

## APx500 MEASUREMENT SOFTWARE

APx500 software options provide measurements and functionality beyond the core set of capabilities standard for each APx analyzer. A variety of options are offered, suited to different specific test applications and requirements.

Software options are enabled by one or more “iButtons” that mount on the rear of the APx instrument. Each iButton enables a particular feature or set of features, and can be moved from analyzer to analyzer as needed.



## APx Models & Measurements

### APx515

Standard measurements included in the APx515 are:

- Level & Gain
- Frequency Response
- THD+N
- Signal-to-Noise Ratio
- Noise
- Crosstalk
- Interchannel Phase
- DC Level
- Frequency Measurement
- Measurement Recorder
- Stepped Level Sweep
- Stepped Frequency Sweep
- Compare Encoded Bitstream
- Level Ratio
- CMRR
- SINAD
- Pass/Fail
- Scope Monitor
- DC Level Sweep
- Q-peak Noise
- Input Sample Rate

Advanced measurements available for the APx515 via software options are shown below:

APx Option	Description
APX-SW-ACR	Acoustic Response Measurement
APX-SW-AML	Advanced Measurement Library (includes FFT Spectrum Monitor)
APX-SW-ASIO	ASIO Direct Connectivity
APX-SW-HST	High Speed Test
APX-SW-BEN	Bench Mode for APx515
APX-SWB-2	Bundle: ACR, AML, ASIO, and HST

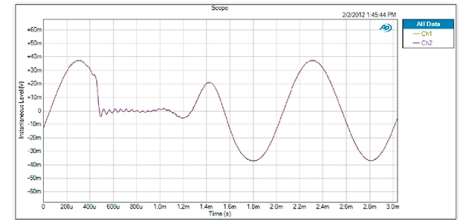
### APx525, 526, 582, 585, 586 and 555

Standard and advanced measurements are included in all models. See reverse for specialized measurement suites.

Additional software options are available for electro-acoustic and perceptual audio test needs.

These options work on any APx analyzer but must be ordered as a separate option.

APx Option	Description
APX-SW-SPK-PT	Production loudspeaker test measurements
APX-SW-SPK-RD	R&D loudspeaker test measurements (includes APX-SW-SPK-PT)
APX-SW-PESQ	Perceptual audio test (speech) for low-bandwidth devices
APX-SW-POLQA2	Perceptual audio test (speech) for wideband devices
APX-SW-STI	Speech Transmission Index measurements plug-in



## Option Details

	Part No.	Description	Measurements/Features
APx515 Options	APX-SW-ACR	Acoustic Response	Acoustic Response for non-anechoic environments.
	APX-SW-AML	Advanced Measurement Library	Bandpass Level, Bandpass Frequency Sweep, Bandpass Level Sweep, Crosstalk Sweep (custom), Crosstalk Sweep (1 channel driven), Crosstalk Sweep (1 channel undriven), Digital Error Rate, Dynamic Range (AES17), IMD (DFD/MOD/SMPTE/CCIF), IMD Frequency Sweep, IMD Level Sweep, Maximum Output, Maximum Output (CEA-2006), Metadata Recorder, Regulated Frequency Sweep, Signal Analyzer DC Level Sweep, FFT spectrum monitor.
	APX-SW-ASIO	ASIO Output and Input	Provides ability to connect directly to an ASIO device on a PC.
	APX-SW-HST	High Speed Test	Continuous Sweep (a brief log-swept sine wave that moves continuously across a specified range of frequencies), Multitone Analyzer (a very fast stimulus signal that provides a broad range of results).
	APX-SW-BEN	Bench Mode for APx515	Adds a real-time UI mode to APx515.
	APX-SWB-2	APx515 Software Bundle	Combines: ACR, AML, ASIO, and HST software options in a single bundle.
APx Options	APX-SW-SPK-PT	Loudspeaker Test: Production	Combines an acoustic measurement (Frequency Response, Phase, Distortion and Rub & Buzz) and an electromechanical impedance measurement (Impedance Response Curves plus a subset of Thiele-Small). Also includes Acoustic Response (APx v4.0 or later) and Modulated Noise.
	APX-SW-SPK-RD	Loudspeaker Test: R&D	Acoustic Response (with Rub & Buzz), Impedance / Thiele-Small, Modulated Noise. Includes: all measurements provided in APX-SW-SPK-PT plus the APx Polar Plot and APx Waterfall Graph utilities.
	APX-SW-STI	Speech Transmission Index	Plug-in for conducting Speech Transmission Index (STI) measurements using the STIPA method.
	APX-SW-PESQ	PESQ	Widely-used, enhanced perceptual measurement for voice quality on low-bandwidth devices.
	APX-SW-POLQA2	POLQA	Successor to PESQ with support for HD Voice, 3G, 4G/LTE and VoIP technologies. (2 channels)