## RouterBOARD OmniTik UPA-5HnD

#### **Quick Setup Guide and Warranty Information**

The RouterBOARD **OmniTik** comes preinstalled in an outdoor case, with a built-in 5GHz 802.11a/n wireless and five 10/100 Ethernet ports which support MDI-X auto detection. There are two built-in antennas. One antenna is v-pol, the other is h-pol. Antenna gain is 6-6.5dbi. The device is packaged with a 24V power adapter, a PoE injector, a mounting bracket and a hose clamp.

#### First use

- Open the small door on the bottom of the case, connect an Ethernet cable to the Ethernet port. If you want to connect more than one Ethernet cable, you have to break out the hole-blockers.
- OmniTik accepts 8-30V Passive PoE from a PoE injector. The package includes a 24V power adapter and a PoE injector.
- The default IP address from LAN is 192.168.88.1 for configuration
- Username is admin and there is no password

#### **Powering**

The board accepts powering from the Ethernet port (Passive PoE):

 Ethernet port accepts passive Power over Ethernet 8-30V DC. Package contains a 24V adapter and a PoE injector.

Maximum power consumption of the device is 9W.

#### **Power output**

The OmniTik UPA-5HnD can supply PoE powering to external devices from its Ethernet ports. This is convenient as you don't need any additional PoE injectors on a tower to power other wireless devices. This feature is indicated by the letter "P" in the device model name. The output Voltage will be the same as input Voltage, and this feature will have to be enabled on the specific ports in RouterOS software. By default

will be the same as input Voltage, and this feature will have to be enabled on the specific ports in RouterOS software. By default it is disabled. Output is possible on ports 2-5.

### **Booting process**

This device doesn't come fitted with a Serial Port connector, so initial connection has to be done via the Ethernet cable, using the MikroTik Winbox utility. Winbox should be used to connect to the default IP address of **192.168.88.1** with the username **admin** and no password.

In case IP connection is not available, Winbox can also be used to connect to the MAC address of the device. Information here: http://wiki.mikrotik.com/wiki/First\_time\_startup

In case you wish to boot the device from network, for example to use MikroTik Netinstall, hold the RESET button of the device when starting it until the LED light turns off, and the device will start to look for Netinstall servers.

#### **Mounting**

OmniTik comes bundled with one mounting bracket and one hose clamp for putting the device on a pole. You should avoid connecting a loose Ethernet cable to the Ethernet port, secure the cable to a wall or the pole, so that the cable weight is not pulling the port. It is recommended to secure the Ethernet cable less than 2m from the device. This is to ensure that the cable doesn't damage the port by its weight, or doesn't fall out.



#### **Expansion Slots and Ports**

- One built in 5GHz 802.11a/n wireless, 2x2 MIMO. Two built-in antennas (h-pol and v-pol)
- Five individual 10/100 Ethernet ports, 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. The First Ethernet port accepts 8-30V
  DC powering from a passive PoE injector.
- One USB2.0 port

#### **Buttons and Jumpers**

- RouterOS reset jumper hole (no direct access, board has removed from case) resets RouterOS software to defaults.
   Must short circuit the metallic sides of the hole (with a screwdriver, for example) and boot the device. Hold screwdriver in place until RouterOS configuration is cleared.
- RouterBOOT reset button (access through the plastic door) has two functions:
  - Hold this button during boot time until LED light starts flashing, release the button to reset RouterOS configuration (same result as with reset hole)
  - Hold this button during boot time longer, until LED turns off, and then release it to make the device look for Netinstall servers.

#### **Operating System Support**

Currently tested operating system is MikroTik RouterOS (starting from version v4.17).

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**Hardware**. MikroTik warrants all RouterBOARD series equipment for the term of fifteen (15) months from the shipping date to be free of defects in materials and workmanship under normal use and service, except in case of damage caused by mechanical, electrical or other accidental or intended damages caused by improper use or due to wind, rain, fire or other acts of nature.

To return failed units to MikroTik, you must perform the following RMA (Return Merchandise Authorization) procedure. Follow the instructions below to save time, efforts, avoid costs, and improve the speed of the RMA process.

- 1. If you have purchased your product from a MikroTik Reseller, please contact the Reseller Company regarding all warranty and repair issues, the following instructions apply ONLY if you purchased your equipment directly from MikroTik in Latvia.
- 2. We do not offer repairs for products that are not covered by warranty. Exceptions can be made for RB1000, RB1100
- 3. Out-of-warranty devices and devices not covered by warranty sent to Mikrotikls will be returned to the sender at send-er's cost

RMA Instructions are located on our webpage here: http://rma.mikrotik.com

Manual. This manual is provided "as is" without a warranty of any kind, expressed or implied, including, but not limited to, the implied warranty of merchantability and fitness for a particular purpose. The manufacturer has made every effort to ensure the accuracy of the contents of this manual; however, it is possible that it may contain technical inaccuracies, typographical or other errors. No liability is assumed for any inaccuracy found in this publication, nor for direct or indirect, incidental, consequential or other damages that may result from such an inaccuracy, including, but not limited to, loss of data or profits. Please report any inaccuracies found to support@mikrotik.com

# Federal Communication Commission Interference Statement (FCC ID: TV70MNITIK5HND)

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.

5cm minimum distance has to be maintained between the antenna and the occupational user and 10 cm to general public. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.