

Broadband Pre-amplifier - FPA-18, 1 GHz - 18 GHz



Description

Low noise low power wideband amplifier for increasing sensitivity at field strength measurements and for general attenuation measurements up to 18 GHz. A power supply with 12 V / 300 mA DC (e.g. optional AC/DC adaptor, laboratory power supply, rechargeable battery) is required for operation. In- and output of the broadband amplifier are sensitive to electrostatic discharge. Therefore some precaution (discharging coaxial cables and persons) is required before touching the amplifier. The amplifier input comes with an SMA- female connector. A coaxial microwave cable of 0.5 m length is supplied to connect the antenna with the amplifier. The cable is equipped with N-male and SMA-male connectors.

Usually the amplifier should be installed very close to the antenna. The amplifier housing is equipped with rubber pads for placement on horizontal surfaces. Further there are 22 mm holes in the housing to accept the mounting tube of Frankonia antennas. The antenna mounting tube is usually oriented horizontally with the N-female output of the amplifier facing to ground. This avoids undesired bending of the coaxial cable.

Technical specifications

Type:	FPA-18
Nominal frequency range:	1 - 18 GHz
Useable frequency range:	0.5 - 20 GHz
Connectors:	50 Ohm N / SMA
Fixation:	∅ 22 mm tube
Gain:	typ. 33 dB +/- 2.5 dB
Gain min.:	30.0 dB
Max. input power:	-30 dBm (77 dBμV)
1 dB compression (at output):	> +3 dBm (110 dBμV)
SWR typ.:	< 2
Noise figure:	3.5 dB
Supply voltage:	12V - 15V/DC
Current consumption:	250 - 300 mA
Power supply via female banana sockets:	4mm
Weight:	0.6 kg
Dimensions:	142 x 90 x 48 mm

Measurements

