

# MTi 1-series Firmware

## Changelog

Author: Product Manager

Last updated: December, 2020

Document: MT0224P



Symbol	Meaning
+	Added
^	Changed
!	Note
#	Fixed
-	Removed

### Reference documents

- MT Software Suite changelog

## Version 1.8.1

**Applies to: MTi 1-series v2 (MTi-1/MTi-2/MTi-3)**

**Release date: December, 2020**

**Compatible MT Software Suite version: 2020.0.2**

**Release type: Stable**

Type	Reference	Comments
Bug fix	MTI600-298	Fixed a bug where MFM results were not written to the device

## Version 1.8.0

**Applies to: MTi 1-series v2 (MTi-1/MTi-2/MTi-3)**

**Release date: October, 2020**

**Compatible MT Software Suite version: 2020.0.2**

**Release type: Stable**

Type	Reference	Comments
Improvement	MTIONE-356	Update to World Magnetic Model 2020
Improvement	MTIONE-224	Updated ReqConfiguration to also return date and time

# MTi 1-series Firmware



## Changelog

Author: Product Manager  
Last updated: December, 2020  
Document: MT0224P

### Version 1.5.20

**Applies to: MTi-7**

**Release date: March 30, 2020**

**Compatible MT Software Suite version: 2019.3.2**

**Release type: Beta**

Type	Reference	Comments
Improvement	MTIONE-338	Increased heading performance for GeneralMag filter profile

### Version 1.5.16

**Applies to: MTi-7**

**Release date: December 11, 2019**

**Compatible MT Software Suite version: 2019.3.2**

**Release type: Beta**

---

Improvements & features			
Feature	MTONE-313	+	Added support to MTi-670 and MTi-7 for the uBlox ZED family GNSS receivers
Feature	MTI600-79	+	Added support to MTi-670 and MTi-7 for the uBlox NEO family GNSS receivers

### Version 1.5.2

**Applies to: MTi 1-series v2 (MTi-1/MTi-2/MTi-3/MTi-7)**

**Release date: March 20, 2019**

**Compatible MT Software Suite version: 2019.1.2**

**Release type: Beta**

---

Improvements & features			
Improvement	MTIONE-318	^	Update to World Magnetic Model 2015v2

---

Bug Fixes			
-----------	--	--	--

---

# MTi 1-series Firmware

## Changelog

Author: Product Manager  
Last updated: December, 2020  
Document: MT0224P



## Version 1.4.0

**Applies to: MTi 1-series v2 (MTi-1/MTi-2/MTi-3/MTi-7)**

**Release date: February 14, 2019**

**Compatible MT Software Suite version: 2019.0.1**

**Release type: Stable**

---

### Improvements & features

Improvement	<a href="#">MTIONE-223</a>	^	
Improvement	<a href="#">MTIONE-310</a>	^	
New Feature	<a href="#">MTIONE-130</a>	+	
New Feature	<a href="#">MTIONE-257</a>	+	Enabled skip factor on 800Hz HR outputs, preparation for future features/releases
New Feature	<a href="#">MTIONE-288</a>	+	
New Feature	<a href="#">MTIONE-294</a>	+	
New Feature	<a href="#">MTIONE-295</a>	+	
New Feature	<a href="#">MTIONE-297</a>	+	

---

### Bug Fixes

Bug	<a href="#">MTIONE-125</a>	#	
Bug	<a href="#">MTIONE-172</a>	#	
Bug	<a href="#">MTIONE-243</a>	#	
Bug	<a href="#">MTIONE-269</a>	#	Several fixes on UTC and PVT timing and other small fixes
Bug	<a href="#">MTIONE-285</a>	#	
Bug	<a href="#">MTIONE-301</a>	#	
Bug	<a href="#">MTIONE-303</a>	#	

## Version 1.2.7

**Applies to: MTi 1-series v2 (MTi-1/MTi-2/MTi-3)**

**Release date: July 1, 2018**

**Compatible MT Software Suite version: 4.9.1**

**Release type: Stable**

- + [\[MTIONE-191\]](#) MTi 1-series v2 firmware support.
- # [\[MTIONE-269\]](#) Device resets itself if data is not read fast enough when in SPI/I2C mode.
- # [\[MTIONE-268\]](#) Problems with writing emts.
- # [\[MTIONE-258\]](#) Z-value FreeAcceleration has an offset of 9.8 for MTi-2 and MTi-3.
- # [\[MTIONE-214\]](#) Acceleration data often wrong in first packet.
- ^ [\[MTIONE-165\]](#) Sensor and orientation data in different packets for update rates lower than 50 Hz.
- # [\[MTIONE-164\]](#) Heading reset issue with low output onboard orientation output.
- # [\[MTIONE-267\]](#) Combination of HR acc/gyr and normal rate acc/gyr not always possible.
- + [\[MTIONE-205\]](#) Enable glitch filter for capturing inputs making it resistant to noisy input pulses.
- ^ [\[MTIONE-155\]](#) Remember ICC DDT value over gotoConfig/gotoMeasurement.

