RouterBOARD RBM33 series

First use

- Insert the miniPCIe and M.2 cards (not included) and secure them with the included screws. [Only one 802.11 wireless card can be used at once]. It is suggested to use the other slot for LTE modems.
- (Optional) Install the device in a case.
- Connect cables to wireless cards and ethernet ports.
- Plug in power cable (directly or through the PoE injector) to turn on the device.

Powering

The device accepts power with the following modes:

- Passive 11-30 V PoE to J1 ethernet port. Higher voltage needed to compensate for power loss on long cables. At least 18 V is suggested.
- Direct input to the power jack 11-30 V.

Max total power consumption with all interfaces loaded is 19 W. Maximum power to each extension card is 3 A.

Booting process

RouterOS is the operating system of all RouterBOARD routers. Please see documentation: http://mt.lv/help

This device is not preconfigured other than an IP address on the ethernet port. Other configuration has to be applied according to the documentation manual linked above.

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 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.

In case IP connection is not available, the Winbox utility can also be used to connect to the MAC address of the device. More information in the documentation.

Extension slots and ports

- Three gigabit ethernet ports (With Auto MDI/X so you can use either straight or cross-over cables for connecting to other network devices). The J1 (first from the left) ethernet port accepts 11-30 V DC powering from a passive PoE injector.
- Two miniPCIe slots for either a 802.11 wireless card, or a 3G/LTE modem. Mini SIM 2FF slots available for miniPCIe 3G/LTE modems and have no functionality when a modem is not installed. [***Important!*** *Two 802.11 wireless radio cards cannot be used at the same time on this device. It is suggested to use J8 slot for a LTE modem, and the J10 slot for a wireless card.]*
- One M.2 (M key) slot for PCI-e SSD disk or other devices. The mounting hole is for 2242 size cards, for other sizes, an extender is suggested. Any speed M.2 cards will operate at 1x PCIe speed.
- One microSD slot for a storage card.
- One DB9 RS232 serial port for serial console access. Configured as 115200 bit/s, 8 data bits, 1 stop bit, no parity.

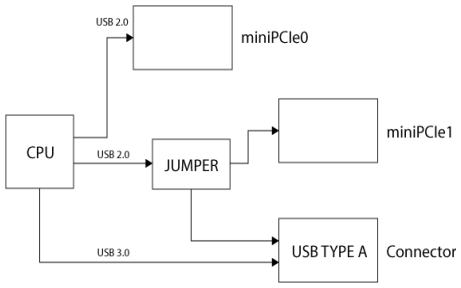
Buttons and jumpers

RouterBOOT reset button. This button has the following functions:

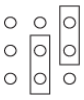
- Hold this button during boot time until LED light starts flashing, release the button to reset RouterOS configuration (total 5 seconds).
- Keep holding for 5 more seconds, LED turns solid, release now to turn on CAPs mode (total 10 seconds).
- Keep holding the button for 5 more seconds until until LED turns off, then release it to make the RouterBOARD 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.

USB jumper. Located right next to the USB 3.0 port. When loaded, the jumper enables the USB 3.0 port. Remove the jumper to switch the USB 2.0 lines to the J10 (central) miniPCIe slot (USB 3.0 lines remain enabled to the USB port). This is required if you need to use two cellular modems in the device. Normally you can use the LTE modem in the J8 (left hand side) slot, and use a 802.11 wireless card in the J10 slot. In this case, you can leave the jumper on, as most wireless cards operate on PCI express. Removing the jumper enables use of a secondary cellular modem in the central J10 slot, but disables the USB 2.0 functionality of the USB port, while USB 3.0 can still be used on the USB port. Refer to the diagram below,



Boot configuration jumpers. More options will be added later, below is default jumper configuration for MikroTik RouterOS boot.



Operating system support

The device only 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.

CE declaration of conformity

Full Declaration of Conformity (DoC) may be obtained by visiting our product page on https://mikrotik.com

[EN] English	Hereby, MIKROTĪKLS SIA declares that this RouterBOARD is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EC.
[BG] Bulgarian	С настоящето, MIKROTĪKLS SIA декларира, че RouterBOARD е в съответствие със съществените изисквания и другитеприложими разпоредби на Директива 2014/53/ЕС.
[CZ] Czech	MIKROTĪKLS SIA tímto prohlašuje, že RouterBOARD splňuje základní požadavky a všechna příslušná ustanoveni Směrnice 2014/53/ES.
[DK] Danish	Undertegnede MIKROTĪKLS SIA erklærer herved, at følgende udstyr RouterBOARD overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EF.
[DE] German	Hiermit erklärt MIKROTĪKLS SIA dass sich das Gerät RouterBOARD in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 2014/53/EG befindet.
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[GR] Greek	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Ο ΚΑΤΑΣΚΕΥΑΣΤΗΣ MIKROTĪKLS SIA ΔΗΛΩΝΕΙ ΟΤΙ RouterBOARD ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2014/53/ΕΚ
[ES] Spanish	Por la presente, MIKROTĪKLS SIA declara que este RouterBOARD cumple con los requisitos esenciales y otras exigencias relevantes de la Directiva 2014/53/EC.
[IT] Italian	Con la presente MIKROTĪKLS SIA dichiara che questo RouterBOARD è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/CE.
[LV] Latvian	Ar šo MIKROTĪKLS SIA deklarē, ka RouterBOARD atbilst Direktīvas 2014/53/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
[LT] Lithuanian	Šiuo MIKROTĪKLS SIA deklaruoja, kad šis RouterBOARD atitinka esminius reikalavimus ir kitas 2014/53/EB Direktyvos nuostatas
[HU] Hungarian	A MIKROTĪKLS SIA ezzennel kijelenti, hogy a RouterBOARD típusú beren-dezés teljesíti az alapvető követelményeket és más 2014/53/EK irányelvben meghatározott vonatkozó rendelkezéseket.
[NL] Dutch	Hierbij verklaart MIKROTĪKLS SIA dat het toestel l RouterBOARD in overeenstemming is met de essentiële eisen en de andere relevante bepalin-gen van richtlijn 2014/53/EG.
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[FI] Finish	MIKROTĪKLS SIA vakuuttaa täten että RouterBOARD tyyppinen laite on direktiivin 2014/53/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
[SE] Swedish	Härmed intygar MIKROTĪKLS SIA att denna RouterBOARD är i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2014/53/EG.
[NO] Norwegian	MIKROTĪKLS SIA Erklærer herved at RouterBOARD er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 2014/53/EF.

