

RF amplifier – 1 MHz to 3 GHz, 20/40 dB

Features

- Wide frequency range from 1 MHz up to 3 GHz
- Universal usage as near field probe preamplifier, general purpose or measurement preamplifier, power amplifier for immunity testing, etc.
- Very good gain flatness combined with high output power, both available in entire frequency range
- Small and portable design, powered from USB
- Downloadable compensation data



Product description

EMCgear RF amplifier RFA-30 provides excellent parameters within entire frequency range 1 MHz to 3 GHz. Very stable gain characteristics allows its usage as measurement amplifier. High output power in pocket size offers application in field of RF transmitters as RF power amplifier. Amplifier output can directly drive antennas or other RF stages.

Technical parameters

| | | |
|----------------------------|--------------------------------|----------------------------|
| Input / output impedance | 50 Ohm | |
| Input / output terminal | SMA female | |
| Operating frequency range | 1 MHz to 3 GHz | |
| Gain | 20 dB variant 40 dB variant | Typ. 20 dB Typ. 40 dB |
| Input power | 20 dB variant 40 dB variant | Max. 16 dBm Max. 13 dBm |
| Output power (P1dB @ 2GHz) | 20 dB variant 40 dB variant | Typ. 20 dBm Typ. 16 dBm |
| Noise figure | Typ. 3,4 dB | |
| Power supply terminal | Mini USB socket | |
| Current consumption | 20 dB variant 40 dB variant | Typ. 70 mA Typ. 100 mA |

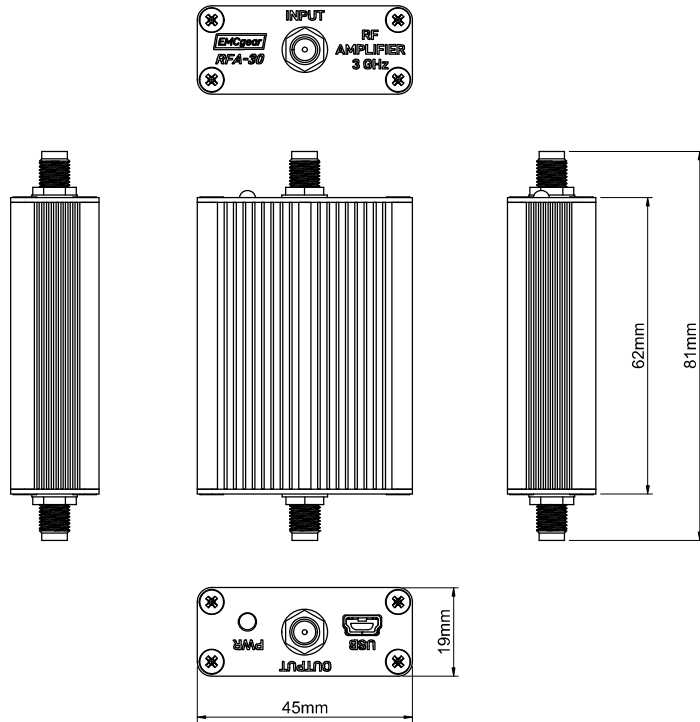
Scope of delivery

| | |
|--|-------------|
| RF amplifier, 1 MHz to 3 GHz, 20 dB gain | RFA-30-20dB |
| RF amplifier, 1 MHz to 3 GHz, 40 dB gain | RFA-30-40dB |
| USB cable, USB A to Mini USB, 1 m | - |
| Compensation data (downloadable) | - |

Warranty

2-year manufacturer warranty

Mechanical dimensions
RF amplifier (RFA-30)



Optional accessories

| Description | Order code |
|--|-------------|
| SMA to BNC cable, RG174, length 0,5 / 1 / 2 m | C-SABCxx174 |
| SMA to SMA cable, RG174, length 0,5 / 1 / 2 m | C-SASAxx174 |
| SMA to SMB cable, RG174, length 0,5 / 1 / 2 m | C-SASBxx174 |
| RF attenuator, SMA, 3 / 6 / 10 / 20 / 30 / 40 dB | RFAT-xx |
| RF attenuator kit, SMA, 3 to 40 dB, 6 pcs. | RFAT-K1 |



