



LTE OTA ID Scanner Measurement

OneAdvisor-800

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1. Scope

This document describes how to configure the ONA-800 for spectrum analysis, including:

- Realtime Spectrum Analyzer
- Interference Analyzer
- Gated Sweep Mode

The required products and parts to complete this procedure are as follows:


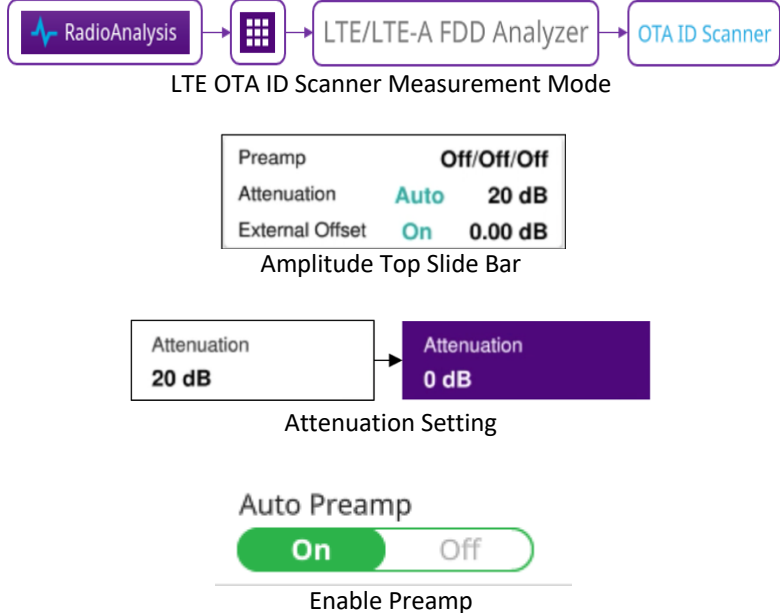
Description	Diagram																						
<p>OneAdvisor-800 with the following functions:</p> <ul style="list-style-type: none"> - ONA-800-MF: Mainframe - ONA-800A-DISPL: Display - SPA06MA-O: Spectrum Analyzer Module - ONA-SP-GNSS: GPS Connectivity and GPS Antenna - ONA-SP-RT100: Realtime Spectrum Analysis 100MHz - ONA-SP-INTAN: Interference Analysis - ONA-SP-GSS: Gated Sweep Spectrum - ONA-SP-RM: Route Map - ONA-SP-LTEFDDOTA – LTE Demodulation 	 <p style="text-align: center;">OneAdvisor-800</p>																						
<p>FR1 Antennas</p> <table border="1" data-bbox="207 957 1003 1409"> <tbody> <tr> <td>G700050350</td> <td>RF omni antenna Type-Nm; 3300 to 3800 MHz</td> </tr> <tr> <td>G700050353</td> <td>RF omni antenna Type-N(m), 806 to 896 MHz</td> </tr> <tr> <td>G700050354</td> <td>RF omni antenna Type-N(m), 870 to 960 MHz</td> </tr> <tr> <td>G700050355</td> <td>RF omni antenna Type-N(m), 1710 to 2170 MHz</td> </tr> <tr> <td>G700050356</td> <td>RF omni antenna Type-N(m), 720 to 800 