



INA 5540-GA

USER MANUAL



Advanced Test Solutions for EMC

INA 5540-GA

USER MANUAL

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1 OVERVIEW



The INA 5540-GA is an adapter to use a dual-ARB NSG 5500 +ARB to simulate the pulses described in GMW 3172 section 9.2.5. This test requires two function generators, one being modulated through a capacitor as shown below.

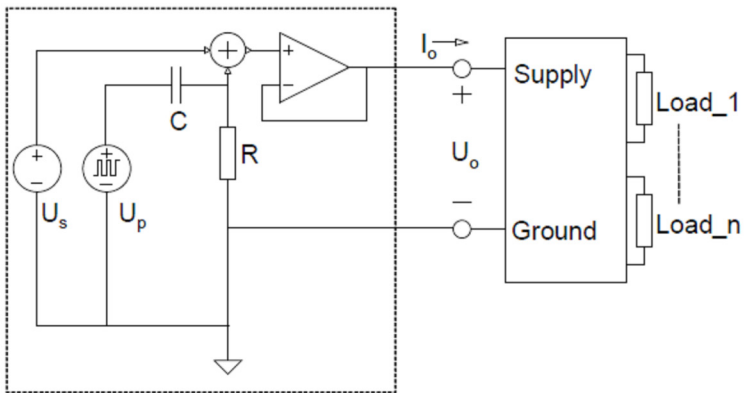


Figure 1 - The test circuit from GMW 3172

- 6 For this reason, the INA 5540-GA is designed to use two inputs from two ARB 5500 channels output with the recommended capacitance built in directly to the PA.



Figure 2 – The INA 5540-GA

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2 SETUP



Connect the CH1 and CH2 DSUB connectors to the respective ARB channel output. Connect the Output to PA connector to the PA 5840 or PA 5740 input using the cable supplied with the PA.



Finally, connect the INA 5540-GA to the supplied DC power supply and connect that to mains.

3 ADJUSTMENT



Program a 0 V DC ramp for the master FG card and a square wave with 2 V_{pp} and 1 Hz for the slave 1 FG card.

Measure the output voltage of PA and adjust the peak amplitude of the rectangular wave to achieve the desired superimposed voltage. If the values seem unusually, be sure that the appropriate source is selected in AutoStar.

5 TEST PROCEDURE

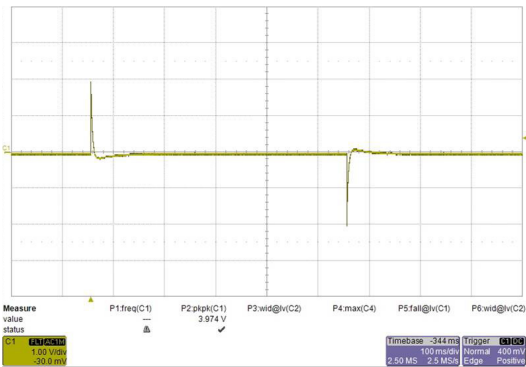


Program a DC ramp for the master FG card with an amplitude corresponding to U_s required by the standard. Program a rectangular wave with an amplitude of 2 Vpp and logarithmic ramped frequency from 1 Hz to 4 kHz to 1 Hz, see pre-programmed test in AutoStar.

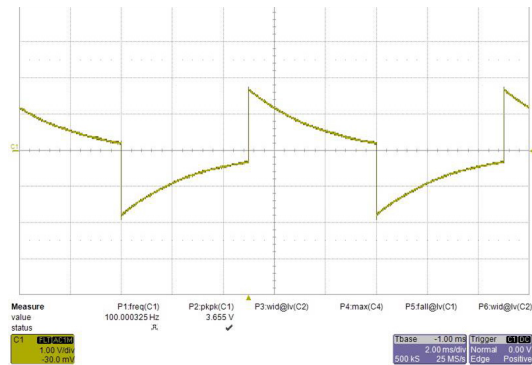
6 SAMPLE PLOTS



Us=14 V, f=1 Hz



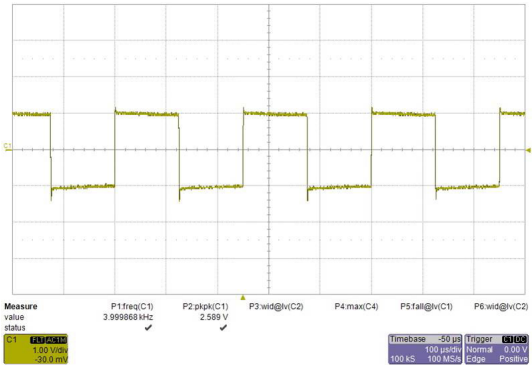
Us=14 V, f=100 Hz



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Us=14 V, f=4 kHz

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7 PACKAGE CONTENTS



Inside the packaging, you will find the following items:

- 1) INA 5540-GA
- 2) DC power supply
- 3) Users guide (this guide)

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