November 19th, 2014

MobileMapper 300 Frequently Asked Questions

What is the main application of MobileMapper 300?

MobileMapper 300 provides professional grade accuracy to consumer handheld devices. A customer may want to use a consumer tablet or smartphone to benefit from its display size or 4G modem,… but the device accuracy is too low for GIS type applications. Now he can connect his device to the MobileMapper 300 and get the professional level accuracy. Also, if a customer prefers to use the ESRI ArcGIS or any other GIS software (must be Android compatible) then he can use it now with MobileMapper 300. Some examples: Trimble Connect application for Water Utilities, Trimble Ag application, and many others including ESRI ArcGIS or many other local market specific applications. The integration effort will be small and limited to SDK implementation, all other settings will be handheld by the SPace application that Spectra Precision is providing free of charge.(TBC)

Differences between MobileMapper 300 and ProMark 700

Name	**MobileMapper 300**	**ProMark 700**
Markets	GIS	Survey
Plastic color code	 Grey bumper	 Blue bumper
Controller and software	• MobileMapper 300 can be interfaced with Android (and Windows 8 in a second release) smart phones and tablets. • MobileMapper 300 solution includes SPace control SW • 3rd party GIS application provided that it integrates Trimble SDK	Controller could be any of Spectra precision controllers running Survey Pro or FAST Survey
List of product	• Samsung Galaxy Tab Pro 10" Kitkat 4.4.2 • Samsung Galaxy S4 Kitkat 4.4.2	MM20, MM120, PM120, T41,…

	• Samsung Galaxy Note 8 Jelly bean • Quechua Phone 5 Jelly bean 4.1 • Trimble T41 Jelly bean • Asus Nexus 7 Kitkat 4.4.2 • Samsung S3 –Jelly bean • Nexus 4- Kitkat • HTC One- kitkat • HP Slate+ (7") - Jelly bean • Nexus 7 – 2012 Kitkat • Nexus 7 – 2013 Kitkat	
Accuracy options	Advanced accuracy modes in RMS (need correction service) • 30/30 (standard): horizontal 30 cm ; vertical 30 cm • 7/2 (firmware option needed): horizontal 7 cm ; vertical 2 cm • Full RTK (firmware option needed) Horizontal 10 mm + 1ppm; vertical 20 mm + 1 ppm • RTX (firmware option needed): horizontal 4 cm ; vertical 9 cm, after 30 mins convergence	• Full RTK as standard: horizontal 10 mm + 1 ppm; vertical 20 mm + 1 ppm • RTX (firmware option needed): horizontal 4 cm ; vertical 9 cm, after 30 min convergence
Part numbers	100921-10 MobileMapper 300 GNSS Receiver Kit 30x30 100921-20 MobileMapper 300 GNSS Receiver Kit 7x2 100921-30 MobileMapper 300 GNSS Receiver Kit RTK	89823-00

Can I use MobileMapper Field software with MobileMapper 300?

Not at this point as MobileMapper Field software is not compatible with Android OS and thus cannot be used with MobileMapper 300.

What is included in the MobileMapper 300 package?

What is needed to use the MobileMapper 300 receiver for GIS?

You need to have a GIS application running on Android OS and an Android smart phone or tablet, with an Android version 4.2 or higher.

You need to load the SPace application on the tablet / smartphone. Once configured it will run in the background of the GIS application.

You need to have a source of GPS corrections (VRS, or others) to reach the required accuracy.

Where can I find SPace application?

SPace application is not delivered with the MobileMapper 300 receiver. It can be downloaded from the Google store (https://play.google.com/store) or from www.spectraprecision.com. SPace application is free of charge.

What is the purpose of SPace application?

SPace is an application provided by Spectra Precision to handle all the GNSS settings of the MobileMapper 300, including: NTRIP connection, antenna height management, satellite skyplot, position quality information… Having all those controls made by SPace, you may use any 3rd party GIS application without any specific development. Moreover, you can configure the system to have SPace starting

automatically at startup of your device (connecting to the correction source with previously defined parameters) and running in the background to feed the GIS application with accurate positions.

What are the GIS applications available that can work with MobileMapper 300?

SDK strategy needs to be confirmed.

If SDK is not required then all Android applications using the standard Android location service can benefit from MobileMapper 300 accurate positioning.

If SDK is needed then an application will have to integrate the SDK before being able to benefit from the MobileMapper 300 location.

Confirmation of SDK Yes/no is expected early December.

What are smart phones and tablets that can be used with MobileMapper 300?

We have tested the MobileMapper 300 solution with a number of Android devices such as:

- Samsung Galaxy Tab Pro 10” Kitkat 4.4.2
- Samsung Galaxy S4 Kitkat 4.4.2
- Samsung Galaxy Note 8 Jelly bean
- Quechua Phone 5 Jelly bean 4.1
- Trimble T41 Jelly bean
- Asus Nexus 7 Kitkat 4.4.2
- Samsung S3 –Jelly bean
- Nexus 4- Kitkat
- HTC One- kitkat
- HP Slate+ (7") - Jelly bean
- Nexus 7 – 2012 Kitkat
- Nexus 7 – 2013 Kitkat
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Can I use MobileMapper 300 with MobileMappers handheld receivers?

No, Mobile Mapper 300 needs to be controlled by SPace application and this application runs only on Android device (Android version 4.2 or later). A new release will introduce the support of Windows 8.1. But SPace cannot run on Windows Embedded Handheld or Windows Mobile devices.

How MobileMapper 300 connects to the smart phone or tablet?

The connection is made over Bluetooth.

What is needed for MobileMapper 300 to reach the required accuracy level?

MobileMapper 300 offers different levels of accuracy at different pricing. In order to guaranty the best accuracy MobileMapper 300 needs to get corrections from a base station. It can be single base or VRS one.

How could I increase the accuracy of my MobileMapper 300 receiver?

If you are using a MobileMapper 300 in the 30/30cm configuration then you can decide to increase this accuracy by purchasing the 7cm horizontal / 2cm vertical option or the full RTK option.

What are the accuracy performance levels of MobileMapper 300 depending on the corrections source?

		Corrections type		
Part nb	Version	SBAS	VRS	Single base (assuming a base line < 10 kms)
100921-10	30/30	< 50 cm Hor; < 85 cm Vert	30 cm Hor; 30 cm Vert	30 cm Hor; 30 cm Vert
100921-20	7/2	< 50 cm Hor; < 85 cm Vert	7cm Hor; 2cm Vert	7cm Hor; 2cm Vert
100921-30	RTK	< 50 cm Hor; < 85 cm Vert	1cm Hor; 2cm cm Vert	1cm Hor; 2cm cm Vert