

## 20 dB near field amp for Tektronix EMC pre-compliance

EMI-NF-AMP (TEKBOX TBWA2 offered by Tektronix)



The EMI-NF-AMP is the TEKBOX TBWA2. This 20 dB wideband amplifier is for radiated emissions EMC pre-compliance measurements. This amplifier can be used with the EMI-NF-PROBE probes to increase the dynamic range of the measurements.

### Key features

- Wideband amplifier with 20 dB gain
- Works with EMI-NF-PROBE (TEKBOX TBPS01) magnetic field and electric field probes

### Applications

- Radiated EMC measurement
- RF immunity testing
- Contactless (load free) relative measurement of RF signal chains
- Contactless (load free) relative measurement of oscillators, modulators, etc.

# Specifications

**Near field amplifier**

<b>Input</b>	50 Ω, SMA
<b>Output</b>	50 Ω, SMA
<b>Nominal supply voltage</b>	4.5 – 5 V, typical. 110 mA, Mini-USB-B connector
<b>Maximum supply voltage</b>	5.5 V
<b>Maximum input power</b>	+ 10 dBm
<b>1 dB output compression point at 2 GHz</b>	+20 dBm
<b>3rd order output intercept point at 2 GHz</b>	Pin = 0 dBm/tone, Δf = 10 MHz: +35 dBm
<b>Reverse isolation S12, 0.1... 6 GHz</b>	23 dB
<b>Noise figure at 2 GHz</b>	4.5 . . . 5 dB

<b>Gain</b>	<b>1 MHz</b>	<b>10 MHz</b>	<b>100 MHz</b>	<b>500 MHz</b>	<b>1 GHz</b>	<b>2 GHz</b>	<b>3 GHz</b>	<b>4.5 GHz</b>	<b>6 GHz</b>
	14.8 dB	20.2 dB	20.2 dB	20 dB	19.8 dB	19 dB	17.6 dB	17.4 dB	15.4 dB

## Ordering information

### EMI-NF-AMP and related accessories

Item	Description
EMI-NF-AMP	20 dB wideband amplifier with cable
EMI-NF-PROBE	EMC probe set consisting of H20, H10, H5, E5, 75 cm SMB to SMA cable, measurement plots

### Service

All service provided by TEKBOX Digital Solutions. Contact <https://www.tekbox.net/> for product information and service.

**ASEAN / Australasia** (65) 6356 3900  
**Belgium** 00800 2255 4835\*  
**Central East Europe and the Baltics** +41 52 675 3777  
**Finland** +41 52 675 3777  
**Hong Kong** 400 820 5835  
**Japan** 81 (3) 6714 3086  
**Middle East, Asia, and North Africa** +41 52 675 3777  
**People's Republic of China** 400 820 5835  
**Republic of Korea** +822 6917 5084, 822 6917 5080  
**Spain** 00800 2255 4835\*  
**Taiwan** 886 (2) 2656 6688

**Austria** 00800 2255 4835\*  
**Brazil** +55 (11) 3759 7627  
**Central Europe & Greece** +41 52 675 3777  
**France** 00800 2255 4835\*  
**India** 000 800 650 1835  
**Luxembourg** +41 52 675 3777  
**The Netherlands** 00800 2255 4835\*  
**Poland** +41 52 675 3777  
**Russia & CIS** +7 (495) 6647564  
**Sweden** 00800 2255 4835\*  
**United Kingdom & Ireland** 00800 2255 4835\*

**Balkans, Israel, South Africa and other ISE Countries** +41 52 675 3777  
**Canada** 1 800 833 9200  
**Denmark** +45 80 88 1401  
**Germany** 00800 2255 4835\*  
**Italy** 00800 2255 4835\*  
**Mexico, Central/South America & Caribbean** 52 (55) 56 04 50 90  
**Norway** 800 16098  
**Portugal** 80 08 12370  
**South Africa** +41 52 675 3777  
**Switzerland** 00800 2255 4835\*  
**USA** 1 800 833 9200

\* European toll-free number. If not accessible, call: +41 52 675 3777

**For Further Information.** Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit [www.tek.com](http://www.tek.com).

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.



08 Feb 2018 37W-61345-1

