# **HEX** series

The hEX series are small ethernet routers with five ports.

#### First use

- Connect your Internet cable to port 1 (labeled "Internet"), and local network computers to ports 2-5
- Set your computer IP configuration to automatic (DHCP)
- The IP address from local network is 192.168.88.1, use it in your browser to access the device

### **Powering**

The device accepts powering from the power jack or from the first Ethernet port (Passive PoE):

- Direct input power jack (5.5mm outside and 2mm inside, female, pin positive) accepts 8-30V DC
- The first Ethernet port accepts passive Power over Ethernet accepts 8-30V DC

The power consumption of this device under maximum load is up to 3W

### **Booting process**

The device is already configured and protected from the internet side, but it is suggested to set a password. Open **192.168.88.1** and since there is no password, the browser will automatically log into the configuration interface. In case IP connection is not available, Winbox can be used to connect to the MAC address of the device. More information here: <a href="http://wiki.mikrotik.com/wiki/First\_time\_startup">http://wiki.mikrotik.com/wiki/First\_time\_startup</a>

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. Keep holding the button until the LED light turns off, and the device will start to look for Netinstall servers.

#### **Extension Slots and Ports**

Five individual 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
Ethernet port accepts 8-30V DC powering from a passive PoE injector, 12V or more is
recommended to compensate for loss in cables.

#### **Buttons**

The Reset button (front panel, labeled RES) has these functions:

- Loading the backup RouterBOOT loader: Hold this button before applying power, release after three seconds since powering, to load backup Boot loader. This might be necessary if the device is not operation because of a failed RouterBOOT upgrade. When you have started the device with the backup loader, you can either set RouterOS to force backup loader in the RouterBOARD settings, or have a chance to reinstall the failed RouterBOOT from a fwf file (total 3 seconds)
- Resetting the RouterOS configuration: If you keep holding this button for 2 more seconds until LED light starts flashing, release the button to reset RouterOS configuration (total 5 seconds)
- Starting the RouterBOARD in Netinstall mode: Or Keep holding the button for 5 more seconds
  until until LED turns off, then release it to make the RouterBOARD look for Netinstall servers. You
  can also simply keep the button pressed until the device shows up in the Netinstall program on
  Windows (total 15 seconds)

## **Operating System Support**

Currently tested operating system is MikroTik RouterOS (starting from v6.35).

### **CE Declaration of Conformity**

Full Declaration of Conformity (DoC) may be obtained by visiting this web page: http://routerboard.com/doc/



