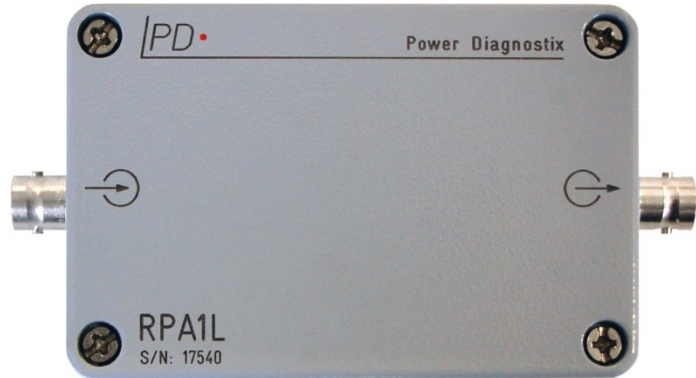


# Signal Condition Preamplifier

## RPA1L

The RPA1L is a pre-amplifier designed for measurements in a frequency range according to standards such as the IEC 60270. As every Power Diagnostix preamplifier the RPA1L is remote supplied and remote controlled through a simple coaxial signal cable (RG58) up to 50 m long. This allows placement of the preamplifier close to the sensor or signal source.



BNC input connector. To be connected to the signal source. To utilize the benefits of the relative high impedance of the RPA1L's input, the connection cable to a quadrupole must be as short as possible. Use a BNC-BNC adapter or a very short BNC cable, preferably (RG58: 100 pF/m).

**Warning:**

The RPA's input is not able to carry the load current of a sample or coupling capacitor. A power separation filter or quadrupole is required in general!



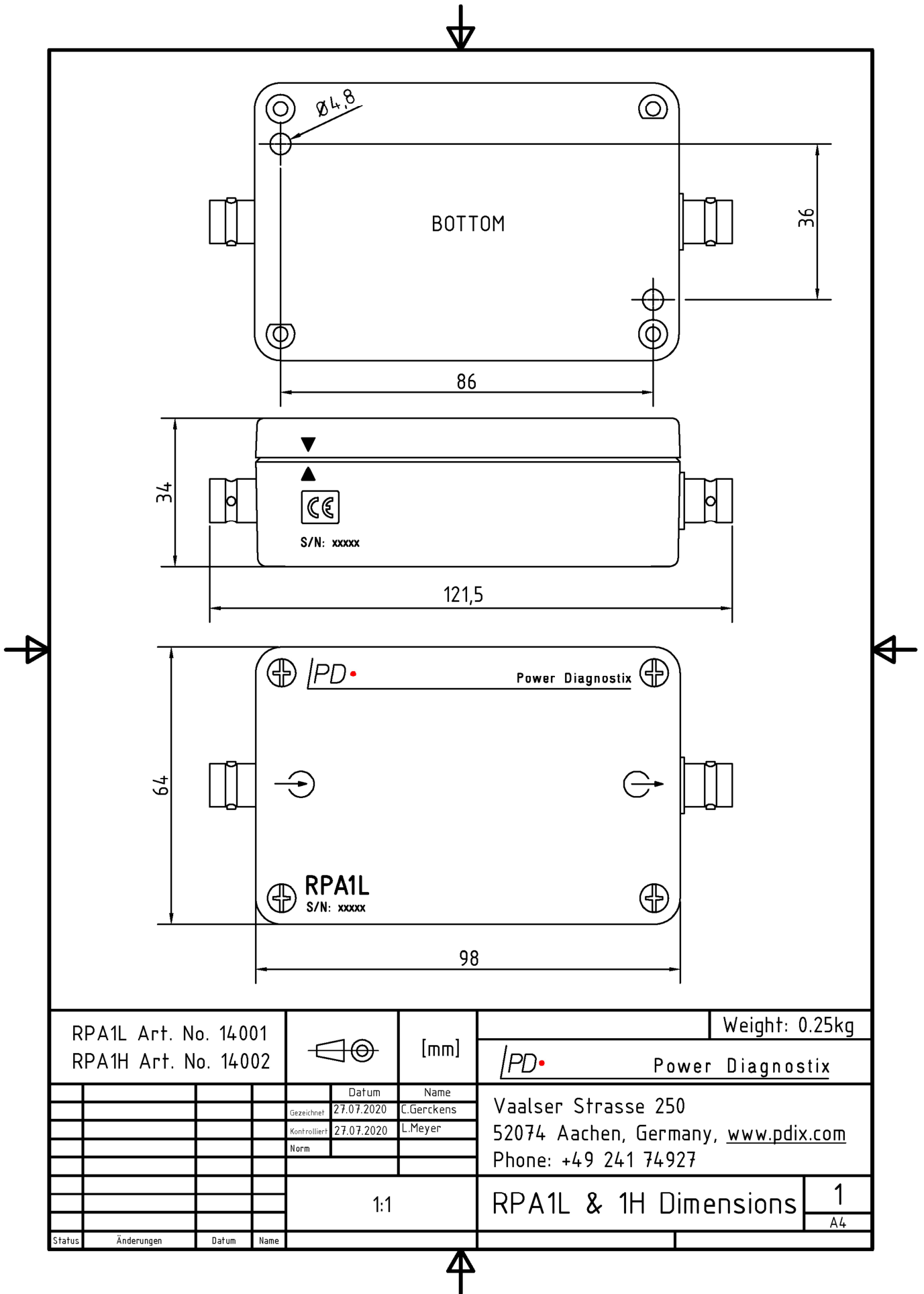
BNC output connector. To be connected directly to an amplifier input. If not remote powered, this output has a high frequency connection to the input.

**Caution:**

Use AC coupling and high impedance input setting (1 M $\Omega$ //20 pF) if monitoring the RPA's output with an oscilloscope. Low impedance oscilloscope inputs may be damaged or cause malfunction, as the signal cable between RPA and the measuring device carries the RPA's power supply and remote control.

## Technical Data

Input impedance:	1 k $\Omega$ //50 pF
Bandwidth:	40 kHz–20 MHz
Roll-off:	40 dB/dec.
Gain steps:	Off, 0, 20, 40 dB (remote controlled)
Input sensitivity:	< 15 $\mu$ V <sub>rms</sub> /0.02 pC
Operation temperature:	-10°C to 60°C (non-condensing)
Enclosure:	Cast aluminum
Ingres protection class	IP52
Input connector:	BNC connector (female)
Output connector:	BNC connector (female)
Applications:	Cable, DSO
Size (W x H x L):	64 x 34 x 122 mm <sup>3</sup>
Weight:	approx. 250 g



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Product information and design is subject to changes without notice.