

Preamplifier on batteries

80 Hz – 3 GHz

This broadband preamplifier is especially meant to amplify signals from current probes, antennas or other sensors in a rough electromagnetic environment. The device is totally stand-alone thanks to its battery; therefore it can be used without any additional cabling. The very wide frequency range, especially in low frequency, makes this amplifier well adapted to EMC measurements. Special care has been taken concerning the shielding effectiveness of the device allowing measurement in harsh electromagnetic environments such as a NEMP electromagnetic field of 500 kV/m. The amplifier module is delivered with a battery charger. Two versions are available: with 20 dB and with 40 dB gain.



TYPICAL SPECIFICATIONS

| Type | PRA3G20D | PRA3G40D |
|---|---|----------|
| Bandwidth | 80 Hz – 3 GHz (± 1.5 dB) | |
| Typical gain | 20 dB | 40 dB |
| Output power @1 dB compression (2 GHz) | + 9.9 dBm | |
| Noise figure | 3.3 dB | 4 dB |
| Input return loss | > 10 dB, > 20 dB below 300 MHz | |
| Absolute maximum input power | 20 dBm | |
| Input ESD protection | according to IEC 61000-4-2 (15 kV) | |
| Immunity to external electric fields | > 500 kV/m (pulse according to MIL-Std 461 RS105 E/F/G) | |
| Connectors | SMA | |
| Impedance | 50 ohm | |
| Battery life | 27 hours | 17 hours |
| Dimensions | 99 x 64 x 41 mm (L x W x H) | |
| Weight | 350 g | |