

For customers using RF over fiber products for GPS/GNSS

Between midnight on the 6th and 7th April 2019 globally, there will be a 1024 week rollover on the timing clocks used in the GPS network. From a user equipment perspective, this will impact on how GPS receiver chips interpret the week rollover.

Most GPS chip manufacturers already have software/firmware updates in place, which can be applied and will ensure the equipment is unaffected by this problem.

While this issue will not directly affect **ViaLite** RF over fiber GPS link equipment, customers should be aware of the forthcoming issue.

More details

A GPS receiver IC cannot last more than 1024 weeks (19.7 years) after manufacture without intervention such as reconfiguration or new firmware. This is due to the maximum week value that can be transmitted from GPS satellites. After reaching its maximum value, the number resets to zero. This reuse of week numbers means that the transmitted date is not unique. This therefore creates an ambiguity. In other words, 'Which 19.7-year "epoch" does the transmitted date belong to?'

The last time there was a GPS Week Number Rollover was in 1999. The next one will take place at midnight between 6th and 7th April 2019.

It is the responsibility of the GPS receiver to interpret that week number as the correct date and different manufacturers have different approaches to how this is achieved.

Date: 02/05/19 (February 5)