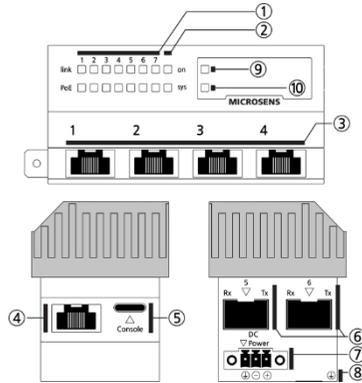


# Commissioning the 10G Micro Switch

## Hardware Description

- ① 7x port status LEDs "link"  
5x port status LEDs "PoE" (ports 1 – 4, 7)
- ② 1x device status LED "on"  
1x device status LED "sys"
- ③ 4x local ports (10/100/1000T)  
PoE+ (30 W per port)
- ④ 1x downlink port (10/100T/1000T/2.5G/5G)  
PoE++ (60W)
- ⑤ USB-C port (virtual COM port for console access).
- ⑥ 2x uplink ports (10G SFP+, no PoE)
- ⑦ Power supply (50-57 VDC, 54 VDC typ.)
- ⑧ Earth lug
- ⑨ Hardware reset button
- ⑩ Factory default button

**Note: Before use remove the protective plastic strip from the display!**



**Note:** For communication between the console port ⑤ and the USB port of the computer, support for communication with a "USB to UART Bridge CP2102N" is a prerequisite. The manufacturer Silicon Labs offers a maybe needed driver for download on their homepage ([www.silabs.com/developers](http://www.silabs.com/developers)).

## Notifications

### Port Status LEDs ①

'link' LED		'PoE' LED	
Off:	Link down (no connection)	Off:	PoE/PoE+/PoE++ (Power over Ethernet, PSE role) inactive
Green:	Link up, port open (able to receive and send data)	Green:	PoE on, port supplying power (PSE role active, PoE PD detected)
Red:	Link up, blocked (PAC has rejected user)	Orange:	PoE/PoE+/PoE++ turned on, port not supplying power
Blinking:	Port sending or receiving data	Red:	PoE error (Device has rejected PoE request)
		Blue:	PoE+/PoE++ turned on, port supplying power (PSE role active, PoE+ or PoE++ PD detected)

### Device Status LEDs ②

'on' LED		'sys' LED	
Off:	Device unpowered	Off:	System not ready
Green:	Device powered	Green:	System in operation
		Other:	see "Restoring 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) ⑨

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

### Restoring the factory default settings ⑩

Pressing the 'Factory defaults' key triggers the following actions:

Dur.	'sys' LED Status	Description
2 s	blue	Switch requesting IP address from Switch IP Configuration Tool or NMP.
10 s	blue blinking	Switch is resetting to factory defaults, IP configuration remains unchanged.
20 s	magenta blinking	Switch is resetting to factory defaults, IP configuration is reset.
30 s	green	Switch is aborting the selected recovery function (see above), the entire configuration remains unchanged.

## Connecting the Device

- Make sure to earth the device properly via the power supply ⑦ or the earth lug ⑧.
- When connecting the power supply ⑦ observe the correct polarity (GND/+/-).
- After connecting the power supply the device boots from its internal memory.
- Connect the device to the network using either an SFP+ transceiver with one of the SFP+ uplink ports ⑥ or an Ethernet connector cable with one of the other local ports ③④.

## Configuring the Device

For management across the network, the switch requires valid IP parameters (IP address, subnet mask, and default gateway). It retrieves these automatically via DHCP (factory setting). To discover the assigned IP parameters, log on to the DHCP server and search for the device's entry. You will find the corresponding MAC address printed on the device's chassis.

As an alternative you can discover and assign the IP parameters with one of the following applications:

- **Switch IP Configuration Tool** for discovering MICROSENS devices within the corporate network by means of the device's MAC address.
  - **Network Management Platform (NMP)** for convenient configuration of MICROSENS switches.
- Both applications are available on the MICROSENS website for download. For more information on how to use these applications please refer to the provided user manuals.
- Open one of the applications to discover the device in the network and to configure it.
  - For direct access via Web Manager enter the device's IP address in the web browser's address bar.

**Note:** Exceptionally, it is possible to use the USB port ⑤ for configuration via console (**115200-8N1**). Familiarity with configuration of serial connections and using console commands is highly recommended. For more information on the device's CLI command reference please refer to the provided device's user manual.

## User Levels for Management Access

The following user levels (roles) are preset (for security reasons you must change their passwords):

User	Password	Access
user	microsens	Read only
admin	administrator	Read / Write / Execute

## User Interfaces

A correct IP configuration assumed the device provides the following user interfaces:

Interface	Description
https (http)	<b>Note:</b> http is disabled by default. http requests are automatically redirected to https. Web Manager (graphical interface, encrypted, access: <code>https://&lt;device IP address&gt;</code> Also for the management software NMP
ssh	Encrypted text-based interface (CLI)
telnet	Unencrypted text-based interface (CLI)
snmp	For third-party management software

## 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](http://www.microsens.com) > Login > Click on the button 'Not registered' > Fill out the e-mail form and send it to [sales@microsens.com](mailto:sales@microsens.com). MICROSENS will send you an e-mail containing a user name and password.
- Login: [www.microsens.com](http://www.microsens.com) > Login > Enter your user name and password > Click the button 'Login'.
  - Firmware images: Please navigate to your device and select the section 'Download'.
  - Further information is available by selecting the other tabs on the product page.

For further questions please contact our support via the MICROSENS support portal. Just visit the support area on our website [www.microsens.com](http://www.microsens.com). There please select the link 'Support' and then the link 'Support Portal'.

**Note:** After the firmware update clear the browser's cache before opening the Web Manager again. This will force the browser to reload the device's updated web GUI data instead of using the out-dated data from its cache.