# LHG XL HP5



## RBLHG-5HPnD-XL LHG XL HP5

## Safety Warnings

Before you work on any equipment, be aware of the hazards involved with electrical circuitry, and be familiar with standard practices for preventing accidents.
Ultimate disposal of this product should be handled according to all national laws and regulations.
The Installation of the equipment must comply with local and national electrical codes.
This product is intended to be mounted outdoors on a pole. Failure to use the correct hardware and configuration or to follow the correct procedures could result in a hazardous situation for people and damage to the system.
Use only the power supply and accessories approved by the manufacturer, and which can be found in the original packaging of this product.
Read the installation instructions before connecting the system to the power source.
We cannot guarantee that no accidents or damage will occur due to the improper use of the device. Please use this product with care and operate at your own risk!
In the case of device failure, please disconnect it from power. The fastest way to do so is by unplugging the power plug from the power outlet.
It is the customer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, cabling requirements, and Dynamic Frequency Selection (DFS) requirements. All Mikrotik radio devices must be professionally installed.

**Exposure to Radio Frequency Radiation:** This MikroTik equipment complies with the FCC, IC, and European Union radiation exposure limits set forth for an uncontrolled environment. This MikroTik device should be installed and operated no closer than 20 centimeters from your body, occupational user, or the general public.

## Assembly

Attach the two legs to the LHG case, then snap the assembled LHG unit to the grid in the appropriate locations. Fix the legs in place with two self thread screws (Included, use Phillips screwdriver PH2). Attach the L shaped mount to the dish using the included screws. Use the U bolt, to fix the unit to a pole/mast. More detailed instructions available on the product page on https://mikrotik.com/products/.

## Connecting

- Open the Ethernet door to connect your PC or LAN cable to the Ethernet port, connect the other end of the Ethernet cable to a PoE injector;
- Set LAN computer IP configuration to *automatic* (DHCP);
- Default The IP address of the unit is 192.168.88.1, open this address in your web browser to start the configuration. The username is **admin** and there is **no password (or, for some models, check user and wireless passwords on the sticker);**
- In case the IP address is not available, download WinBox configuration tool https://mt.lv/winbox, and connect through MAC address;
- Once connected configure the device, so it has an active Internet connection https://mt.lv/configuration;
- Upgrade the RouterOS software to the latest version https://mt.lv/upgrade;
- Choose your country, to apply country regulation settings;
- Secure your device and set a strong password.

## Powering

The device accepts powering only from Passive PoE injectors.

## Extension slots and ports

- One Ethernet port, supporting automatic cross/straight cable correction (Auto MDI/X), so you can use either straight or cross-over cables for connecting to other network devices.
- One integrated wireless device with a built-in grid antenna.

## Buttons and jumpers

The reset button has three functions:
• Hold this button during boot time until LED light starts flashing, release the button to reset RouterOS configuration (total 5 seconds).
• Keep holding for 5 more seconds, LED turns solid, release now to turn on CAPs mode (total 10 seconds).
• Or keep holding the button for 5 more seconds until LED turns off, then release it to make the RBLHG-5HPnD-XL look for Netinstall servers (total 15 seconds).
Regardless of the above option used, the system will load the backup RouterBOOT loader if the button is pressed before power is applied to the device. Useful for RouterBOOT debugging and recovery.

## Operating system support

The device supports RouterOS software with the version number at or above what is indicated in the RouterOS menu /system resource.

Other operating systems have not been tested.

⚠ To avoid pollution of the environment, please separate the device from household waste and dispose of it in a safe manner, such as in designated waste disposal sites. Familiarize yourself with the procedures for the proper transportation of the equipment to the designated disposal sites in your area.

## Federal Communication Commission Interference Statement

| Model | FCC ID |
|---|---|
| RBLHG-5HPnD-XL | TV7LHG5HPND |

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. This device and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.

**IMPORTANT: Exposure to Radio Frequency Radiation.**

20 cm minimum distance has to be maintained between the antenna and the user. Under such configuration, the FCC radiation exposure limits set forth for a population/uncontrolled environment can be satisfied.

Antenna Installation. WARNING: It is the installer's responsibility to ensure that when using the authorized antennas in the United States (or where FCC rules apply); only those antennas certified with the product are used. The use of any antenna other than those certified with the product is expressly forbidden in accordance with FCC rules CFR47 part 15.204. The installer should configure the output power level of antennas, according to country regulations and per antenna type. Professional installation is required for equipment with connectors to ensure compliance with health and safety issues.

# Innovation, Science and Economic Development Canada

| Model | FCC ID |
|---|---|
| RBLHG-5HPnD-XL | 7442A-LHG5ACD2HPD |

This device complies with Industry Canada's license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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 : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

CAN ICES-003 (B) / NMB-003 (B)

# UKCA Marking

# Eurasian Conformity Mark

| Частотный каналы | Мощность передатчика |
|---|---|
| 5150-5350 МГц, 5650-5850 МГц | ≤10 Вт |

*Доступные частотные каналы могут различаться в зависимости от модели продукта и сертификации.