EN. Instruction manual: Connect the power adapter to turn on the device. Open 192.168.88.1 in your web browser, to configure it. More information on http://mt.lv/help **BG. Инструкция**: Свържете адаптера на захранване, за да включите устройството. Отворете 192.168.88.1 в уеб браузър, за да настроите продукта. Повече информация в http://mt.lv/help **CZ. Návod k použití**: Připojte napájecí adaptér k zapnutí přístroje. Otevřete 192.168.88.1 ve webovém prohlížeči pro konfiguraci produktu. Více informací najdete v http://mt.lv/help **DK. Instruktionsbog**: Tilslut strømadapteren for at tænde for enheden. Åbn 192.168.88.1 i en webbrowser til at konfigurere produktet. Mere information i http://mt.lv/help **FR. Mode d'emploi**: Connectez l'adaptateur d'alimentation pour allumer l'appareil. Ouvrez 192.168.88.1 dans un navigateur Web pour configurer le produit. Plus d'informations dans http://mt.lv/help **DE. Bedienungsanleitung**: Verbinden Sie das Netzteil, um das Gerät einzuschalten. Öffnen Sie 192.168.88.1 in einem Web-Browser, um das Produkt zu konfigurieren. Weitere Informationen im http://mt.lv/help **EE. Kasutusjuhend**: Ühendage toiteadapter seadme sisselülitamiseks. Avatud 192.168.88.1 in veebilehitseja seadistada toodet. Rohkem teavet http://mt.lv/help **ES. Manual de instrucciones**: Conecte el adaptador de alimentación para encender la unidad. Abra 192.168.88.1 en un navegador web para configurar el producto. Más información en http://mt.lv/help **IT. Manuale di istruzioni**: Collegare l'adattatore di alimentazione per accendere l'unità. Aprire 192.168.88.1 in un browser Web per configurare il prodotto. Maggiori informazioni in http://mt.lv/help **LV. Lietošanas instrukcija**: Pievienojiet Strāvas adapteri, lai ieslēgtu ierīci. Atvērt 192.168.88.1 ar interneta pārlūku, lai konfigurētu produktu. Plašāka informācija http://mt.lv/help **LT. Naudojimosi instrukcija**: Prijunkite maitinimo adapterį įjunkite įrenginį. Į interneto naršyklę 192.168.88.1 Atidarykite galite konfigūruoti gaminį. Daugiau informacijos rasite http://mt.lv/help **HU. Használati utasítás**: Csatlakoztassa a hálózati adaptert a készülék bekapcsolásához. Megnyitása 192.168.88.1 egy webböngészőben beállítani a terméket. Több információ http://mt.lv/help **NL. Handleiding**: Sluit voedingsadapter aan op het apparaat in te schakelen. Open 192.168.88.1 in een webbrowser om het product te configureren. Meer informatie in http://mt.lv/help **PL. Instrukcja obsługi**: Podłącz adapter zasilania, aby włączyć urządzenie. Otwórz 192.168.88.1 w przeglądarce internetowej, aby skonfigurować urządzenie. Więcej informacji w http://mt.lv/help **PT. Manual de instruções**: Conecte o adaptador de alimentação para ligar o aparelho. Abra 192.168.88.1 em um navegador da web para configurar o produto. Mais informações em http://mt.lv/help **RO. Instrucţiuni de utilizare**: Conectaţi adaptorul de alimentare pentru a porni aparatul. Deschide 192.168.88.1 într-un browser web pentru a configura produsul. Mai multe informaţii în http://mt.lv/help **SK. Návod na použitie**: Pripojte napájací adaptér k zapnutiu prístroja. Otvorte 192.168.88.1 vo webovom prehliadači pre konfiguráciu produktu. Viac informácií nájdete v http://mt.lv/help **SI. Navodila**: Priključite napajalnik za vklop naprave. Odprite 192.168.88.1 v spletnem brskalniku nastaviti izdelek. Več informacij v http://mt.lv/help **FI. Käyttöohje**: Kytke virtalähde päälle laitteen. Avaa 192.168.88.1 in selaimen määrittää tuotteen. Lisää tietoa http://mt.lv/help **SE. Instruktionsmanual**: Anslut nätadaptern för att slå på enheten. Öppna 192.168.88.1 i en webbläsare för att konfigurera produkten. Mer information på http://mt.lv/help **NO. Bruksanvisningen**: Koble strømadapteren for å slå på enheten. Åpne 192.168.88.1 i en nettleser for å konfigurere produktet. Mer informasjon på http://mt.lv/help **GR. εγχειρίδιο οδηγιών**: Συνδέστε τον προσαρμογέα τροφοδοσίας για να ενεργοποιήσετε τη μονάδα. Ανοίξτε 192.168.88.1 σε ένα πρόγραμμα περιήγησης στο Web για να διαμορφώσετε το προϊόν. Περισσότερες πληροφορίες στο http://mt.lv/help