[EN] English	Hereby, MIKROTĪKLS SIA declares that this ROUTERBOARD is in compliance with the essential requirements and other relevant
	provisions of Directive 1999/5/EC.
[BG] Bulgarian	С настоящето, MIKROTĪKLS SIA декларира, че ROUTERBOARD е в съответствие със съществените изисквания и
	другитеприложими разпоредби на Директива 1999/5/ЕС.
[CZ] Czech	MIKROTĪKLS SIA tímto prohlašuje, že ROUTERBOARD splňuje základní požadavky a všechna příslušná ustanoveni Směrnice
	1999/5/ES.
[DK] Danish	Undertegnede MIKROTĪKLS SIA erklærer herved, at følgende udstyr ROUTERBOARD overholder de væsentlige krav og øvrige
	relevante krav i direktiv 1999/5/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 1999/5/EG befindet.
[EE] Estonian	Käesolevaga kinnitab MIKROTĪKLS SIA seadme ROUTERBOARD vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud
	direktiivist tulenevatele teistele asjakohastele sätetele.
[GR] Greek	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Ο ΚΑΤΑΣΚΕΥΑΣΤΗΣ MIKROTĪKLS SIA ΔΗΛΩΝΕΙ ΟΤΙ ROUTERBOARD ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ
	ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ
[ES] Spanish	Por la presente, MIKROTĪKLS SIA declara que este ROUTERBOARD cumple con los requisitos esenciales y otras exigencias
	relevantes de la Directiva 1999/5/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 1999/5/CE.
[LV] Latvian	Ar šo MIKROTĪKLS SIA deklarē, ka ROUTERBOARD atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem
	noteikumiem.
[LT] Lithuanian	Šiuo MIKROTĪKLS SIA deklaruoja, kad šis ROUTERBOARD atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas
[HU] Hungarian	A MIKROTĪKLS SIA ezzennel kijelenti, hogy a ROUTERBOARD típusú beren-dezés teljesíti az alapvető követelményeket és más
	1999/5/EK irányelvben meghatározott vonatkozó rendelkezéseket.
[NL] Dutch	Hierbij verklaart MIKROTĪKLS SIA dat het toestel I ROUTERBOARD in overeenstemming is met de essentiële eisen en de andere
	relevante bepalin-gen van richtlijn 1999/5/EG.
[PL] Polish	Niniejszym MIKROTĪKLS SIA deklaruje że ROUTERBOARD jest zgodny z zasadniczymi wymaganiami i innymi właściwymi
	postanowieniami Dyrektywy 1999/5/EC.
[PT] Portuguese	Eu, MIKROTĪKLS SIA declaro que o ROUTERBOARD cumpre os requisitos essenciais e outras provisões relevantes da Directiva
	1999/5/EC
[RO] Romanian	Prin prezenta, MIKROTĪKLS SIA declară că aparatul ROUTERBOARD este în conformitate cu cerințele esențiale și cu alte
	prevederi pertinente ale Directivei 1999/5/CE.
[SK] Slovak	MIKROTIKLS SIA týmto vyhlasuje, že ROUTERBOARD spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice
	1999/5/ES.
[SI] Slovenian	MIKROTĪKLS SIA izjavlja, da je ta ROUTERBOARD v skladu z bistvenimi zahtevami in drugimi relevantnimi določili direktive
	1999/5/ES.
[FI] Finish	MIKROTĪKLS SIA vakuuttaa täten että ROUTERBOARD tyyppinen laite on direktiivin 1999/5/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 1999/5/EG.
[NO] Norwegian	MIKROTĪKLS SIA Erklærer herved at ROUTERBOARD er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv
	1999/5/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 <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> ВG. Инструкция: Свържете адаптера на захранване, за да включите устройството. Отворете 192.168.88.1 в уеб браузър, за да настроите продукта. Повече информация в <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> ОТ. Návod k použítí: Připojte napájecí adaptér k zapnutí přístroje. Otevřete 192.168.88.1 ve webovém prohlížeči pro konfiguraci produktu. Více informací najdete v <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> 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://wiki.mikrotik.com R. Mode d'emploj: 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 <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> 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 <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> EE. Kasutusjuhend: Ühendage toiteadapter seadme sisselülitamiseks. Avatud 192.168.88.1 in veebilehitseja seadistada toodet. Rohkem teavet <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> 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 <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> ES. Manual de instrucciones: Conecte el adaptador de alimentación para encender la unidad. Abra 192.168.88.1 en un navegador web para

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://wiki.mikrotik.com UV. Lietošanas instrukcija: Pievienojiet Strāvas adapteri, lai ieslēgtu ierīci. Atvērt 192.168.88.1 ar interneta pārlūku, lai konfigurētu produktu. Plašāka informācija http://wiki.mikrotik.com LT. Naudojimosi instrukcija: Prijunkite maitinimo adapterį ijunkite įrenginį. Į interneto naršyklę 192.168.88.1 Atidarykite galite konfigūruoti gaminį. Daugiau informacijos rasite http://wiki.mikrotik.com HU. Használati utasítás: Csatlakoztassa a hálózati adaptert a készülék bekapcsolásához. Megnyitása 192.168.88.1 egy webböngészőben beállítani a terméket. Több információ http://wiki.mikrotik.com 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://wiki.mikrotik.com PL. Instrukcja obsługi: Podłącz adapter zasilania, aby włączyć urządzenie. Otwórz 192.168.88.1 w przeglądarce internetowej, aby skonfigurować urządzenie. Więcej informacji w http://wiki.mikrotik.com 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://wiki.mikrotik.com RO. Instrucțiuni de utilizare: Conectați adaptorul de alimentare pentru a porni aparatul. Deschide 192.168.88.1 într-un browser web pentru a configura produsul. Mai multe informații în http://wiki.mikrotik.com 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://wiki.mikrotik.com SI. Navodila: Priključite napajalnik za vklop naprave. Odprite 192.168.88.1 v spletnem brskalniku nastaviti izdelek. Več informacij v http://wiki.mikrotik.com FI. Käyttöohje. Kytke virtalähde päälle laitteen. Avaa 192.168.88.1 in selaimen määrittää tuotteen. Lisää tietoa <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> 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://wiki.mikrotik.com. NO. Bruksanvisningen: Koble strømadapteren for å slå på enheten. Åpne 192.168.88.1 i en nettleser for å konfigurere produktet. Mer informasjon på <a href="http://wiki.mikrotik.com">http://wiki.mikrotik.com</a> 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://wiki.mikrotik.com