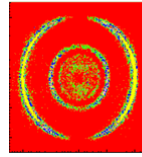


The FAMP1+ fast timing amplifier



RoentDek

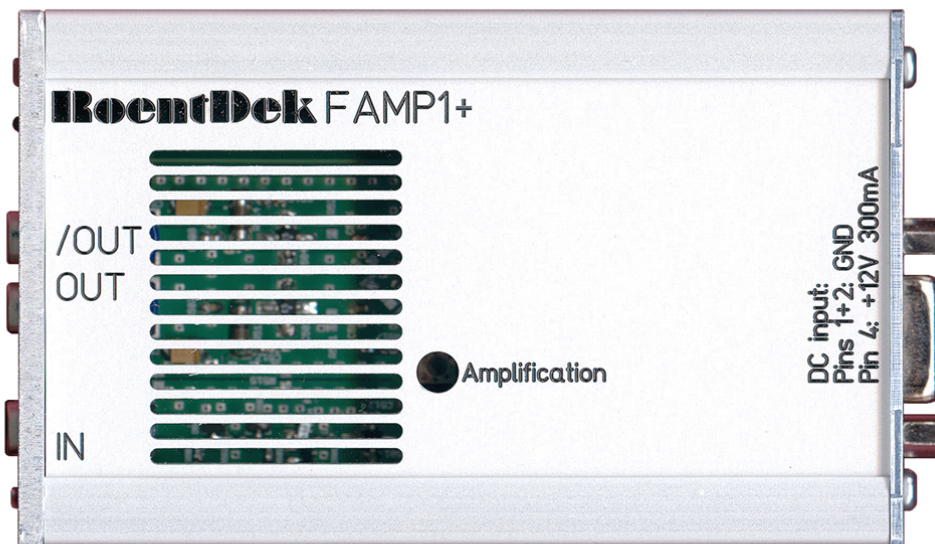
Handels GmbH

Supersonic Gas Jets
Detection Techniques
Data Acquisition Systems
Multifragment Imaging Systems

The **RoentDek FAMP1+** is an amplifier for high frequency pulse signals as obtained from microchannel plate detectors and all kinds of secondary electron amplifiers (photomultiplier, channeltron, etc.). It is similar in function to the **RoentDek FAMP8** model.

This amplifier has a bipolar input with bandwidth of 200-300 MHz via an AC-coupled 50 Ohm impedance socket (lemo00) and both inverting/non-inverting outputs (lemo00 sockets). The nominal amplification factor is about 70 adjustable from 0 to 120%. The maximum linear output signal height is approx. +/- 1.5 V. Amplification of inverting and non-inverting output may differ within 10%.* In the version **FAMP1i** the outputs can have very different amplifications.

The unit has a power consumption of < 4 Watt (0.3 A at +12V). It comes with an external power supply for 100-250V AC (50-60Hz) mains power (typ. power consumption < 30 W).



Size (approx.): 110 mm x 65 mm x 40 mm
Weight: 300g (without power adapter)

The **FAMP1+** is especially suited for signal amplification of **RoentDek** MCP (timing) detectors with **FT4/12/16TP** (or similar) **RoentDek** signal decoupler.

The **FAMP1+** can for example be used for detector timing readout in combination with a CFD plus TDC or with a fast ADC system.

* Input impedance may vary when amplification is altered.

Revision in 2019:

The gain potentiometer was relocated to the front panel and the **RoentDek FAMP1+** is now optionally available with a 3HU compatible front panel for convenient mounting in a 19" rack.



FAMP1i:

A special **FAMP1i** version allows operation with two different amplification factors for the outputs. For example amplification may vary by a factor 10 so that a low-amplifying output will have linear response to very high input signals while the other saturates.

The **FAMP1i** is factory-fixed according to customer demand towards gain choices (one variable by a gain pot) and polarities for the outputs. External passive inverter/attenuator plugs (**RoentDek pInv** and **pAtt**) increase the application range further.

Size (approx.): 110 mm x 65 mm x 40 mm
Weight: 300g (without power adapter)
power consumption of < 4 Watt

