

Pre-amplifiers 9kHz - 3GHz

CPA 9231A / 9232 RFP 4001A / 4002

- **Wide band**
- **High gain, low noise figure**
- **Improves dynamic range of emission test-systems**
- **Unique overload warning (CPA 9231A)**

This range of pre-amplifiers is invaluable for low signal measurement applications, with their wide bandwidth, high gain and low noise figures. They are essential for radiated field strength measurements where spectrum analysers are used together with broadband antennas as these have relatively high loss factors. Having noise figures of 4dB-6dB, they can be used to make significant improvements to overall system noise performance in many applications.

The CPA 9231A is optimised for use with probes in the band 9kHz-1GHz (useful to 2GHz).

The CPA 9231A has a unique warning that activates when signals are present at levels likely to cause non-linearity in its pre-amplifier and thus impair the integrity of the measurement.

The CPA 9232 has a lower gain than the CPA 9231A and increased peak signal handling making it ideal for use with broadband antennas up to 3GHz.

The pre-amplifiers are compact and can be connector mounted. They are powered by the supplied AC mains PSU, or directly from an external DC source.

The RFP 400x amplifiers are designed mainly for use with the SCR 3000 receiver range but can also be used with other devices.

Contains

- **CPA 9231A**
external power supply CPS 9753
- **CPA 9232**
external power supply CPS 9755
- **RFP 4001A and 4002**
LE220 cable for connection to SCR 3501 / 3502



CPA 9231A



RFP 4001A

UKAS Calibration option

Technical Specifications	CPA 9231A	RFP 4001A	RFP 4002	CPA 9232
Frequency range	9kHz - 2GHz	150kHz - 1GHz	20MHz - 2.75GHz	20MHz - 3GHz
Noise figure	≤ 4dB	Typically 3.8dB	Typically 5dB	Typ 6dB
Input connector	N Female	N Female	N Female	N Female
Output connector	N Male	N Male	N Male	N Male
Gain	30dB ± 2dB to 1GHz (>17dB at 2GHz)	20dB ± 0.5dB	12dB ± 0.5	20dB ± 3dB to 2GHz (>14dB at 3GHz)
Input/output impedance	50Ω	50Ω	50Ω	50Ω
Input VSWR	< 2:1	≤ 1.5 : 1	≤ 1.5 : 1	< 1.7:1
DC power	10V ± 0.1V DC stabilised or 15V ± 10% DC unstabilised	11 - 15V	11 - 15V	+20 to 30V
DC current	100mA	typ. 45mA	typ. 53mA	typ. 160mA
Output 1dB compression point	0dBm	+5dBm	+14dBm	+15dBm
Size L x W x H mm	103 x 26 x 27	101 x 69 x 37	101 x 69 x 37	104 x 33 x 33
Weight	0.15kg	0.18kg	0.18kg	0.15kg