

Firmware Update GSR183

Relating to the critical fault in GPS183 & GNS183-UC clocks meinbergOS





Meinberg Funkuhren GmbH & Co. KG

Lange Wand 9, 31812 Bad Pyrmont, Germany

Telephone: + 49 (0) 52 81 / 93 09 - 0

Fax: + 49 (0) 52 81 / 93 09 - 230

Website: https://www.meinbergglobal.com

Email: info@meinberg.de

Date: May 23, 2024



1.	Background	1
2.	Identifying Affected Systems	2
3.	Installing the Firmware Update	5



1. Background

In May 2024, a critical firmware fault was identified in GPS183 and GNS183-UC-based reference clocks where a short-circuit on the antenna line could result in a failure and subsequent permanent damage to the receiver.

While such a failure is rare and can only occur with a short-circuited antenna line, operators of affected systems are strongly urged to install the firmware update to eliminate the risk of damage arising from this fault.

Only microSync devices shipped in 2024 contain the affected reference clock types. All GPS183 and GNS183-UC-based reference clocks shipped by Meinberg from May 2024 onwards already include the fix and therefore do not require any action on the operator's part.

This document explains how to detect if your system is affected by the fault, and how to download and install the module firmware file.



2. Identifying Affected Systems

The described fault affects the following devices manufactured between February 2024 and May 2024:

microSync HR101, HR102, HR301, HR302, RX101, RX102, RX201, RX202, RX301, RX302, RX311, RX312, RX401, RX402, RX411, RX412 Time Servers

Unaffected Systems

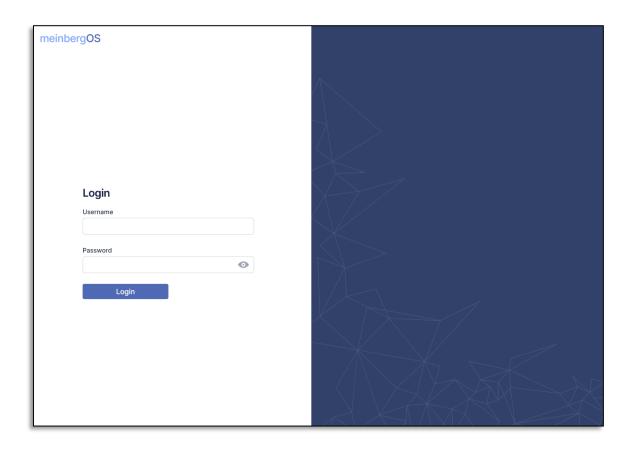
It **does not** affect the following devices:

microSync HR100, HR300, HR310, HR700, HR701, HR702, RX100, RX300, RX310, RX400, RX410, RX522,
 RX622, RX700, RX701, RX702, RX800, RX801, RX802 Time Servers

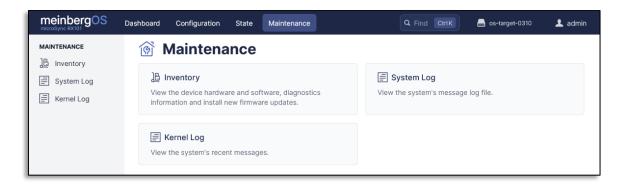


The firmware fault relates to reference clocks and time servers with a reference clock firmware version earlier than v1.11. You can identify which firmware version your microSync's reference clock has by following the procedure below:

1. Log into your microSync system via the Web Interface.

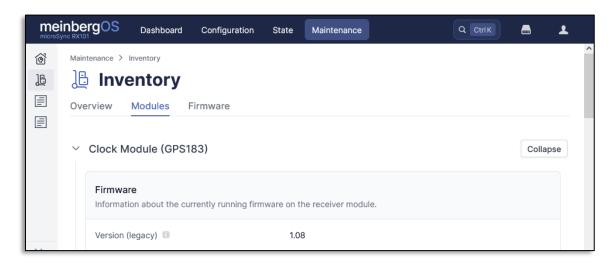


2. Select the "Maintenance" tab.





3. Expand the "Clock Module" panel.



Affected systems can be identified as follows:

- The "Clock Module" panel should display "GPS183" or "GNS183-UC" in parentheses. If the model shown here is anything else, you do not need to install this firmware.
- Affected systems will have a "Version (legacy)" of "v1.08" or earlier. If this field reads "v1.11" or better, the appropriate fix is already installed and there is no need to install the latest version.



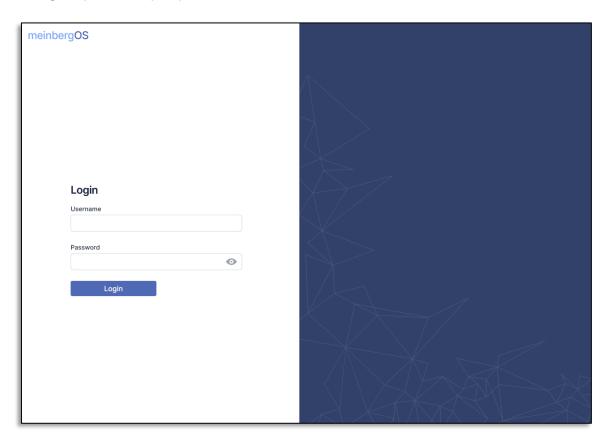
3. Installing the Firmware Update

Visit the Meinberg Firmware Download page
 (https://www.meinbergglobal.com/english/sw/firmware.htm), enter the serial number of your device, and download the latest firmware update.



