

# Broadband Pre-amplifier – FPA-26, 18 GHz – 26.5 GHz



## Description

Low noise low power wideband amplifier for increasing sensitivity at field strength measurements and for general attenuation measurements up to 26.5 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 SMA- female connectors. A coaxial microwave cable of 0.5 m length is supplied to connect the antenna with the amplifier. The cable is equipped with SMA-male connectors. The amplifier is equipped with a female 3/8" camera thread to be connected to a mast, e.g. to FSM-1.6. The antenna itself is mounted with another 3/8" screw at the amplifier base. The polarization swivel can easily be achieved within seconds by a further screw in 45° steps using fixing bolts for indexing.

It is very important to avoid bending and torsion of the microwave cable, otherwise persistent damage may be a result. Therefore we recommend to mount the antenna in a way that the antenna connector points into the opposite direction as the RF-input of the amplifier. This allows a smooth routing the microwave cable with a wide bending radius.

## Technical specifications

Type:	FPA-26
Nominal frequency range:	18 – 26.5 GHz
Useable frequency range:	12 – 28 GHz
Connectors:	50 Ohm SMA
Mounting thread:	3/8"
Gain:	typ. 33 dB +/- 2 dB
Gain min.:	30 dB
Max. input power:	-20 dBm (87 dBμV)
1 dB compression (at output):	> +17 dBm (124 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:	400 g
Dimensions:	210 x 100 x60 mm

## Measurements

