

User Manual - hAP ax lite



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 unit is intended to be installed in the rackmount. Please read the mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation to people and damage to the system.

This product is intended to be installed indoors. Keep this product away from water, fire, humidity or hot environments.

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.

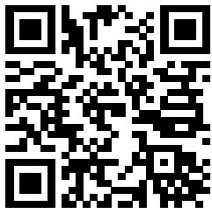
Quickstart

Please follow these quick steps to set up your device:

- Make sure your Internet service provider is allowing hardware change and will issue an automatic IP address;
- Connect your ISP cable to the first Ethernet port;
- Connect the device to the included power adapter;
- Connect your computer to the wireless network;
- Open <https://192.168.88.1> in your web browser to start the configuration;
- User name: *admin* and there is no password by default (or, for some models, check user and wireless passwords on the sticker);
- Click the "Check_for_updates" button on the right side and update your RouterOS software to the latest version. The device must have an active Internet connection;
- The device will reboot;
- Connect again and choose your country on the left side of the screen, to apply country regulation settings;
- Set up your wireless network password, the password must be at least eight symbols;
- Set up your router password in the bottom field to the right and repeat it, it will be used to log in next time.

MikroTik mobile app

Use the MikroTik smartphone app to configure your router in the field, or to apply the most basic initial settings for your MikroTik home access point.



1. Scan QR code and choose your preferred OS.
2. Install and open application.
3. By default, the IP address and user name will be already entered.
4. Click Connect to establish a connection to your device through a wireless network.

5. Choose Quick setup and application will guide you through all basic configuration settings in a couple of easy steps.
6. An advanced menu is available to fully configure all necessary settings.

Powering

The device accepts power in the following ways:

- USB type C accepts 5 V DC⁼⁼.
The power consumption under maximum load can reach 8 W.

Configuration

Once logged in, we recommend clicking the "Check for updates" button in the QuickSet menu, as updating your RouterOS software to the latest version ensures the best performance and stability. For wireless models, please make sure you have selected the country where the device will be used, to conform with local regulations.

RouterOS includes many configuration options in addition to what is described in this document. We suggest starting here to get yourself accustomed to the possibilities: <https://mt.lv/help>. In case IP connection is not available, the Winbox tool (<https://mt.lv/winbox>) can be used to connect to the MAC address of the device from the LAN side (all access is blocked from the Internet port by default). For recovery purposes, it is possible to boot the device for reinstallation, see section [Buttons and Jumpers](#).

Mounting

The device is designed to be used indoors and placed on a flat surface with all needed cables connecting to the front of the unit.

The IP rating scale of this device is IPX0. We recommend using Cat6 shielded cables.

Warning! This equipment should be installed and operated with a minimum distance of 20 cm between the device and your body. Operation of this equipment in the residential environment could cause radio interference.

Expansion slots and ports

- Product code L41G-2axD
- CPU Dual-Core IPQ-5010 1 GHz
- CPU architecture ARM 64bit (RouterOS 32bit)
- Size of RAM 256 MB

- Storage 128 MB, NAND
- Number of 1G Ethernet ports 4
- Switch chip model MT7531BE
- Wireless band 2.4 GHz
- Wireless interface model IPQ-5010
- Wireless 802.11b/g/n/ax dual-chain
- Wireless antenna max gain 4.3 dBi
- Dimensions 124 x 100 x 54 mm
- Operating system RouterOS v7, License level 4
- Operating temperature -40°C to +70°C

Reset button

RouterBOOT reset button has the following functions. Press the button and apply the power, then:

- Release the button when the green LED starts flashing, to reset the RouterOS configuration to defaults.
- Keep holding for 5 more seconds, the LED turns solid, release now to turn on CAPs mode (total 10 seconds).
- Release the button after the LED is no longer lit (~20 seconds) to cause a device to look for Netinstall servers (required for reinstalling RouterOS over the network).

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.

Accessories

Package includes the following accessories that come with the device:

- 5V 2.4A 12W USB power adapter

Operating system support

The device supports RouterOS software version 7. The specific factory-installed version number 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
<i>L41G-2axD</i>	TV7L41GX D

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 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.

Note: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

WARNING: Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Equipment complies with RF 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.

Innovation, Science and Economic Development Canada

Model	IC
<i>L41G-2axD</i>	7442A- L41AX

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 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.

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)

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Lors de l'installation et du fonctionnement de cet équipement, la distance minimale entre le radiateur et le corps doit être de 20 cm.

UKCA marking



CE Declaration of Conformity

B G	С настоящото Mikrotīkls SIA декларира, че този тип радиосъоръжение L41G-2axD е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: https://mikrotik.com/products
C S	Tímto Mikrotīkls SIA prohlašuje, že typ rádiového zařízení L41G-2axD je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: https://mikrotik.com/products
D A	Hermed erklærer Mikrotīkls SIA, at radioudstyrstypen L41G-2axD er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: https://mikrotik.com/products

