



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.
- Este dispositivo debe utilizarse a una distancia mayor a 20 cm del cuerpo del usuario para disminuir los riesgos de alguna afectación en el desempeño del dispositivo o de salud.

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

- 使用频率: 2.4-2.4835, 5.18-5.825 GHz
等效全向辐射功率(EIRP):
天线增益<10dBi时: ≤100 mW 或 ≤20 dBm
最大功率谱密度:
天线增益<10dBi时: ≤10 dBm / MHz (EIRP)
载频容限: 20 ppm
杂散发射(辐射)功率(对应载波±2.5倍信道带宽以外):
≤-36 dBm / 100 kHz (30 - 1000 MHz)
≤-33 dBm / 100 kHz (2.4 - 2.4835 GHz)
≤-40 dBm / 1 MHz (3.4 - 3.53 GHz)
≤-40 dBm / 1 MHz (5.725 - 5.85 GHz)
≤-30 dBm / 1 MHz (其它1 - 12.75 GHz)
- 不得擅自更改发射频率、加大发射功率(包括额外加装射频功率放大器), 不得擅自外接天线或改用其它发射天线;
- 使用时不得对各种合法的无线电通信业务产生有害干扰; 一旦发现有害干扰现象时, 应立即停止使用, 并采取有效措施消除干扰后方可继续使用;
- 使用微功率无线电设备, 必须忍受各种无线电业务的干扰或工业、科学及医疗应用设备的辐射干扰;
- 不得在飞机和机场附近使用。
- 本设备包含型号核准代码为: CMIIT ID:XXXXYYZZZ, 的无线电发射模块。

เครื่องวิทยุคมนาคมนี้มีอัตราการดูดกลืนพลังงานจำเพาะ (Specific Absorption Rate - SAR) อันเนื่องมาจากเครื่องวิทยุคมนาคมเท่ากับ ___ W/kg ซึ่งสอดคล้องตามมาตรฐานความปลอดภัยต่อสุขภาพของมนุษย์จากการใช้เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการโทรคมนาคมแห่งชาติประกาศกำหนด

额定 1.8V 3.3V 0.5A
频率 (2400-2483.5, 5180-5825MHz)
占用带宽 (≤40MHz)
辐射功率 (≤20 dBm (EIRP))
调制方式 (DBPSK/DQPSK/CCK/BPSK/QPSK/16QAM/64QAM)

사용자 안내문
이 기기는 업무용 환경에서 사용될 목적으로 적합성 평가를 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines.

This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

■ ISED Regulations

This product complies with the following regulations specified by the ISED.
• Applicable regulation CAN IECIS-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

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules.
This equipment should be installed and operated keeping the radiator at least 20cm or more away from person’s body.
Cet équipement est conforme aux limites d’exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d’exposition aux fréquences radioélectriques (RF) CNR-102 de l’ISDE.
Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.

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- (1) 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.
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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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額定 1.8V 3.3V 0.5 A
頻率 (2400-2483.5, 5180-5825MHz)



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