



Important Firmware Update for April 2019 GPS Week Number Rollover Event

To establish context, this event is occurring due to the end of the current GPS Time Epoch. GPS Time uses 10 bits to count GPS Week Numbers, and can only cover a finite period of 1024 weeks (19.7 year epoch), with the first GPS Time Epoch ending on 21/22 August 1999. GPS Week 0 started January 6, 1980. The 1024 weeks counter ran out and rolled over on August 21, 1999. The week counter then reset to zero, and it has been recounting ever since. The next time the counter will reach week 1023 and rollover to zero is on April 6, 2019. In order to smoothly transition through the Week 0 time period, the firmware must be updated in the GPS receiver in the part number and versions below.

Without this update, the firmware will not recognize Week 0 after the rollover. The result of this is that during Week 0, the receiver will not accept satellite data and will not make a solution to lock to the GPS satellites. If Week 0 is entered in a “locked” state, the receiver will lose lock and enter into holdover mode. If the receiver maintains its power prior to and is not reset during Week 0, the date and time will continue to be updated properly in the NMEA data stream. In holdover mode, the receiver will continue to generate the clock output and a 1PPS signal based on the stability of the external holdover clock, or in the case of the CW25-TIM or Wi125 receivers, the stability of the onboard TCXO.

Once Week 0 is over and Week 1 is entered into, the receiver will immediately re-gain lock to the GPS satellites and move out of holdover mode. The receiver, if not reset after entering Week 0, will continue to report the correct date and time until the receiver is reset or is power cycled and restarted. If the receiver is started during the coming epoch Week 1 or after, it will not report the correct week or year, however, the time and day of the week will be correctly reported. Without the updated firmware installed, the receiver will report the week and year as if it was starting Week 1 in August 1999.

Once the firmware update is downloaded, you will be asked for a password: **navsync**

See page 2 - 4 for the updated firmware version and download link.

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FR/FTSxxx update v1.79.12.00.33

Download Link: http://www.conwin.com/docs/fts_update_v1.79.12.00.33.rar

Part Number	Revision	Version	2019 Rollover Updated Version
FR125-BRD-010.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FR125-COO-010.0M	V1.0	V.1.79.12.00.18	V.1.79.12.00.33.bin
FR125-CTV-016.384M	V1.0	V.1.79.12.00.12	V.1.79.12.00.33.bin
FTS125-COO-010.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS125-COV-010.0M	V1.0	V.1.79.12.00.12	V.1.79.12.00.33.bin
FTS125-CST-010.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS125-CTV-010.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS250-010.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS250-025.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS250-035.84M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS250-035.84M	V1.1	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS250-CST-010.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS250-CST-010.0M	V1.1	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS250-CST-010.0M	V1.2	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS375-010.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin
FTS375G-010.0M	V1.0	V.1.79.12.00.32	V.1.79.12.00.33.bin

FTS375-HD update v1.79.12.05.02

Download Link: http://www.conwin.com/docs/fts375hd_update_v1.79.12.05.02.rar

Part Number	Revision	Version	2019 Rollover Updated Version
FTS375-HD	V1.0	v1.79.12.05.01	v1.79.12.05.02.bin
FTS375-HD-010.0M	V1.0	V.1.79.12.05.01	V.1.79.12.05.02.bin

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Wi125 update v1.79.00.29.14

Download Link: http://www.conwin.com/docs/wi125_update_v1.79.00.29.14.rar

Part Number	Revision	Version	2019 Rollover Updated Version
WI125	V1.79.00.29.04		v1.79.00.29.14
WI125	V1.79.00.29.05		v1.79.00.29.14

CW25-TIM update v1.79.00.02.15

Download Link: http://www.conwin.com/docs/cw25tim_v1.79.00.02.15.rar

Part Number	Revision	Version	2019 Rollover Updated Version
CW25-TIM	V1.79.00.02.01B		v1.79.00.02.15
CW25-TIM	V1.79.00.02.01C		v1.79.00.02.15
CW25-TIM	V1.79.00.02.03		v1.79.00.02.15
CW25-TIM	V1.79.00.02.06		v1.79.00.02.15
CW25-TIM	V1.79.00.02.10		v1.79.00.02.15
CW25-TIM-AV2	V1.79.00.02.03		v1.79.00.02.15
CW25-TIM-SOM	V1.79.00.02.03		v1.79.00.02.15
CW25-TIM-SOM	V1.79.00.02.06		v1.79.00.02.15

Xenith-MOB update v1.79.12.03.03

Download Link: http://www.conwin.com/docs/xenithtbr_v1.79.12.03.03.rar

Part Number	Revision	Version	2019 Rollover Updated Version
FTS375-TBR-010.0M	V1.0	V.1.79.12.03.01	V1.79.12.03.03.bin
Xenith-TBR	V1.0	V.1.79.12.03.01	V1.79.12.03.03.bin
FTS500-010.0M	V1.0		V.1.79.12.03.03.bin

FTS250-MOB update v1.79.12.02.06

Download Link: http://www.conwin.com/docs/fr125nav_v1.79.12.02.06.rar

Part Number	Revision	Version	2019 Rollover Updated Version
FTS250-MOB-010.0M	V170.12.02.04		V.1.79.12.02.06

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CW25-TIM-WR1 update v1.79.00.32.02

Download Link: http://www.conwin.com/docs/cw25timwpr_update_v1.79.00.32.02.rar

Part Number	Revision	Version	2019 Rollover Updated Version
CW25-TIM-WR1	V1.0	V1.79.00.32.01	V1.79.00.32.02.bin

CW25-TIM-VTx update v1.79.05.03.05

Download Link: http://www.conwin.com/docs/cw12timvt_update_v1.79.05.03.05.rar

Part Number	Version	2019 Rollover Updated Version
CW25-TIM-VT3	V1.79.05.03.02	V1.79.05.03.05.bin
CW25-TIM-VT4	V1.79.05.03.04	V1.79.05.03.05.bin

CW25-TIM-VTx update v1.79.05.01.04

Download Link: http://www.conwin.com/docs/cw12tim_update_v1.79.05.01.04.rar

Part Number	Version	2019 Rollover Updated Version
CW25-TIM-VT2	V1.79.05.01.00S	V1.79.05.01.04.bin

CW25-TIM-Wxx update V1.79.00.32.xx

Download Link: http://www.conwin.com/docs/cw25timwpr_update_v1.79.00.32.02.rar

Part Number	Version	2019 Rollover Updated Version
CW25-TIM-WPR	V1.79.00.32.00	V1.79.00.32.02.bin
CW25-TIM-WR1	V1.79.00.32.01	V1.79.00.32.02.bin