MHz</td> </tr> <tr> <td>G700050357</td> <td>RF omni antenna Type-N(m), 2300 to 2700 MHz</td> </tr> <tr> <td>G700050363</td> <td>RF yagi antenna Type-N(f), 1750 to 2390 MHz</td> </tr> <tr> <td>G700050364</td> <td>RF yagi antenna Type-N(f), 806 to 896 MHz</td> </tr> <tr> <td>G700050365</td> <td>RF yagi antenna Type-N(f), 866 to 960 MHz</td> </tr> <tr> <td>G700050366</td> <td>RF yagi antenna SMA(f), 700 to 4000 MHz</td> </tr> <tr> <td>G700050367</td> <td>RF yagi antenna SMA(f), 700 to 6000 MHz</td> </tr> </tbody> </table>	G700050350	RF omni antenna Type-Nm; 3300 to 3800 MHz	G700050353	RF omni antenna Type-N(m), 806 to 896 MHz	G700050354	RF omni antenna Type-N(m), 870 to 960 MHz	G700050355	RF omni antenna Type-N(m), 1710 to 2170 MHz	G700050356	RF omni antenna Type-N(m), 720 to 800 MHz	G700050357	RF omni antenna Type-N(m), 2300 to 2700 MHz	G700050363	RF yagi antenna Type-N(f), 1750 to 2390 MHz	G700050364	RF yagi antenna Type-N(f), 806 to 896 MHz	G700050365	RF yagi antenna Type-N(f), 866 to 960 MHz	G700050366	RF yagi antenna SMA(f), 700 to 4000 MHz	G700050367	RF yagi antenna SMA(f), 700 to 6000 MHz	 <p style="text-align: center;">Omni-Antennas</p> <p style="text-align: center;">Log Periodic Antenna</p>
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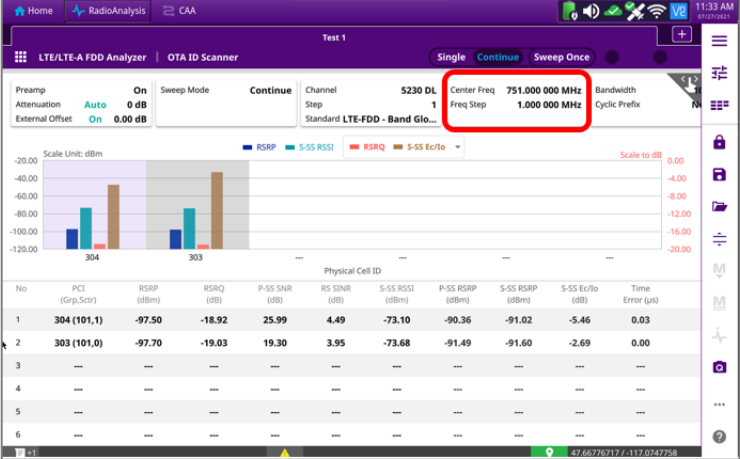
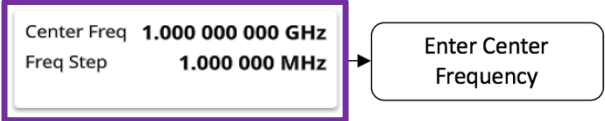
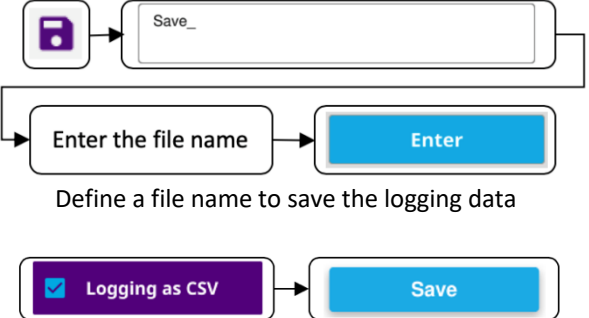

