# QUICK CARD

## **Over-the-Air Time Error Measurement**

This quick card describes how to set up the OneAdvisor 800 **SPA06MA-O Radio Analysis Module** to test TDD 5G NR Radio Time Accuracy over the Air for Single Sector

- OneAdvisor 800 equipped with the following:
  - SPA06MA-O Radio Analysis Module
  - ONA-SP-5GOTA Software Option
  - Or ONA-SP-5GRAN Software Option
- G700050367 Directional Antenna with JD70050007 AntennaAdvisor Handle or G700050367 Directional Antenna with G710050533 Type N (Male) to SMA (Male) cable
- Omni Antennas such as G700050350 stick Antenna or Magnetic Mount Antennas G700050345 or G700050358 (can also be used if close to the center of the sector under test)
- Magmount GPS Antenna JD71050351
- Optional G700050616 C-Band Band Pass Filter (to block out nearby strong signals outside of C-Band)

**C-Band** 



**VIAVI** Solutions

Figure 1: Test Setup



Figure 2: Accessories

# **OneAdvisor 800 Wireless Platform**



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## QUICK CARD

### LAUNCH TEST

- 1. Press the Power button on the ONA-800 base top panel to turn on the OneAdvisor.
- Tap f Home to display the Home Screen. 2.
- Tap **Tests** to display the Tests menu. 3.
- Tap Radio Analysis 6 GHz to show Radio Analysis 4. test applications. 5GNR
- Tap the 5G NR Signal Analyzer icon. 5G NR SIGNAL 5. ANALYZER If the icon is grayed out tap the RAN Analyzer Icon. RAN
- Tap 6. sele

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Tap the III select Free	on the top left of the screen and / Time / Power Variation Done	
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Cancel

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5G NR Signal Ana **RAN** Analyze Blind Scanner NSA Signal Analyze

DSS Signal Analyze

LTE/LTE-A FDD Analyze

LTE/LTE-A TDD Analyze

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OneCheck

- Tap  $\ddagger$  to autoconfigure the Power Settings 7.
- Set the Channel Number setting ARFCN to 8. 650006 with Band n77
- Set the GSCN to 8006 The Sync Light on the 9. top right of the screen will turn Green
- 10. Make sure the Bandwidth is set to 100 MHz with SCS to 30 kHz
- 11. Set the Trigger to GNSS to get GPS Lock
- 12. The Time Error ideally should be less than ±1.5 usec. Time error will increase as test distance from site is increased. Default Distance = 0**OneAdvisor 800 Wireless Platform**

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Favorites	ONA800-VFL	>	Radio Analysis 6 GHz				
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				LTE/LTE-A FDD ANALYZER	LTE/LTE-A TDD ANALYZER	GSM SIGNAL ANALYZER	CHANNEL SCANNER

Figure 3: Select Test

#### RAN Analyzer



