

Subject: Rollover on GPS

Dear all,

The purpose of this letter is to inform you about several events regarding some products synchronized with GPS. A rollover is expected on the GPS OEM receiver we integrate in our products using the GPS system. This intrinsic GPS system event may have consequences on your equipment.

Please, find the necessary information below.

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The Rollover description

The rollover is an inevitable event in the life of a GPS board because a GPS board has a lifecycle of 1024 weeks. At the end of its lifecycle, it resets to its initial time.

This rollover date depends on the initial time of the embedded firmware. Therefore, reset dates differ accordingly to manufacturers and models. It is necessary to be well informed about it.

What impact does it have on devices?

If the module resets, the device will not be synchronized anymore and will display the initial date (no changes on time though). The device itself will not be damaged but any other device synchronized on it may display the wrong date and time.

What are the solutions ?

To solve this problem, 3 solutions can be used depending on the device, production dates and solution implementation:

1. GPS receiver board update

If your devices have been produced in 2003 or later, they only need to be updated by our technicians or a trained maintenance team. In this case, please contact us in order to do the necessary operations in time.

2. Device replacement

In the case of a device made before 2003, update operations are not manageable. The hardware is not compatible with the newest GPS receiver boards. It is needed then to replace all concerned products by new versions. **RTB GPS with the reference 4028/xx must be changed quickly.**

3. Holdover mode

In order to ease the transition, it is possible to use a temporary solution to the rollover. It is indeed possible to keep your devices a few days in holdover. Before the reset that will occur you need to unplug the synchronization source (antenna). The device will keep running on its internal time base. The device will not be synchronized anymore but will keep running. Careful though, the drift on some devices is about a second a day. This solution must not stay permanently.

The Rollover schedule

You can find some information on the product. All products have a sticker at the back with at least this information:

- Brand Name: Gorgy Timing
- Product reference : ex. 4028/xxx
- Serial number : YYXXXX where (YY : Year of production and XXXX: Production number in the current year)

The detailed schedule

| Reference GT | Name Product | Mean to identify the reference | GPS board | Rollover Problem | Date of rollover occurrence MM/DD/YY | Chipset manufacturer | Replacement product | Year of Production |
|--------------|-------------------------|--------------------------------|-----------|------------------|--------------------------------------|----------------------|---------------------------|---|
| 92100/xxx | Ledi Network NTP server | Sticker on the product | 38116-20 | Yes | 07/28/2018 | Trimble | Ledi Network ITSv2m or TS | From April 2005 to June 2007 included |
| 92100/xxx | Ledi Network NTP server | Sticker on the product | 58048-00 | Yes | 12/07/2025 | Trimble | Ledi Network ITSv2m or TS | From July 2007 to december 2008 included |
| 92100/xxx | Ledi Network NTP server | Sticker on the product | 58048-10 | Yes | 02/28/2027 | Trimble | Ledi Network ITSv2m or TS | From january 2009 to february 2010 included |
| 92100/xxx | Ledi Network NTP server | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | Ledi Network ITSv2m or TS | From March 2010 to August 2011 included |
| 4015/8xx | GPS2000 | Sticker on the product | * | Oui | * | Motorola | Ledi Network ITSv2m or TS | Before December 2002 |
| 4015/8xx | GPS2000 | Sticker on the product | 28835-20 | Oui | 30/07/2016 | Trimble | Ledi Network ITSv2m or TS | From January 2003 to June 2008 included |
| 4028/xxx | RTBGPS | Sticker on the product | * | Oui | * | Motorola | RTBGPS (4048/xx) | Between 1995 and 1998 |
| 4028/xxx | RTBGPS | Sticker on the product | 28835-20 | Oui | 30/07/2016 | Trimble | RTBGPS (4048/xx) | From 1998 to January 2002 included |
| 4038/xxx | RTBGPS | Sticker on the product | 28835-20 | Yes | 07/30/2016 | Trimble | RTBGPS (4048/xx) | From February 2000 to January 2002 included |
| 4038/xxx | RTBGPS | Sticker on the product | 38115-20 | Yes | 07/29/2017 | Trimble | upgrade | From February 2002 to June 2003 included |
| 4038/xxx | RTBGPS | Sticker on the product | 38116-20 | Yes | 07/28/2019 | Trimble | upgrade | From July 2003 to July 2006 included |
| 4038/xxx | RTBGPS | Sticker on the product | 46240-25 | Yes | 09/14/2025 | Trimble | | From October 2006 to June 2007 included |
| 4048/xxx | RTBGPS with antenna | Sticker on the product | 58048-00 | 12/07/2025 | Trimble | upgrade | upgrade | From July 2007 to December 2008 included |
| 4048/xxx | RTBGPS with antenna | Sticker on the product | 58048-10 | 02/28/2027 | Trimble | upgrade | upgrade | From January 2009 to February 2010 included |

