

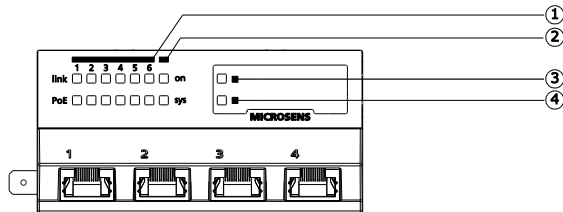
Commissioning the Gigabit Ethernet Micro Switch Generation 6+

Step 1: Connecting the power supply

- Make sure that you earth the device before connecting it to any other cables (power supply, network, etc.)
- Devices with an integrated 230 VAC power supply must be installed by qualified professionals only: Please observe the correct assignment of the L- and N-wires and the protective earth (PE) according to the drawing on the device type label.
- For devices with 44-57 VDC power supply please observe the correct polarity (+/- clamp markings)

Step 2: Starting up

- After connecting the power supply the device boots from its internal memory
- If a firmware card is inserted, it starts from the card (with factory settings)
- Connect the device to your local network segment using a suitable connector cable



Notifications

Port status LEDs ①

- 'link' LED: Off – Link down: No connection
Green – Link up, port open (able to receive and send data)
Orange – Link up, port blocked by port access control (PAC), spanning tree (STP), ring protocol or local loop protection. The blocking cause is determined in Web Manager under Ports > Forwarding Status.
- Red – Link up, blocked: PAC has rejected user
Blinking – Port sending or receiving data
- 'PoE' LED: Off – PoE (Power over Ethernet, PSE role) inactive
Orange – PoE or PoE+ turned on, port not supplying power
Green – PoE on, port supplying power (PSE role active)
Blue – PoE+ turned on, port supplying power (PSE role active)
Red – PoE error: Device has rejected PoE request

Device status LEDs ②

- 'on' LED: Off – Device unpowered
Green – Device ready for operation
Red, orange – Device booting
Green *blinking* – Device loading firmware
- 'sys' LED: Off – Normal operation
Other – See 'Restoring the factory default settings'

Operating elements

Two buttons are located behind the label on the switch (see drawing). To reveal these keys, prise open the transparent cover and pull the label out.

Restarting the switch (hardware reset) ③

By briefly pressing the reset button (upper key) the memory and the MAC table are erased and all connections are reinitialized. The current configuration (switch and management) remains unchanged.

Restoring the factory default settings ④

Pressing the 'Factory defaults' key (lower key) triggers the following actions:

- 2 s press: 'sys' LED lights up blue – Switch requesting IP address from Switch IP Configuration Tool or NMP
- 10 s press: 'sys' LED *blinks* blue – Switch is resetting to factory defaults, the IP configuration remains unchanged
- 20 s press: 'sys' LED *blinks* magenta – Switch is resetting to factory defaults, and IP configuration is also reset
- 30 s press: 'sys' LED lights up green – Switch is aborting the selected recovery function (see above), the entire configuration remains unchanged

Step 3: IP address assignment

For management over the network to function, the switch needs valid IP parameters (IP address, subnet mask, and default gateway). It retrieves these automatically via DHCP (factory setting). As an alternative you can manually assign the IP parameters with the software 'Switch IP Configuration Tool' ('Switch IP Config Tool') or the software 'Network Management Platform (NMP)'.

Using the software 'Switch IP Config Tool'

The software 'Switch IP Config Tool' is available on our website for download as a ZIP archive:

- www.microsens.com > Support > [Software tools](#)

The ZIP archive contains the documentation in English and the software offers an English user interface.

- Install and launch the software (prerequisite for installation: Java Runtime Environment)
- On your PC, select the network interface to be used for configuring the device
- Click the button 'MAC-based Device Discovery' (please consider your firewall configuration)
 - The software lists the MICROSENS devices by their MAC addresses
- Use the list to assign the IP parameters to the device. Clicking the button 'Send' stores the information to the non-volatile memory in the device

User interfaces to the device

Once the IP configuration is ready, you are able to manage the device. The device provides the following user interfaces:

- https – Web Manager (graphical interface, encrypted, access: <https://<IP address of device>>, User documentation is available via the link 'Documentation' in the navigation bar)
 - Also for the Management software NMP (see below)
- http – Web Manager, disabled by default (optional activation instead of https)
- ssh – Encrypted text-based interface (CLI)
- telnet – Unencrypted text-based interface (CLI)
- snmp – For third-party management software

User levels for management access

The following user levels (roles) are preset:

User	Password	Access	Comments
public	microsens	Read only	This user cannot make any changes.
user	microsens	Limited write	This user has write access to selected parameters, e.g. alias, time setup, test functions, etc.
admin	administrator	Full rights	This user can adjust all settings.

Management software NMP

With the Network Management Platform (NMP) MICROSENS offers a universal management software for the central configuration and administration of all MICROSENS devices. The clearly structured graphical user interface and intelligent mechanisms greatly simplify the tasks for the administrator.

The software interface offers a number of languages. The functions of the 'Switch IP Config Tool' are integrated. The latest version is available for download from our website:

- www.microsens.com > Support > [Software tools](#)

A license key is required to operate this software. A test license is available either from your MICROSENS products sales partner or directly from MICROSENS (sales@microsens.de).

Firmware updates and further information

You have access to current firmware versions and further information once you have registered on our website:

- Register: www.microsens.com > Partner-Login > Please follow the link 'Please register here' > Fill out and submit the online [User Registration](#) form
 - MICROSENS will send you an e-mail containing a user name and password
- Login: www.microsens.com > [Partner-Login](#) > Enter your user name and password > Click the button 'Login'
 - Firmware images: Please navigate to your device and select the tab 'Services'
 - Further information is available by selecting the other tabs

For further questions please contact our support:

- By e-mail under support@microsens.de
- By phone under +49 (0)2381 9452-345 (Mo. – Fr., 7:30 AM – 4:00 PM CET)