2. ONA-800 Overview

The ONA-800 is a portable instrument for spectrum analysis on all frequencies between 50 MHz and 6 GHz .

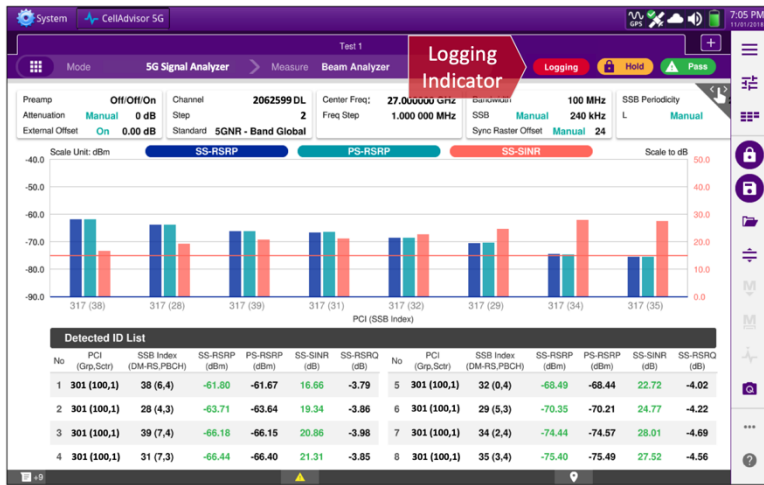
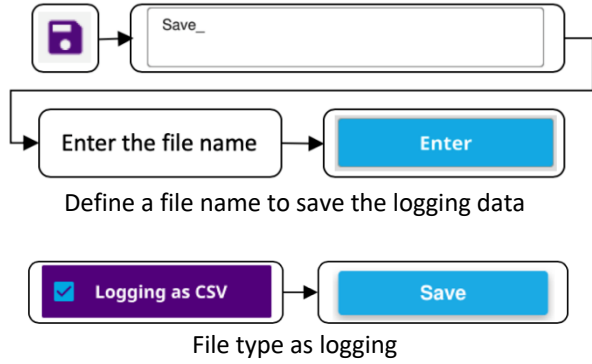
2.1 LTE-FDD OTA ID Scanner

The following procedure describes the steps to perform LTE-FDD OTA ID Scanner with the OneAdvisor-800.

Step	Action	Description
1	Connect the Omni or a Directional Antenna into the ONA-800 RF-In spectrum analyzer port	
2	<p>LTE-FDD OTA ID Scanner Mode Configuration sequence:</p> <ul style="list-style-type: none"> - Measurement Mode - LTE-FDD - OTA ID Scanner - Done <p>Amplitude Settings:</p> <ul style="list-style-type: none"> - Select Amplitude Top Slide Bar - For over the air measurements, set the attenuation value to 0dB <ul style="list-style-type: none"> - Enable Auto Preamp 	 <p>LTE OTA ID Scanner Measurement Mode</p> <p>Preamp Off/Off/Off Attenuation Auto 20 dB External Offset On 0.00 dB</p> <p>Amplitude Top Slide Bar</p> <p>Attenuation 20 dB Attenuation 0 dB</p> <p>Attenuation Setting</p> <p>Auto Preamp <input checked="" type="checkbox"/> On <input type="checkbox"/> Off</p> <p>Enable Preamp</p>

Step	Action	Description
	<p>Carrier Center Frequency</p> <ul style="list-style-type: none"> - Select the Center Frequency Icon - Enter the frequency (or channel #) - Enable the carrier measurement by setting the toggle switch to the right - Enter the carrier's center frequency and select Apply - Select the carrier number icon and the next carrier number to configure and perform the same sequence of enabling and setting the center frequency for the additional carriers 	 <p>LTE OTA ID Carrier Scanner Measurement Screen</p>  <p>Center Frequency Setup</p>
3	<p>To log beam analysis measurements select:</p> <ul style="list-style-type: none"> - Save icon - Select the File Name are and enter the desired file name - Check the icon box of Logging as CSV - Select Save icon - To Stop the logging process select the Logging Icon Select Yes on the popup window 	 <p>Define a file name to save the logging data</p> <p>File type as logging</p> <p>Logging Indicator</p>  <p>Logging Indicator</p>

- 3 To log the measurement select:
- Save icon
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Logging Indicator



Logging Indicator

3. Technical Support

Technical support is provided by:

- Phone: 1-844-GO-VIAVI (1-844-468-4284) options 3-2-3
- Email: diagnostics.tac@viavisolutions.com

Regularly new firmware updates for the OneAdvisor-800 are released and it is recommended to keep the instrument in the latest firmware to provide all the enhancements and bug fixes.

- For additional information of cell site test go to:
<http://www.viavisolutions.com/en/products/network-test-and-certification/cell-site-test>