DAB/DAB+/T-DMB Signal Analysis Solutions

Product Overview

Agilent now offers a new modulation analysis solution for digital audio standards DAB/DAB+ and T-DMB. Digital Audio Broadcasting (DAB) is a digital radio technology for broadcasting radio stations, originally from Europe. An upgraded version of the system is called DAB+. DAB is not forward compatible with DAB+. Terrestrial Digital Multimedia Broadcasting (T-DMB) is a digital radio transmission technology developed by South Korea as part of the national IT project for sending multimedia such as TV, radio and datacasting to mobile devices such as mobile phones. T-DMB has also some similarities with the main competing mobile TV standard, DVB-H.

The PC based solution is based on an easy-to-use user interface, which enables you to quickly and easily assess the modulation quality of DAB/DAB+/T-DMB components, modulators or transmitters.

This solution provides the flexibility to capture data from hardware directly or recall the previously recorded data as the input data source. It also offers simple power measurements and powerful modulation analysis for DAB, DAB+ and T-DMB standards. The carrier frequency and modulation parameters can be set from the software user interface.

**E9285B-H06** is fully compliant with the DAB, DAB+ and T-DMB standards. Displays include spectrum, channel power, constellation diagram, MER results, frequency error, channel frequency and impulse response etc.

**Readouts/displays:**
- CCDF
- Channel Frequency Response (including Magnitude Spectrum, Phase Spectrum and Group Delay Spectrum)
- Channel Impulse Response
- Equalizer Frequency Response
- Error Vector Spectrum (EVM vs. Subcarriers)
- OFDM Magnitude Error
- OFDM Measured
- OFDM Phase Error
- OFDM Reference
- Symbol/Metrics (Overall MER, Frequency Error, Amplitude Error, Phase Error)
- Spectrum (including Channel Power)
- Time

Note: This option is available through Agilent Special Handling.
Depending on your performance requirements you can choose either a **PSA** series spectrum analyzer, an **E4406A** Vector Signal Analyzer, a VXI-based RF Vector Signal Analyzer (89640S/89641S) or a X-Series (**MXA**/**EXA**) spectrum analyzer as the front end capture for your signal.

There are options available for each of PSA, E4406A, 89640S/89641S, MXA or EXA which enable this link and should be ordered to complete the solution.

In addition, the E9285B analysis software can be used in conjunction with the Agilent 89601A Vector Signal Analyzer software to measure simulated devices and signals created using the Agilent EEsof EDS software. See [http://eesof.tm.agilent.com](http://eesof.tm.agilent.com) for more details.

### Minimum Signal Analyzer Configurations.

1. **PSA Configuration**
   - E9285B-H06
   - PSA Series spectrum analyser E4440A, E4443A, E4445A, E4446A or E4448A with option B7J

2. **E4406A Configuration**
   - E9285B-H06
   - E4406A (firmware A.05.01 or later)

3. **VXI-based RF Vector Signal Analyzer Configuration**
   - E9285B-H06
   - 89640S or 89641S

4. **X-Series Spectrum Analyzer Configuration**
   - E9285B-H06
   - X-Series spectrum analyzer N9020A or N9010A with option 503, 508, 513 or 526

### Minimum Recommended PC Specification
- CPU: 600MHz Pentium or AMD K6 (>2GHz recommended)
- RAM: 512MB (1GB recommended)
- Video RAM: 4MB (16MB recommended)
- Hard Disk: At least 400MB available
- Operating System: Microsoft Windows XP (with .NET Framework 1.1 or later)
- Additional: CDROM drive, Instrument connection (GPIB, GPIB-USB, LAN)

**Note:** If you already own a copy of 89601A and have this installed on the same PC, the E9285B-H06 will also work with this. 89601A version 8.00 (built based on 8.00 or later) is required for the E9285B to work correctly. See [www.agilent.com/find/89601A](http://www.agilent.com/find/89601A) for upgrade details if necessary.

If you require any further information please contact your local Agilent Sales Office or email [support_pdl-cvo@agilent.com](mailto:support_pdl-cvo@agilent.com)

For more information on the signal analyzers, please visit:
- [www.agilent.com/find/psa](http://www.agilent.com/find/psa)
- [www.agilent.com/find/e4406a](http://www.agilent.com/find/e4406a)
- [www.agilent.com/find/89640s](http://www.agilent.com/find/89640s)
- [www.agilent.com/find/mxa](http://www.agilent.com/find/mxa)
- [www.agilent.com/find/exa](http://www.agilent.com/find/exa)

For more information on digital video, please visit:
- [www.agilent.com/find/E9285B](http://www.agilent.com/find/E9285B)