D E	Hiermit erklärt MikroTik SIA, dass der Funkanlagentyp L41G-2axD der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: https://mikrotik.com/products
E L	Με την παρούσα ο/η MikroTik SIA, δηλώνει ότι ο ραδιοεξοπλισμός L41G-2axD πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: https://mikrotik.com/products
E N	Hereby, MikroTik SIA declares that the radio equipment type L41G-2axD 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
E S	Por la presente, MikroTik SIA declara que el tipo de equipo radioeléctrico L41G-2axD es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: https://mikrotik.com/products
E T	Käesolevaga deklareerib MikroTik SIA, et käesolev raadioseadme tüüp L41G-2axD vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: https://mikrotik.com/products
F I	MikroTik SIA vakuuttaa, että radiolaitetyyppi L41G-2axD on direktiivin 2014/53/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: https://mikrotik.com/products
F R	Le soussigné, MikroTik SIA, déclare que l'équipement radioélectrique du type L41G-2axD est conforme à la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: https://mikrotik.com/products
H R	MikroTik SIA ovime izjavljuje da je radijska oprema tipa L41G-2axD u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: https://mikrotik.com/products
H U	MikroTik SIA igazolja, hogy a L41G-2axD típusú rádióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: https://mikrotik.com/products
I T	Il fabbricante, MikroTik SIA, dichiara che il tipo di apparecchiatura radio L41G-2axD è conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: https://mikrotik.com/products

I S	Hér með lýsir Mikrotíks SIA því yfir að L41G-2axD er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 2014/53/EU. Fullur texti ESB samræmisýfirlýsingar er að finna á eftirfarandi veffangi: https://mikrotik.com/products
L T	Aš, Mikrotíks SIA, patvirtinu, kad radijo įrenginių tipas L41G-2axD atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: https://mikrotik.com/products
L V	Ar šo Mikrotīkls SIA deklarē, ka radioiekārta L41G-2axD atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: https://mikrotik.com/products
M T	B'dan, Mikrotíks SIA, niddikjara li dan it-tip ta' tagħmir tar-radju L41G-2axD huwa konformi mad-Direttiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: https://mikrotik.com/products
N L	Hierbij verklaar ik, Mikrotíks SIA, dat het type radioapparatuur L41G-2axD conform is met Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: https://mikrotik.com/products
N O	Mikrotíks SIA erklærer herved at utstyret L41G-2axD er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 2014/53/EU. Den fulle teksten til EU-samsvarserklæringen er tilgjengelig på følgende internetadresse: https://mikrotik.com/products
P L	Mikrotíks SIA niniejszym oświadcza, że typ urządzenia radiowego L41G-2axD jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: https://mikrotik.com/products
P T	O(a) abaixo assinado(a) Mikrotíks SIA declara que o presente tipo de equipamento de rádio L41G-2axD está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: https://mikrotik.com/products
R O	Prin prezenta, Mikrotíks SIA declară că tipul de echipamente radio L41G-2axD este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: https://mikrotik.com/products
S K	Mikrotíks SIA týmto vyhlasuje, že rádiové zariadenie typu L41G-2axD je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: https://mikrotik.com/products

S L	Mikrotīkls SIA potrjuje, da je tip radijske opreme L41G-2axD skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: https://mikrotik.com/products
S V	Härmed försäkrar Mikrotīkls SIA att denna typ av radioutrustning L41G-2axD överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: https://mikrotik.com/products

WLAN

Operating Frequency / Maximum output power	WL AN	2412-2472 MHz / 17.89 dBm
Betriebsfrequenz / maximale Ausgangsleistung		
Fréquence de fonctionnement / puissance de sortie maximale		
Frequenza operativa / massima potenza di uscita		
Frecuencia de funcionamiento / potencia de salida máxima		
Рабочая частота / максимальная выходная мощность		

This MikroTik device meets Maximum TX power limits per ETSI regulations. For more detailed information see Declaration of Conformity above / Dieses MikroTik-Gerät erfüllt die maximalen Sendeleistungsgrenzwerte gemäß ETSI-Bestimmungen. Weitere Informationen finden Sie oben in der Konformitätserklärung. Nähere Informationen finden Sie oben in der Konformitätserklärung / Cet appareil MikroTik respecte les limites de puissance TX maximale via les réglementations ETSI. Pour plus d'informations, voir la déclaration de conformité ci-dessus / Questo dispositivo MikroTik soddisfa i limiti di potenza massima TX tramite le normative ETSI. Per informazioni più dettagliate consultare la Dichiarazione di conformità sopra / Este dispositivo MikroTik cumple con los límites máximos de potencia TX a través de las normas ETSI. Para obtener información más detallada, consulte la Declaración de conformidad anterior / Это устройство MikroTik соответствует ограничениям максимальной мощности передачи согласно правилам ETSI. Для получения более подробной информации см. Декларацию соответствия выше.

(EN) Technical Specifications / (DE) Technische Spezifikationen / (FR) Spécifications techniques / (IT) Specifiche tecniche / (ES) Especificaciones técnicas / (RU) Технические характеристики:

(EN) Product Power Input Options (DE) Produkt Stromquellen Optionen (FR) Options d'entrée d'alimentation du produit (IT) Opzioni di ingresso alimentazione del prodotto (ES) Opciones de entrada de energía del producto (RU) Варианты входной мощности продукта	(EN) DC Adapter Output Specification (DE) Ausgangsspezifikationen des Gleichstromadapters (FR) Spécifications de sortie de l'adaptateur de courant continu (IT) Specifiche di uscita dell'adattatore di corrente continua (ES) Especificaciones de salida del adaptador de corriente continua (RU) Выходные характеристики адаптера постоянного тока		(EN) IP class of the enclosure (DE) IP-Klasse des Gehäuses (FR) Classe IP du boîtier (IT) Classe IP della custodia (ES) Clase de IP del recinto (RU) Класс защиты корпуса IP	(EN) Operating Temperature (DE) Betriebstemperatur (FR) température de fonctionnement (IT) temperatura di esercizio (ES) Temperatura de funcionamiento (RU) Рабочая Температура
	Voltage, V	Current, A		
USB C (5 V DC)	5	2.4	IP20	±0°..+45°C