GUZIK PRODUCT BULLETIN

Sector Measurements Test Module

- **Most of WITE32 standard measurements with per-sector results**
- **Capability to sweep/vary most of WITE32 system parameters**
- **Integrated graphical result display**
- **Capability to export all raw test results to a text file**

The *Sector Measurements* WITE32 test module with the *Sector Sweep* test varies one of the system parameters (such as off-track offset or clock), performs **one or several** WITE32 standard measurements listed Table 1, and reports measurement results **per sector**. Each measurement has dedicated preconditioning setup. This feature combined with the ability to sweep almost any system parameter allows this test to execute the algorithms of most WITE32 profile-style tests, such as Track Profile, Saturation, MR Saturation, Frequency, Off-track Performance, and report results per sector.

The integrated graphical result display allows for convenient observation of one or several crosscuts of the three-dimensional result data, see Figure 1.

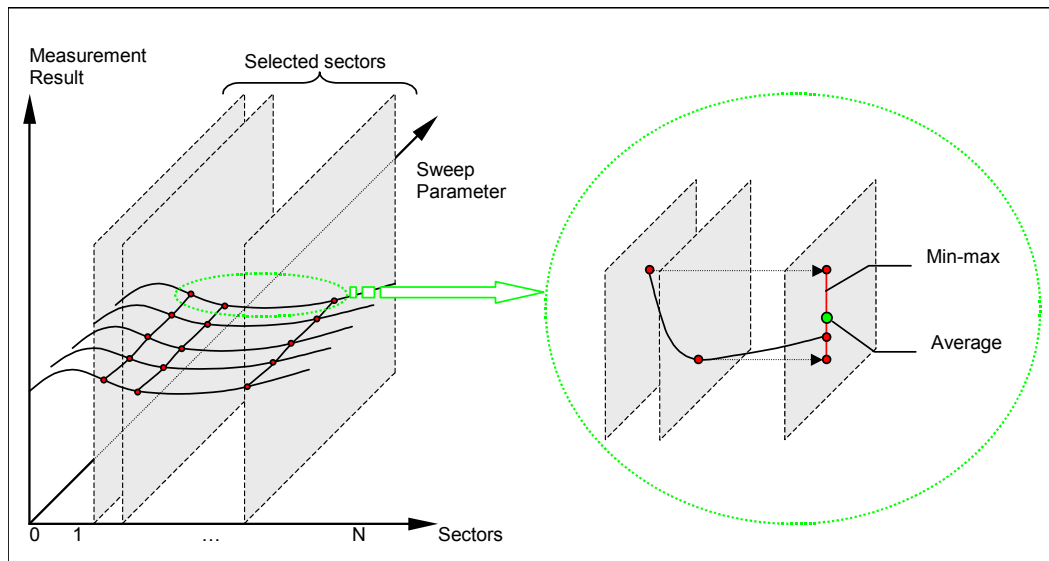All raw results may be exported to a text file in CSV format for custom processing.

Figure 1: Illustration of data selection for graphical display: crosscut along sweep parameter axis

Measurement	Measurement Results	Required hardware	
		Analog Measurement Mode	Digital Measurement Mode
Parametric	TAA Positive / Negative, Amplitude Asymmetry	Available (RWA 2000 series or RWA DTR 3000 series)	Available (WDM5044 or D5000)
	PW Positive / Negative (for longitudinal recording), Rise / Fall Time (for perpendicular recording), Modulation Positive / Negative, Timing Asymmetry	Not Available	Available (WDM5044 or D5000)
SNR	SNR (wideband signal-to-noise ratio), Signal amplitude or RMS, Noise RMS	Not Available	Available (WDM5044 or D5000)
DFT (TAA through Overwrite Filter)	Signal harmonic amplitudes for specified frequencies measured through narrow-band filter	Available (RWA 2000 series or RWA DTR 3000 series)	Available (WDM5044)
Overwrite	Overwrite, direct and reverse, Original signal harmonic amplitude, Residual signal harmonic amplitude	Available (RWA 2000 series or RWA DTR 3000 series)	Available (WDM5044)
Spectral SNR	Spectral SNR, Signal Amplitude, Noise RMS	Not Available	Available (WDM5044)
PES	Position Error Signal (PES), Invalid Sector Count	V2002 or DTR3000 spinstand	
BER	Bit Error Rate, Byte Error Rate, Bit Error Count, Byte Error Count, Byte Count	CAI4K-compatible PRML chip adapter or D5000	

Table 1: List of supported sector measurements

Requirements

The Sector Measurements test is optional purchase software, which requires the following:

1. Guzik RWA 2000 series or DTR3000 series.
2. Guzik WDM5044 Waveform Digitizer (recommended) or D5000 Signal Analyzer for the measurements supported only in Digital Measurement Mode.
3. WITE32 Revision 4.20 or later.
4. Software license. Please contact sales@guzik.com to obtain a quotation for the license.

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