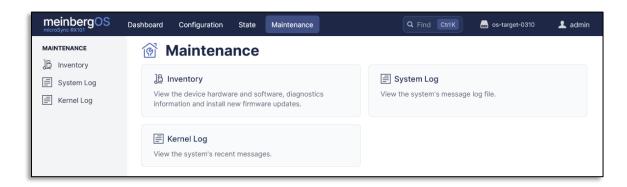
If you have multiple affected microSync devices in operation, this download can of course be used for all of those affected devices.

2. Log into your microSync system via the Web Interface.





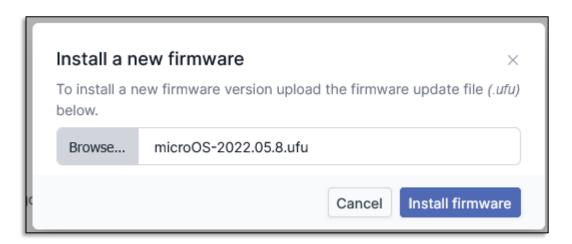
3. Select the "Maintenance" tab.



4. Access the "Inventory" page and click on "Install New Firmware...".

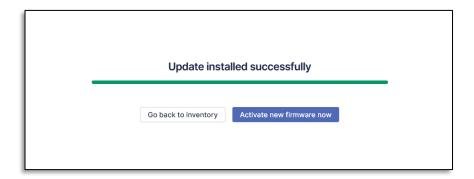


5. You will be prompted to select the firmware update file. Click on "**Browse...**", select the downloaded *.ufu* file.





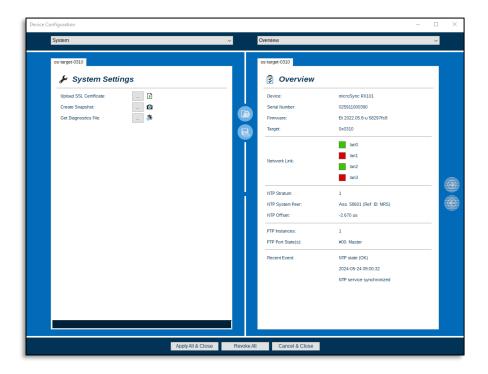
6. Once the meinbergOS software update has been updated, you will see the message below. Click on "Activate New Firmware Now" to enable the new firmware and restart the system.



7. If you do not already have it installed, download Meinberg Device Manager from the Meinberg website at:

https://www.meinbergglobal.com/english/sw/mbg-devman.htm

Install the Meinberg Device Manager software (or unpack it to a directory of your choosing if using the Portable Version) and execute it. Add your microSync system in accordance with the instructions provided in the Meinberg Device Manager documentation, either by means of auto-discovery or by manual configuration.

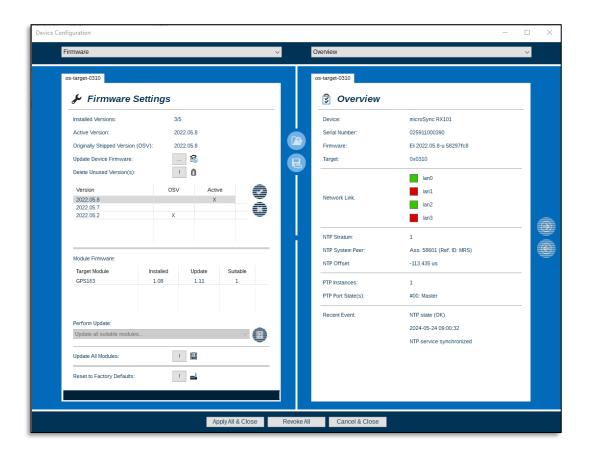




8. Once connected to your microSync system in Meinberg Device Manager, open the "**Firmware**" page in the "**Config**" panel on the left.

Under "Module Firmware" you should see the "GPS183" or "GNS183-UC" target module show that an update to "1.11" (or better) is available. Select the reference clock in the table, select either the reference clock or "Update all suitable modules..." in the drop-down list, then click on the blue "Start Update" button.

Once this process is completed, the reference clock will reboot.





- 9. Verify that the firmware is correctly installed, either by:
 - accessing the Web Interface, selecting the "Maintenance" tab, opening the "Modules" page, and checking "Version (legacy)", which should be "1.11" or better.



o opening Meinberg Device Manager, selecting "System" from the status panel on the right, opening the "System" page under "Clock [CLK1]", and checking "Firmware", which should be "1.11" or better.