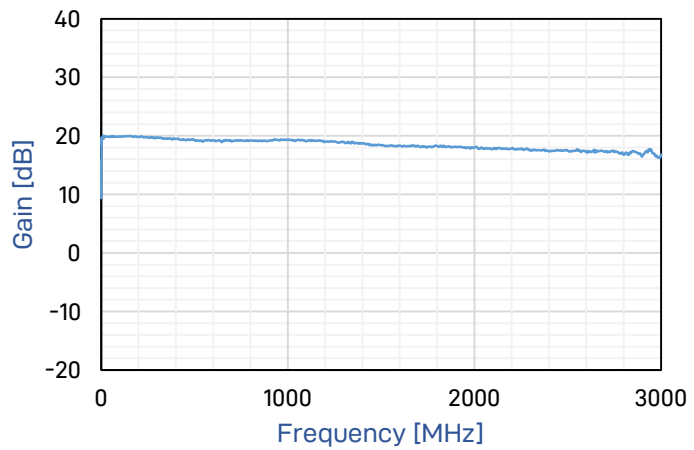
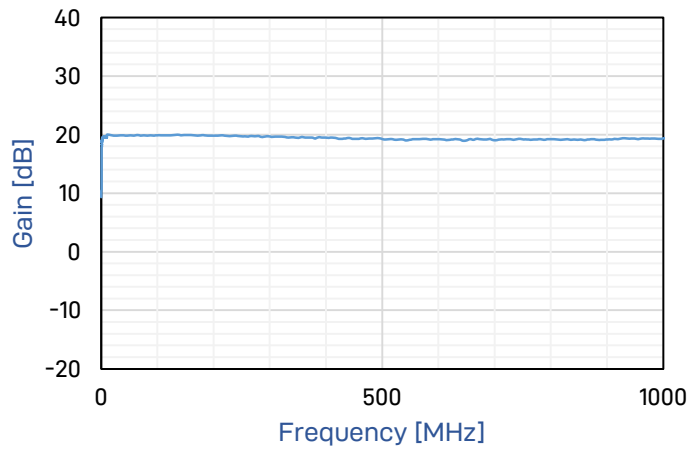
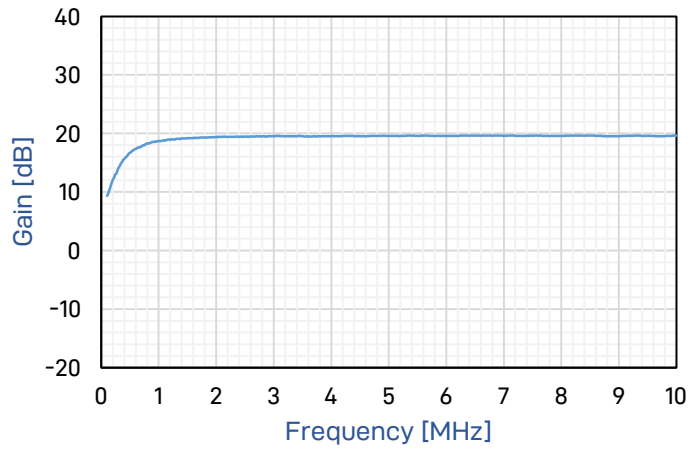
SMA to BNC cable, RG174
C-SABCxx174



RF attenuator kit, SMA, 3 to 40 dB, 6 pcs.
RFAT-K1

Frequency characteristics

RFA-30-20dB
(20 dB variant)



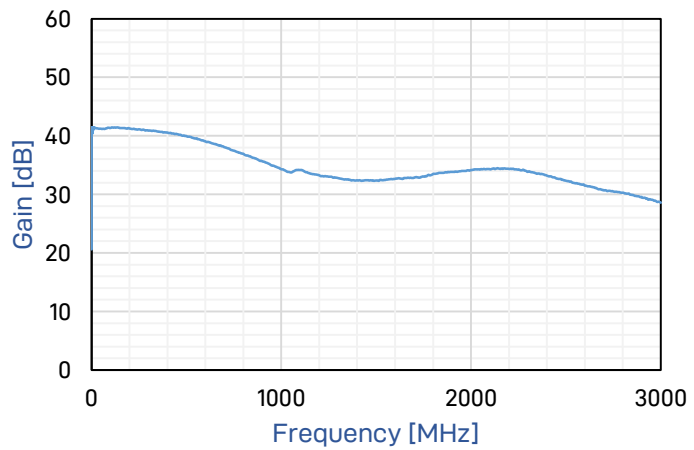
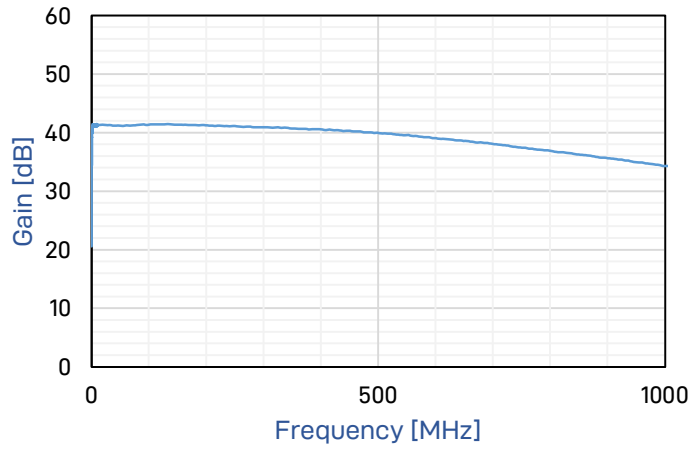
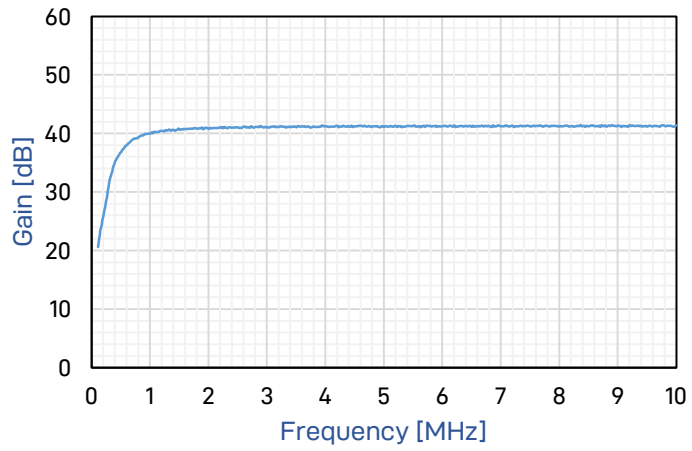
Test conditions

Input power = -20 dBm

Frequency characteristics

RFA-30-40dB

(40 dB variant)



Test conditions

Input power = -40 dBm