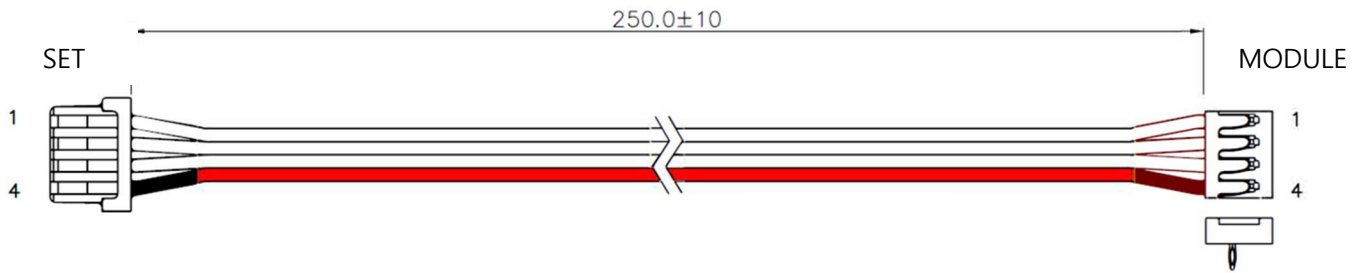
This product is the RF module capable of 2.4GHz band RF4CE(IEEE802.15.4) communication, and operates through connection and operation with a separate controller product.



(2) Specification

Items		Description
Model name		BD-PS-EMR
RF4CE	Frequency	2400~2483.5 MHz
	Channel	16 Channels
	TX Power	10dBm(MAX)
	RX Sensitivity	-95 dBm
Dimension		폭17.9mm X 길이 25.4mm X 두께 1.2 mm (공차 ± 0.3 mm)
Input Voltage		DC 3.3V
Operating Temp.		0 °C ~ + 60 °C

*** Interface**



Pin No	Name	Function	Remarks
1(White)	UART_RX	UART_RX	I/O
2(White)	UART_TX	UART_TX	I/O
3(White)	GND	GND	
4(Red)	VCC_3.3V	3.3V	

***Connect the cable to the set.**

***The set provides 3.3V power and communication with the module via UART.**

2. FCC Statement

FCC Part 15.19 Statements:	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.
FCC Part 15.105 statement(Class B)	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 or more 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 Part 15.21 statement	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 must not be co-located or operating in conjunction with any other antenna or transmitter.
Modular Approval Statement	Regulatory notice to host manufacturer according to KDB 996369 D03 OEM Manual This module has been granted modular approval as below listed FCC rule parts. -FCC Rule parts 15C(15.247) Summarize the specific operational use conditions -The OEM integrator should use equivalent antennas which is the same type and equal or less gain than an antenna listed below this instruction manual. RF exposure considerations -The module has been certified for integration into products only by OEM integrators under the following condition: -The antenna(s) must be installed such that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times. -The transmitter module must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures. -Mobile use As long as the three conditions above are met, further transmitter testing will not be required. OEM integrators should provide the minimum separation distance to end users in their end-product manuals. Antennas list This module is certified with the following integrated antenna. -. Max. Antenna gain: 2.44 dBi / Ant. Type: PCB PATTERN Antenna Any new antenna type, higher gain than listed antenna should be met the requirements of FCC rule 15.203 and 2.1043 as permissive change procedure. End Product Labeling The module is labeled with its own FCC ID and IC Certification Number. If the FCC ID and IC Certification Number are not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. In that case, the final end product must be labeled in a visible area with the following: “Contains FCC ID: OZ5PSEMR “Contains IC: 21703-PSEMR

	Information on test modes and additional testing requirements -OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, additional transmitter in the host, etc.). Additional testing, Part 15 Subpart B disclaimer -The final host product also requires Part 15 subpart B compliance testing with the modular transmitter installed to be properly authorized for operation as a Part 15 digital device. -The final host product also requires Part 15 subpart B compliance testing with the modular transmitter installed to be properly authorized for operation as a Part 15 digital device.
--	--

3. ISED Statement

Licensed-exempt Statement	<i>This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:</i> <i>1. This device may not cause interference.</i> <i>2. This device must accept any interference, including interference that may cause undesired operation of the device.</i> <i>Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :</i> <i>(1) l'appareil ne doit pas produire de brouillage, et</i> <i>(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.</i>
RF Exposure Statement (MPE)	<i>The antenna(s) must be installed such that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times.</i> <i>l'exposition aux RF L'antenne (ou les antennes) doit être installée de façon à maintenir à tout instant une distance minimum de au moins 20 cm entre la source de radiation (l'antenne) et toute personne physique.</i>
End Product Labeling	<i>Étiquetage du produit final (IC)</i> <i>Le module est étiqueté avec sa propre identification FCC et son propre numéro de certification IC. Si l'identification FCC et le numéro de certification IC ne sont pas visibles lorsque le module est installé à l'intérieur d'un autre dispositif, la partie externe du dispositif dans lequel le module est installé devra également présenter une étiquette faisant référence au module inclus. Dans ce cas, le produit final devra être étiqueté sur une zone visible avec les informations suivantes :</i> <i>Contient module émetteur IC : 21703-PSEMR</i>

4. Customer Support

(1) Please refer to service contact information in the set manual.

[Certification Mark / Certification Number]

KC : R-R-OHS-PSEMR

FCC ID : OZ5PSEMR

IC : 21703-PSEMR



Company : OHSUNG Electronics

Production Date : 2025.

Manufacturer/Country : OHSUNG Electronics/KOREA