RouterBOARD Metal 5SHPN

Quick Setup Guide and Warranty Information

The RouterBOARD **Metal 5SHPN** is a solid, waterproof outdoor device with a high power wireless transmitter (5GHz, 802.11a/n, N-Male antenna connector), and one 10/100 Ethernet connector which supports MDI-X auto detection. The device is packaged with a 24V power adapter, a PoE injector and two mounting loops.

First use

1. Connect the antenna to the N-Male connector
2. Use the latches to open the product case, to reveal the Ethernet connector
3. Use the provided round rubber insulator to put on the Ethernet cable, and push it into the case opening, so that the opening is tightly closed.
   To put the cable though the insulator, you have to put in the cable first, and only then clamp on the Ethernet connector. If the connector is already on the cable, you can cut the insulator on one side, to clamp it around the cable, but this sacrifices waterproofness.
4. The Metal accepts 12-28V Passive PoE from a PoE injector (please compensate voltage for loss due to cable length)
5. The default IP address from Ether1 is 192.168.88.1 for configuration
   Username is **admin** and there is **no password**
6. Depending on the antenna used, you must set its gain in the RouterOS software to ensure that EIRP meets the limit set by authorities. This is done in the Wireless menu.

Powering

The devices Etherner port accepts passive Power over Ethernet 12-28V DC. Package contains a 24V adapter and a PoE injector. Maximum power consumption of the device is 12W at 24V.
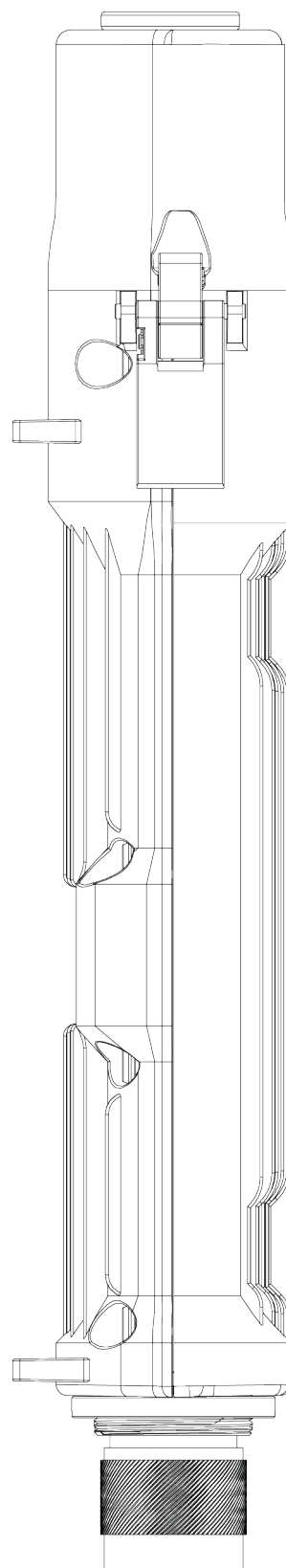
Booting process

Initial connection has to be done via the Ethernet cable. Open **192.168.88.1** in your web browser, and choose "Webfig" for browser based configuration or "Winbox" for a Windows utility with the same functions. Username is **admin** and there is no password. In case IP connection is not available, Winbox can be used to connect to the MAC address of the device. More 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 Metal will start to look for Netinstall servers.

Mounting

To tighten the Metal to a pole, use the provided mounting loops. The Metal comes bundled with two plastic and two metallic mounting loops (choose either) - guide the loops around the Metal though the provided edge markings, and around the pole where it will be mounted. 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 Metal 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

- Built in 5GHz 802.11a/n wireless, 1x1 MIMO, station mode (*AP mode for Metal A-5SHPN*)
- One 10/100 Ethernet port, supporting automatic cross/straight cable correction (Auto MDI/X), so you can use either straight or cross-over cable for connecting to other network devices. The Ethernet port accepts 8-30V DC powering from a passive PoE injector.

Buttons and Jumpers

- RouterOS reset jumper hole (no direct access, board has to be 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 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, then release it to make the device **look for Netinstall servers.**

Operating System Support

Currently tested operating system is MikroTik RouterOS (starting from version v5.0).

Copyright and Trademarks

Copyright MikroTikls SIA. This manual contains information protected by copyright law. No part of it may be reproduced or transmitted in any form without prior written permission from the copyright holder. RouterBOARD, RouterOS, RouterBOOT and MikroTik are trademarks of MikroTikls SIA. All trademarks and registered trademarks appearing in this manual are the property of their respective holders.

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.

- 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.
- We do not offer repairs for products that are not covered by warranty. Exceptions can be made for RB1000, RB1100 and RB1200.
- Out-of-warranty devices and devices not covered by warranty sent to Mikrotikls will be returned to the sender at sender'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