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WLAN unit WM-WL

Instruction Manual

Introduction

This equipment can be used with WM-6000 Series only. Read this instruction manual before using the product in order to achieve maximum performance. After reading it, keep the manual always at hand for future reference.

■ Symbols

The following symbols alert you to important messages. Be sure to read these messages carefully.

	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Indicates a situation which, if not avoided, could result in product damage as well as property damage.
	Indicates cautions and limitations that must be followed during operation.
	Indicates additional information on proper operation.

Indicates tips for better understanding or useful information.

- It is prohibited to use or copy all or any part of this manual without prior approval.
- The information contained in this manual is subject to change without notice.

Precautions on regulations and authentication

■ Precautions regarding wireless LAN

- Remove the main battery of the WM series near electrical medical devices or places in medical institutions where the use of wireless devices is prohibited. Carry and use this device away from implantable cardiac pacemakers.
- As communication may not be possible depending on the operating environment, be sure to conduct a communication check prior to implementation.
- When the device is used near other devices operating at the same frequency band as the device e.g. wireless LAN devices, microwave ovens, industrial heating equipment, high frequency medical equipment etc., radiowave interference may occur, resulting in a drop in the communication speed or communication being disabled.
- When Bluetooth and wireless LAN are used simultaneously, radiowave interference may occur, resulting in a drop in the communication speed or communication to be cut off. If communication is impaired, stop the use of either Bluetooth or the wireless LAN.
- Communication may not be possible near metal objects, in places where there is a lot of metal powder, and in places surrounded by metal walls.

■ CE and UKCA Markings

KEYENCE Corporation has confirmed that this product complies with the essential requirements of the applicable EU Directive(s) and UK regulations, based on the following specifications. Be sure to consider the following specifications when using this product in the Member States of European Union and United Kingdom.

● RE Directive

- Applicable Standards (BS) EN61010-1
EN301 489-1
EN301 489-17
EN300 328

- Frequency band of operation: 2400 to 2483.5 and 5180-5825 MHz
- Maximum radio-frequency power: 16.5dBm

- Overvoltage category I
- Use this product under pollution degree 2.
- Use this product at the altitude of 2000m or less.
- Indoor use only

Hereby, Keyence declares that the radio equipment type WM-WL is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.keyence.com/cedoc

取得實驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。應避免影響附近雷達系統之操作

不得在飞机和机场附近使用。

本设备包含型号核准代码为：CMI IT ID:2023AJ21842,的无线电发射模块。

เครื่องวิทยุคมนาคมที่มีอัตราการดูดกลืนพลังงานจำเพาะ (Specific Absorption Rate - SAR) อันเนื่องมาจากเครื่องวิทยุคมนาคมเท่ากับ 0.68 W/kg ซึ่งสอดคล้องตามมาตรฐานความปลอดภัยต่อสุขภาพของมนุษย์จากการใช้เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการโทรคมนาคมแห่งชาติประกาศกำหนด

額定 3.3V 0.5A/1.8V 0.2A
頻率 (2400-2483.5, 5180-5825MHz)
占用帶寬 (<40MHz)
辐射功率 (<20 dBm (E IRP))
调制方式 (DBPSK/DQPSK/CK/BPSK/QPSK/16QAM/64QAM)

사용자 안내문
이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

■ CSA Certificate

This product complies with the following CSA and UL standards and has been certified by CSA.
• Applicable standard CAN/CSA C22.2 No.61010-1
UL61010-1

Be sure to consider the following specifications when using this product as a product certified by CSA.
• Overvoltage category I
• Use this product under pollution degree 2.
• Use this product at the altitude of 2000m or less.
• Indoor use only

■ FCC Regulations

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 CAUTION Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research.

This WM-WL has been tested and meets the FCC radio frequency (RF) exposure guidelines when used with the WM-RU, WM-RU supplied as the accessory. Use of other accessories may not ensure compliance with the FCC RF exposure guidelines.

■ ISED Regulations

This product complies with the following regulations specified by the ISED.
• Applicable regulation CAN IEC5-003(A) NMB-003(A) RSS-247

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:
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 applicables 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 subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

For indoor use only
Pour usage intérieur seulement

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research.

This WM-WL has been tested and meets the ISED RF exposure rules when used with the WM-RU accessories supplied or designated for this product. Use of other accessories may not ensure compliance with ISED RF exposure rules.

Les connaissances scientifiques dont nous disposons n'ont mis en évidence aucun problème de santé associé à l'usage des appareils sans fil à faible puissance. Nous ne sommes pas en mesure de prouver que ces appareils sans fil à faible puissance sont entièrement sans danger. Les appareils sans fil à faible puissance émettent une énergie fréquence radioélectrique (RF) très faible dans le spectre des micro-ondes lorsqu'ils sont utilisés. Alors qu'une dose élevée de RF peut avoir des effets sur la santé (en chauffant les tissus), l'exposition à de faibles RF qui ne produisent pas de chaleur n'a pas de mauvais effets connus sur la santé. De nombreuses études ont été menées sur les expositions aux RF faibles et n'ont découvert aucun effet biologique. Certaines études ont suggéré qu'il pouvait y avoir certains effets biologiques, mais ces résultats n'ont pas été confirmés par des recherches supplémentaires.

Ce WM-WL a été testé et est conforme aux règles d'exposition aux fréquences radioélectriques (RF) de l'ISDE lorsqu'il est utilisé avec les accessoires WM-RU fournis ou conçus pour ce produit. L'usage d'autres accessoires ne garantit pas nécessairement la conformité aux règles d'exposition aux RF de l'ISDE.



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WARRANTIES AND DISCLAIMERS

- KEYENCE warrants the Products to be free of defects in materials and workmanship for a period of one (1) year from the date of shipment. If any models or samples were shown to Buyer, such models or samples were used merely to illustrate the general type and quality of the Products and not to represent that the Products would necessarily conform to said models or samples. Any Products found to be defective must be shipped to KEYENCE with all shipping costs paid by Buyer or offered to KEYENCE for inspection and examination. Upon examination by KEYENCE, KEYENCE, at its sole option, will refund the purchase price of, or repair or replace at no charge any Products found to be defective. This warranty does not apply to any defects resulting from any action of Buyer, including but not limited to improper installation, improper interfacing, improper repair, unauthorized modification, misapplication and mishandling, such as exposure to excessive current, heat, coldness, moisture, vibration or outdoors air. Components which wear are not warranted.
- KEYENCE is pleased to offer suggestions on the use of its various Products. They are only suggestions, and it is Buyer's responsibility to ascertain the fitness of the Products for Buyer's intended use. KEYENCE will not be responsible for any damages that may result from the use of the Products.
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If the Products/Samples purchased by Buyer are to be resold or delivered to a third party, Buyer must provide such third party with a copy of this document, all specifications, manuals, catalogs, leaflets and written information provided to Buyer pertaining to the Products/Samples.

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