



## +ARB Option Signal Generator

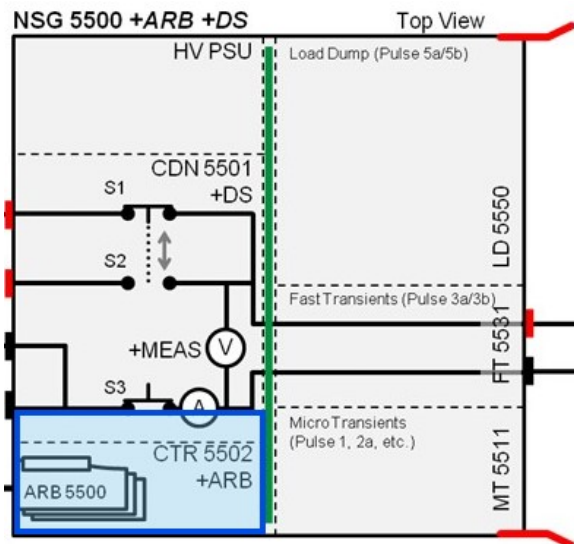
When ordered, the +ARB option is part of the controller module CTR 5502 located at the rear of the NSG 5500 mainframe. The +ARB option consists of the arbitrary waveform generator and comes with one output channel ARB 5500. Seven more channels can be added up to a total of eight channels.

### MAIN FEATURES

- Fits in a NSG 5500 for nearly all requirements in one 19" rack
- 16 bit resolution, 10 MS/s, DC to 500 kHz
- Up to 8 synchronized ARB channels
- Autostar 7 adds advanced ramping, drag-n-drop, WYSIWYG features

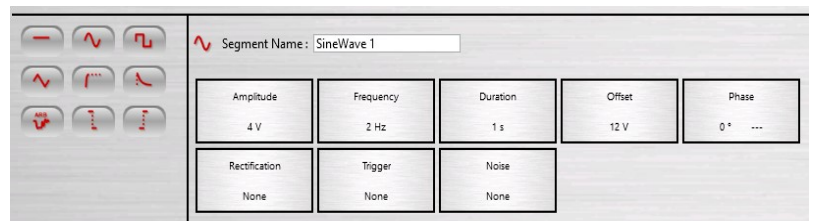
The generated analogue wave signal is within +/- 10V voltage range to drive the Teseq amplifier PA 5x40 series and is available at a 9 pin d-sub connector. On the same connector also a current limiter for the PA-series can be set. A programmable TTL trigger is also provided.

The ARB 5500 has a bandwidth of up to 500 kHz and features stepless playback of many fully parameterized waveforms. Whether the full bandwidth capability can be used depends effectively on the connected power amplifier.



### Software

The Autostar7 software tool allows you to easily program the most complex wave forms. There is a number of different segments to chose from with a variety of individual parameter settings.



**Specification**

Parameter	Value	
Output channels	1 included (expandable up to max. 8 channels)	
Output voltage	± 10 V	
Output voltage accuracy	DC ... 10 kHz	± (0.2% + 10 mV)
	10 ... 100 kHz	± 1%
	100 ... 350 kHz	± 2%
	350 ... 500 kHz	± 5%
Resolution	16 bit	
Sampling rate	10 MS/s (per channel)	
Bandwidth / Frequency	DC ... 500 kHz	
Frequency resolution	0.01 Hz	
Wave form types	dc, ramps, sine, square, triangle, exponential, functions, clone etc.	
Segment parameters	Amplitude, duration, frequency, DC offset, rectification, duty cycle, phase angle, noise, trigger	
Ramping (amplitude, frequency)	Linear, static, exponential, spot, log (only frequency)	
Segments per test	64'000 depending on parameters (theoretical number) *	
Segment duration	0.001 ms ... 99.999 h	
Test duration	1 ... 99'999 counts, continuous	
Clone memory	max. 1 GB (for user defined wave shapes (depends on wave complexity) *)	
Safety	Short circuit protected outputs	

\* With the complexity of segments, the number drops

**Accessories**

ARB 5500	1 ARB channel for +ARB option (max. 8 in total)
INA 5540-GA	Hardware option for GMW 3172 superimposed voltage profile

**Other test generators**

PA 5740	4-quadrant amplifier, -60 ... + 60 VDC, 10 A, up to 180 kHz
PA 5840 series	4-quadrant amplifier, -15 ... + 60 VDC, up to 100 A, up to 150 kHz
+DS option	Power Fail module for dip and drop testing, fall / rise time < 200 ns
+MEAS option	Measuring unit for closed loop testing (AC ripple and magnetic field)