| Reference GT | Name Product | Mean to identify the reference | GPS board | Rollover Problem | Date of rollover occurrence MM/DD/YY | Chipset manufacturer | Replacement product | Year of Production |
|--------------|---------------------|--------------------------------|-----------|------------------|--------------------------------------|----------------------|---------------------------|---|
| 4048/xxx | RTBGPS | Sticker on the product | 63530-00 | 12/29/2029 | Trimble | N/A | N/A | From March 2014 |
| NT819 | NT819-RT4000 Module | Sticker on the product | 38116-20 | Yes | 07/28/2019 | Trimble | Upgrade | From February 2006 to June 2007 included |
| NT819 | NT819-RT4000 Module | Sticker on the product | 58048-00 | Yes | 12/07/2025 | Trimble | Upgrade | From July 2007 to december 2008 included |
| NT819 | NT819-RT4000 Module | Sticker on the product | 58048-10 | Yes | 02/28/2027 | Trimble | Upgrade | From january 2009 to february 2010 included |
| NT819 | NT819-RT4000 Module | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | From March 2010 |
| NT829 | NT829-RT4000 Module | Sticker on the product | 38116-20 | Yes | 07/28/2019 | Trimble | Upgrade | From February 2006 to June 2007 included |
| NT829 | NT829-RT4000 Module | Sticker on the product | 58048-00 | Yes | 12/07/2025 | Trimble | Upgrade | From July 2007 to december 2008 included |
| NT829 | NT829-RT4000 Module | Sticker on the product | 58048-10 | Yes | 02/28/2027 | Trimble | Upgrade | From january 2009 to february 2010 included |
| NT829 | NT829-RT4000 Module | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | From March 2010 |
| 92114/xxx | Ledi Network ITS.V1 | Sticker on the product | 38116-20 | Yes | 07/28/2019 | Trimble | Ledi Network ITSv2m or TS | From February 2006 to June 2007 included |
| 92114/xxx | Ledi Network ITS.V1 | Sticker on the product | 58048-00 | Yes | 12/07/2025 | Trimble | Ledi Network ITSv2m or TS | From July 2007 to december 2008 included |
| 92114/xxx | Ledi Network ITS.V1 | Sticker on the product | 58048-10 | Yes | 02/28/2027 | Trimble | Ledi Network ITSv2m or TS | From january 2009 to february 2010 included |
| 92114/xxx | Ledi Network ITS.V1 | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | Ledi Network ITSv2m or TS | From March 2010 |
| 92152/xxx | Ledi Network ITS | Sticker on the product | 58048-00 | Yes | 12/07/2025 | Trimble | Ledi Network ITSv2m | From July 2007 to december 2008 included |
| 92152/xxx | Ledi Network ITS | Sticker on the product | 58048-10 | Yes | 02/28/2027 | Trimble | Ledi Network ITSv2m | From january 2009 to february 2010 included |

| Reference GT | Name Product | Mean to identify the reference | GPS board | Rollover Problem | Date of rollover occurrence MM/DD/YY | Chipset manufacturer | Replacement product | Year of Production |
|--------------|------------------------------------|--------------------------------|-----------|------------------|--------------------------------------|----------------------|---------------------|---|
| 92167/xxx | Ledi Network ITS.V2 | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | From September 2011 to feb. 2016 included |
| 92167/xxx | Ledi Network ITS.V2m | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | Since March 2016 |
| 92197/xxx | Ledi Network ITS.V2 2U | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | From September 2011 to feb. 2016 included |
| 92197/xxx | Ledi Network ITS.V2m 2U | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | Since March 2016 |
| 92208/Gxx | Ledi Network TS (with 3Gx antenna) | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | Since June 2013 |
| 92209/Nxx | Ledi Network TS | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | Since October 2014 |
| 9286/xxx | Ledi Network ENHANCED GPS | Sticker on the product | 38116-20 | Yes | 07/28/2019 | Trimble | Ledi Network TS | From June 2004 to July 2005 included |
| 92139/xxx | Ledi Network 1SRK ENHANCED | Sticker on the product | 58048-00 | Yes | 12/07/2025 | Trimble | Ledi Network TS | From July 2007 to December 2008 included |
| 92139/xxx | Ledi Network 1SRK ENHANCED | Sticker on the product | 58048-10 | Yes | 02/28/2027 | Trimble | Ledi Network TS | From January 2009 to February 2010 included |
| 92139/xxx | Ledi Network ENHANCED GPS | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | Ledi Network TS | From March 2010 to May 2014 included |
| 3192/xxx | Ledi 1SRK | Sticker on the product | 38116-20 | Yes | 07/28/2019 | Trimble | Ledi Network TS | From March 2002 to January 2006 included |
| 3192/xxx | Ledi 1SRK | Sticker on the product | 46240-25 | Yes | 09/14/2025 | Trimble | Ledi Network TS | From February 2006 to March 2007 included |
| 3Gx | GPS Antenna | Sticker on the product | 46240-25 | Yes | 09/14/2025 | Trimble | N/A | From January 2010 to February 2014 included |

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|-----|-------------|------------------------|----------|-----|------------|---------|-----|------------------|
| 3Gx | GPS Antenna | Sticker on the product | 63530-00 | Yes | 12/29/2029 | Trimble | N/A | Since March 2014 |
|-----|-------------|------------------------|----------|-----|------------|---------|-----|------------------|

Warning for Motorola chip: the date written on the chip is probably not the firmware date.

* : for Motorola chip we don't have information from the provider that allows us to communicate on real rollover dates. Tests are running but not giving expected results now. We consider it is anyway better to upgrade or change the obsolete product.

The previous tab in this document has been deleted because dates were probably not accurate. Tests are running to identify the date associated to the Motorola serial number.

We accept that the customer open the products for all the units produced before February 2004.

For more information or demands, please contact us, we will be pleased to help you:

Support@gorgy-timing.fr / **+33(0) 892 68 70 68**