



MT Software Suite 4.7 - release notes

New version	MT Software Suite 4.7; MTi 10/100-series FW 1.5.1; MTi 1-series FW 1.1.1;
Previous version	MT Software Suite 4.6 MTi 10/100-series FW 1.4.12 MTi 1-series FW 1.0.16
Release date	December 21 st , 2016
Meaning of icons	+added, ^changed, !note, #fixed, -removed

1 Notes

! [MTSDK-3732] This release requires that the drivers of your graphics card are up to date. When they are not, MT Manager may crash when opening graphs.

Supported platform overview:

Software platform	Notes on support
Windows XP	Last support in 4.2.1
Windows 7 32-bit	Officially supported
Windows 7 64-bit	Officially supported
Windows 8 64-bit	Tested, no official support
Windows 10 64-bit	Tested, no official support
Linux 32-bit (Ubuntu 16.04)	Officially supported
Linux 64-bit (Ubuntu 16.04)	Officially supported

2 Improvements and features

2.1 In-run Compass Calibration (ICC)

+*[MTSDK-3673, MTSDK-3857, MTSDK-3874, MTSDK-3853, MTSDK-3700, MTSDK-3701]* Added ICC to MT SW Suite
+*[MTIONE-135, MKIVFW-81]* Added ICC to Firmware (1-series, 10-series, 100-series). ICC is a beta feature for MTi-G-700/710

+*[MTIONE-136, MTSDK-3872, MTSDK-3854, MTSDK-3855,]* Representative Motion mode, both in firmware and MT Manager

+*[MTSDK-3856, MTIONE-137]* Possibility to store ICC data to non-volatile memory

2.2 Gyro bias estimation

^*[MTSDK-3698, MTSDK-3787, MTSDK-3807]* Gyro Bias Estimation using the 'noRotation' update uses a stillness detection mechanism which is more robust to slow rotations and facilitates faster convergence times - this improves the functionality of SetNoRotation and AHS (100-series) features.

^*[MKIVFW-78, MTSDK-3859]* Improved and simplified Gyro Bias estimation status bits

2.3 MTi improvements

^*[MTSDK-3698]* For MTi 100-series: when AHS is enabled, 'noRotation' update with stillness detection is continuously on in conjunction with AHS

2.4 MTi-G-710 improvements

+*[MTSDK-3798]* Added \$XSVEL to MTi-G-710 (velocity output in ASCII). Fixed GNSS lock issue.

+*[MKIVFW-34]* Add NMEA ZDA string to MTi-G-700/710

+*[MTSDK-3819, MKIVFW-68]* Added HighPerformanceEDR filter profile to replace AutomotiveUrbanCanyon, suitable for the same applications.

2.5 MT Manager and MT SDK

+*[MTSDK-3729, MTSDK-3833, MTSDK-3816]* Added boolean to Device Settings in MT Manager to enable AHS and BeiDou

+*[MTSDK-3728]* Added SetOptionsFlags to XDA Data Viewer

+*[MTSDK-3689]* Added licenses in .rtf format to SDK

+*[MTSDK-3717]* Added AccelerationHR and RateofTurnHR contains-functions to XDA

^*[MTSDK-3770]* EnableGpsBeidou is now called EnableBeidou.

+*[MTSDK-3837, MFM-38]* Added automatic checks on software-updates for MT Manager and Magfield Mapper

^*[MTSDK-3515]* No longer required to ask for a specific device; all IMUs, VRUs and AHRs grouped under XsDeviceId::isImu ::isVru ::isAhrs

^*[MTSDK-3400, MTSDK-3571, MTSDK-3805]* Improved readability of Device Data View and XDA Data View

^*[MTSDK-3842]* Upgraded Visual Studio version in the installers to VS2015

+*[MTSDK-3744]* Add several COM interface functions to doxygen

^*[MTSDK-3384]* Made the StatusWord legend vertical, improving readability

^*[MTSDK-3623, MTSDK-3675, MTSDK-3805]* Sync lines naming less ambiguous, MTi 1-series sync lines renumbered to match other MTi products.

^*[MTIONE-133]* Update mbed FWU example with latest firmware and more detailed instructions

3 Bug fixes

3.1 Fixes on all MTi's

#[MTSDK-3832] AHS Boolean is now remembered after Revert or Firmware Update
#[MKIVFW-85] PHTRO (NMEA-output) has a bug fixed when roll is higher than $\pm 90^\circ$

3.2 Specific MTi-G-710 bug fixes

#[MTSDK-3785] Fixed Heading initialization in MTi-G-710 when AHS is enabled
^[MKIVFW-59] When setting a different platform for the GNSS chip it will now be correctly applied without workaround
#[MTSDK-3699] Velocity no longer drifts when roll/pitch are not close to 0 deg
#[MKIVFW-79] Reverting an MTi-G-710 no longer puts it to Legacy Mode

3.3 MT Manager and MT SDK bug fixes

#[MTSDK-3814] Corrected naming of MTi-100 IMU in Device List
^[MTSDK-3544] Replaced image in installers for USB serial converter driver
#[MTSDK-3838, MTSDK-3690] KMZ exporter no longer crashes when there is no velocity in the file
#[MTSDK-3690] ASCII-exporter no longer results in a crash
#[MTSDK-3670] KMZ exporter no longer shows 1/1/1970 when there is no UTC in the file
#[MTSDK-2965, MTSDK-1158, MTSDK-3711] Switching between windows is more robust now in MT Manager
#[MTSDK-3753] Corrected time orientation data plot in MT Manager
#[MTSDK-3841] When processing a file, a choice can now be made to use AHS or not
#[MTSDK-3913] When processing a file without a date, the ambiguous World Magnetic Model input date no longer causes inconsequent heading initialization.

4 Known issues

#[MTSDK-3345] Data in graphs are sometimes not shown when setting display preference to "as fast as possible".
#[MTSDK-3936] UART example on mbed does not work properly due to change in mbed version.