

Instructions on fixing the GPS time week-number-rollover for the LTE module of the BAT450-F (BAT450-FXXW9LXX..)

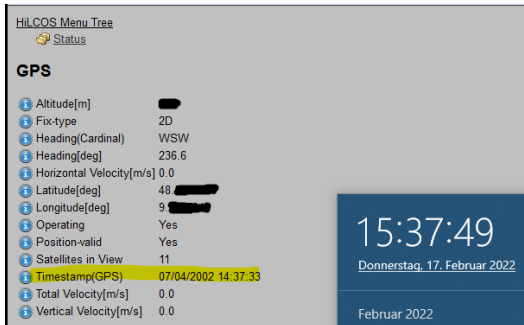
The GPS time week-number-rollover is a phenomenon that occurs approximately every 20 years. A counter overflow results in the GPS time being set back by 20 or 40 years. The fix described here is for the April 2019 occurrence.

1. Issue identification

The **incorrect** GPS time is visible as follows:

- In the graphical user interface WEBconfig with the corresponding IP address of the device:

<https://IP-ADDRESS/config/1/63/>



- In the Command Line Interface: ls Status/GPS/Timestamp(GPS)

```
admin@BAT450-F_LTE:/  
> ls /Status/GPS/Timestamp(GPS)  
  
Timestamp(GPS) INFO: 07/04/2002 14:42:25
```

For further details about the GPS settings, the graphical user interface WEBconfig or the Command Line Interface, please refer to the "User Manual Configuration Guide" and the "Reference Manual Command Line Interface (CLI)". The manuals are available for download on the Internet:

<https://www.doc.hirschmann.com>

2. Fixing the issue

It is absolutely necessary to update HiLCOS to the recommended version first. Otherwise, the device may run in an inconsistent state that can only be resolved by a power cycle.

1) Upgrade HiLCOS to either

- 10.12-6710-RU9
- 10.34--RU2
- **or newer.**

2) Upload the BAT450-LTE_GPS_rollover.upx

For further details about the firmware upload, please refer to the "User Manual Configuration Guide" and the "Reference Manual Command Line Interface (CLI)". The manuals are available for download on the Internet: <https://www.doc.hirschmann.com>.

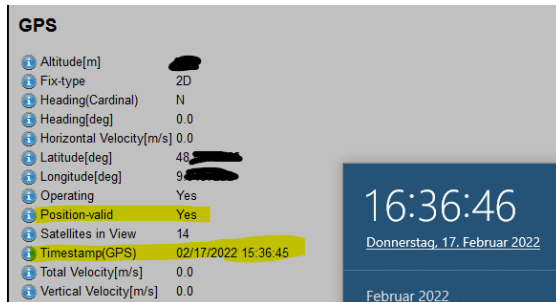
3. Verifying the fix

The problem is solved with the first valid GPS timestamp (position-valid: yes).

The timestamp shows the correct time.

- In the graphical user interface WEBconfig with the corresponding IP address of the device:

<https://IP-ADDRESS/config/1/63/>



- In the Command Line Interface: ls Status/GPS/Timestamp(GPS)

```
admin@BAT450-F_LTE: /  
> ls Status/GPS/Timestamp(GPS)  
  
Timestamp(GPS) INFO: 02/17/2022 15:37:52
```