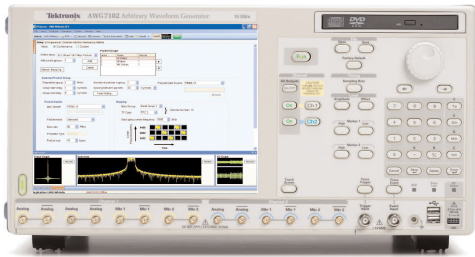


# UWB WiMedia Compliance Solutions

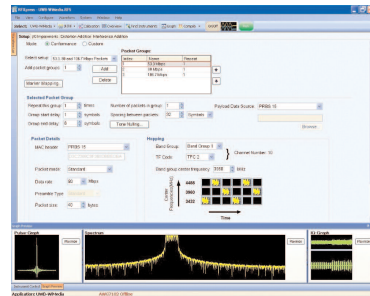
## Full Support for WiMedia PHY Test Specification Version 1.0 and 1.2

UWB WiMedia test requirements are some of the most complex among current wideband RF standards. A designer needs to verify a large number of PHY Layer parameters before a design freeze can be justified. A powerful, flexible test solution that addresses these requirements improves time to market for UWB designs.



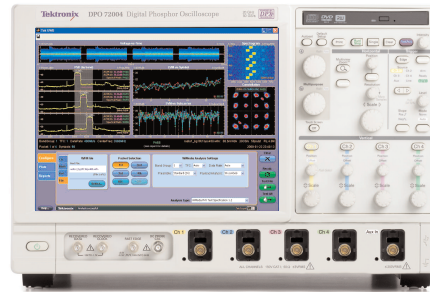
### Compliance Signal Generation Hardware

The AWG7000B Series Arbitrary Waveform Generator generates all UWB WiMedia waveforms for all Band Groups, Time Frequency Codes, and Data Rates required for WiMedia PHY Compliance and Interoperability Receiver Testing.



### Compliance Signal Generation Software

The RFX100 Option UWBCF, RFXpress UWB WiMedia Conformance Software, operates on the AWG7000B and provides a simple user interface to create the complex signals required for UWB WiMedia PHY Compliance and Interoperability Receiver Testing.



### Compliance Signal Analysis Hardware

The DSA/DPO70000 Series Oscilloscopes can be used to analyze all UWB WiMedia waveforms for all Band Groups, Time Frequency Codes, and Data Rates required for WiMedia PHY Compliance and Interoperability Transmitter Testing.



### Compliance Signal Analysis Software

Option UWB, on the DSA/DPO70000 series oscilloscopes, provides a simple user interface to automatically analyze the complex signals UWB WiMedia PHY Compliance and Interoperability Transmitter Testing. A detailed report can be generated for result documentation.

## Recommended Equipment

### Receiver Testing – Required Equipment

Product	Description	Options
<b>Generator</b>	AWG7122B – Arbitrary Waveform Generator	Option 01 Option 06
<b>Generation SW</b>	RFX100 – RFXpress for General Purpose IQ, IF, and RF Signal Creation	Option UWBCF – UWB WiMedia SW Plug-in for Compliance testing

### Transmitter Testing – Required Equipment

Product	Description	Options
<b>Oscilloscope</b>	DPO/DSA71254	
<b>Analysis SW</b>	UWB Version 2.2.1 or later	Option UWBCF – UWB WiMedia SW Plug-in for Compliance testing

### Receiver Tests

- Test 4.1.1 - pCCADetectTime
- Test 6.2 - Rx Packet Error Rate Floor Test

### Transmitter Tests

- Test 3.1.1 - pMIFSTime
- Test 3.1.2 – pMIFSTime Tolerance
- Test 3.2.1.1 - Standard Preamble Support
- Test 3.2.1.2 - Standard Preamble Length
- Test 3.2.1.3 - Burst Preamble Support
- Test 3.2.1.4 - Burst Preamble Length
- Test 3.2.1.5 - CE Length
- Test 3.2.2.1 - PS/FS XCorr
- Test 3.2.3.1 - CE PWR
- Test 3.2.3.2 - PLCP PWR
- Test 3.2.3.3 - Payload PWR
- Test 3.3.1 - PLCP HDR Rate
- Test 3.3.2.1 through .3.2.3 - RF1 Test through RF5
- Test 3.3.3 - Length
- Test 3.3.4 - Scrambler
- Test 3.3.4 - Scrambler
- Test 3.3.5.1 and Test .3.5.2 - BMoff and BMon
- Test 3.3.6.1 and 3.3.6.2 - PTStandard and PTBurst
- Test 3.3.7.1 through 3.3.7.8 - TFC1 through TFC10
- Test 3.3.8.1 through 3.3.8.2 - BG\_LSB135 through BG-LSB2
- Test 3.3.9 - HCS
- Test 3.4.1 through 3.4.4 - Spectral Mask Tests B1 through B4
- Test 3.4.1.1 - ACPR
- Test 3.5.1 through 3.5.3 - EVM1, EVM2, EVM3
- Test 3.6.1.1 through 3.6.2.5 - TXPWR-TFIO through TXPWR-FF14