Информация о дате изготовления устройства указана в конце серийного номера на его наклейке через дробь. Первая цифра означает номер года (последняя цифра года), две последующие означают номер недели.

Изготовитель: Mikrotikls SIA, Aizkraukles iela 23, Riga, LV-1006, Латвия, support@mikrotik.com. Сделано в Китае, Латвии или Литве. См. на упаковке.

Для получения подробных сведений о гарантийном обслуживании обратитесь к продавцу. Информация об импортерах продукции MikroTik в Российскую Федерацию: https://mikrotik.com/buy/europe/russia

Продукты MikroTik, которые поставляются в Евразийский таможенный союз, оцениваются с учетом соответствующих требований и помечены знаком EAC, как показано ниже:

# Norma Oficial Mexicana

Rango de frecuencia (potencia de salida máxima): 5725-5850 MHz (30 dBm). Los canales de frecuencia disponibles pueden variar según el modelo y la certificación del producto.

EFICIENCIA ENERGETICA CUMPLE CON LA NOM-029-ENER-2017.

La operacion de este equipo esta sujeta a las siguientes dos condiciones:

Es posible que este equipo o dispositivo no cause interferencia perjudicial y.
Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operacion no deseada.

Fabricante: Mikrotikls SIA, Brivibas gatve 214i, Riga, LV-1039, Latvia.

País De Origen: Letonia; Lituania; China (Republica Popular); Estados Unidos De America; Mexico.

Por favor contacte a su distribuidor local para preguntas regionales específicas. La lista de importadores se puede encontrar en nuestra página de inicio – https://mikrotik.com/buy/latinamerica/mexico.

# The National Commission for the State Regulation of Communications and Informatization by Ukraine

Виробник: Mikrotikls SIA, Brivibas gatve 214i Рига, Латвія, LV1039.

Робоча частота (Максимальна вихідна потужність): 5150-5250 МГц (23 дБм), 5250-5350 МГц (20 дБм), 5470-5725 МГц (27 дБм).

⚠ Справжнім Mikrotikls SIA заявляє, що маршрутизатор відповідає основним вимогам та іншим відповідним положенням директиви 2014 /53/EC, а також суттєвим вимогам Технічного регламенту радіообладнання, затвердженого постановою Кабінету Міністрів України від 24 травня 2017 року № 355.

Для експлуатації в Україні необхідно отримати дозвіл на експлуатацію у порядку, затвердженому рішенням НКРЗІ від 01.11.2012 № 559, зареєстрованому в Міністерстві юстиції України 03.01.2013 за № 57/22589.

# CE Declaration of Conformity

Manufacturer: Mikrotikls SIA, Brivibas gatve 214i Riga, Latvia, LV-1039.

Hereby, Mikrotīkls SIA declares that the radio equipment type RBLHG-5HPnD-XL is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://mikrotik.com/products

## Frequency bands terms of use

| Frequency range (**for applicable models**) | Channels used | Maximum Output Power (EIRP) | Restriction |
|---|---|---|---|
| 5150-5250 MHz | 26 - 48 | 23 dBm | Restricted to indoor use only* |
| 5250-5350 MHz | 52 - 64 | 20 dBm | Restricted to indoor use only* |
| 5470-5725 MHz | 100 - 140 | 27 dBm | Without any restriction to use in all EU Member States |

** It is the customer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, cabling requirements, and Dynamic Frequency Selection (DFS) requirements. All Mikrotik radio devices must be professionally installed!*
*According to Commission Decision 2000/299/EC (6 April 2000), the product falls under the scope of Class 2.*

This MikroTik device meets Maximum WLAN transmit power limits per ETSI regulations. For more detailed information see Declaration of Conformity above / Dieses MikroTik-Gerät erfüllt die maximalen WLAN- Sendeleistung Grenzwerte gemäß ETSI-Bestimmungen. Weitere Informationen finden Sie oben unter Konformitätserklärung / Cet appareil MikroTik respecte les limites maximales de puissance de transmission WLAN conformément aux réglementations ETSI. Pour plus d'informations, voir la déclaration de conformité ci-dessus / Questo dispositivo MikroTik è conforme ai limiti massimi di potenza di trasmissione WLAN in conformità con le normative ETSI. Per ulteriori informazioni, consultare la dichiarazione di conformità sopra / Este dispositivo MikroTik cumple con los límites máximos de potencia de transmisión WLAN de acuerdo con las regulaciones ETSI. Para obtener más información, consulte la declaración de conformidad anterior / Это устройство MikroTik соответствует максимальным пределам мощности передачи WLAN в соответствии с правилами ETSI. Для получения дополнительной информации см. Декларацию соответствия выше.

*Note. Information contained here is subject to change. Please visit the product page on www.mikrotik.com for the most up to date version of this document.*