# MTi 1-series Firmware

## Changelog

Author: Product Manager  
Last updated: December, 2020  
Document: MT0224P



### Version 1.2.6

**Applies to: MTi-7**

**Release date: June 1, 2018**

**Compatible MT Software Suite version: 4.8.6**

**Release type: Stable**

/ Further performance tuning has been completed with respect to the engineering firmware.

### Version 1.2.5

**Applies to: MTi-7 v2**

**Release date: April 10, 2018**

**Compatible MT Software Suite version: 4.8.6**

**Release type: Beta**

+ First release for MTi-7.

### Version 1.2.1

**Applies to: MTi 1-series**

**Release date: July 5, 2017**

**Compatible MT Software Suite version: 4.8**

**Release type: Stable**

+ [MTSDK-3231] Added UTC time input and output to 1-series firmware.

+ [MKIVFW-100, MTSDK-3998] Calibrated Acceleration and Rate of Turn measurements available at 1 kHz.

# [MTIONE-154] Fixed a bug where the MTi-1 could sporadically reset upon going to measurement.

### Version 1.1.1

**Applies to: MTi 1-series**

**Release date: December 21, 2016**

**Compatible MT Software Suite version: 4.7**

**Release type: Stable**

+ [MTIONE-135, MKIVFW-81] Added ICC to Firmware. 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.

# MTi 1-series Firmware

## Changelog

Author: Product Manager  
Last updated: December, 2020  
Document: MT0224P



^ [MTSDK-3698, MTSDK-3787, MTSDK-3807] Gyro Bias Estimation using the No Rotation Update uses a stillness detection mechanism which is more robust to slow rotations and facilitates faster convergence times - this improves the functionality of NRU and AHS features.

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

## Version 1.0.18

**Applies to: MTi 1-series**

**Release date: August 10, 2016**

**Compatible MT Software Suite version: 4.6.3**

**Release type: Beta**

^ [MTSDK-3698, MTSDK-3787] Gyro Bias Estimation improved with faster convergence times.

## Version 1.0.16

**Applies to: MTi 1-series**

**Release date: July 12, 2016**

**Compatible MT Software Suite version: 4.6**

**Release type: Stable**

+ [MTSDK-3661] Added AHS for all MTi's and MTi-Gs. AHS off by default, also for VRU\_general. AHS can be switched on with a boolean in SetOptions.

# [MTSDK-3764] Fixed timing bug with magnetometer, resulting in heading errors in mag-aided filter profiles.

# [MTIONE-120] MTi 1-series I<sup>2</sup>C communication not working when using full write/read transfer.

## Version 1.0.14

**Applies to: MTi 1-series**

**Release date: May 20, 2016**

**Compatible MT Software Suite version: 4.5.6**

**Release type: Beta**

-

# MTi 1-series Firmware

## Changelog

Author: Product Manager  
Last updated: December, 2020  
Document: MT0224P



### Version 1.0.12

**Applies to: MTi 1-series**

**Release date: April 11, 2016**

**Compatible MT Software Suite version: 4.5.4**

**Release type: Beta**

^[*MTSDK-3605*] Create designated filter profiles for 1-series to enable better sensor-specific tuning. This changes the filter profile naming and numbering.

Filter profiles SW Suite 4.5.2 beta (all MTi products)	Filter profiles SW Suite 4.5.4 beta (MTi 1-series)	Filter profiles SW Suite 4.5.4 beta (MTi 10/100-series)
General (#39)	General (#50)	General (#39)
High_mag_dep (#40)	High_mag_dep (#51)	High_mag_dep (#40)
Dynamic (#41)	Dynamic (#52)	Dynamic (#41)
Low_mag_dep (#42)	North_reference (#53)	Low_mag_dep (#42)
VRU_general (#43)	VRU_general (#54)	VRU_general (#43)

^[*MTSDK-3587*] MTi-1 series Low\_mag\_dep filter profile replaced with North\_reference filter profile.

^[*MTSDK-3592*] MTi-1 series inclination performance improved.

### Version 1.0.11

**Applies to: MTi 1-series**

**Release date: January 18, 2016**

**Compatible MT Software Suite version: 4.5**

**Release type: Stable**

+ First release for MTi 1-series.