

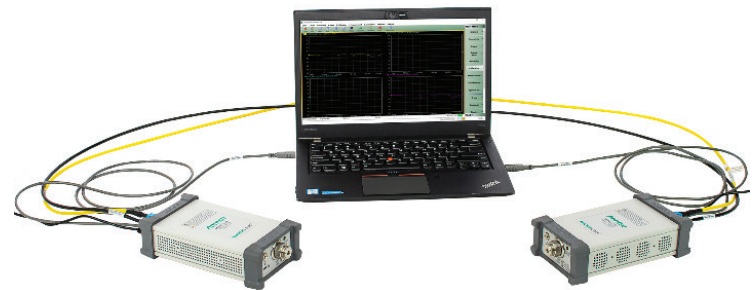
ME7868A Large Vehicle Over-the-Air (OTA) Test Solution

Introduction

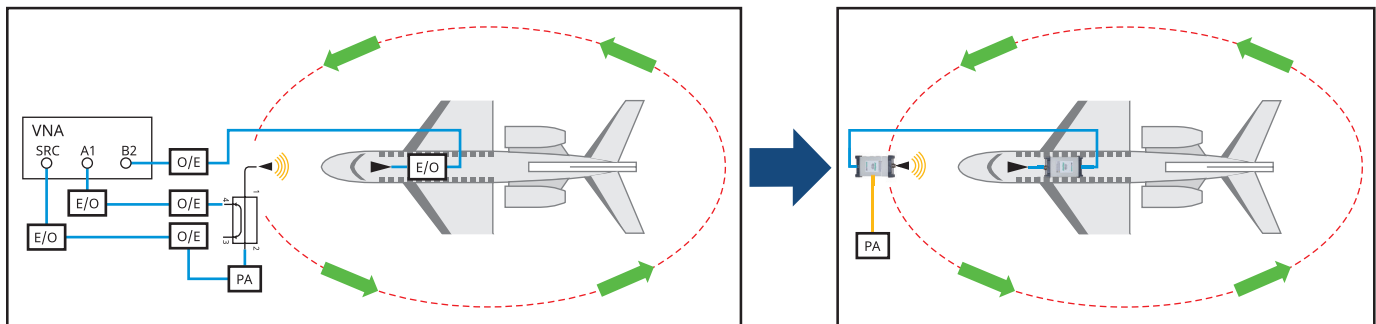
Using VNAs to test OTA RF/ μ W shielding and propagation on large vehicles generally requires very long test port cables to reach around the vehicles. At the distances required for these tests, coax cables introduce insertion loss and phase instability so significant that different transmission media (such as optical cabling) must be used to enable S-parameter measurements. The additional hardware and setup complexity significantly raises the cost and time required to make the propagation and shielding measurements.

The ShockLine™ 2-Port ME7868A Network Analyzer Solution

The Anritsu ShockLine ME7868A is a unique chassis-less 2-port VNA with portable port modules covering a frequency range from 1 MHz to up to 8/20/43.5 GHz. Tested with port modules spaced up to 100 meters apart, the ME7868A's groundbreaking architecture allows physical placement of the VNA ports close to large DUTs or at widely placed test antennas without the need for additional complex test hardware.



ME7868A 2-Port VNA



Large Vehicle Test Setup with Traditional VNA

ShockLine ME7868A Setup

Key Advantages of the ME7868A for Large Vehicle S-parameter Measurements

- Portable port modules eliminate the need for long test port cables
 - Eliminates coax cable insertion loss and phase instability
 - No need for different transmission media (E/O, O/E) and additional costly hardware to overcome coax cable issues
 - Full wide band sweep coverage
 - Easier and faster setups for more efficient testing
- Supports typical large vehicle tests
 - RF/ μ W shielding characterization
 - RF/ μ W propagation studies
 - Vehicle antenna pattern measurement