



The **RoentDek MIXA8** is an 8-fold signal mixing amplifier for high frequency pulse signals as obtained from microchannel plate detectors and all kinds of secondary electron amplifiers (photomultiplier, channeltron, etc.) after pre-amplification (e.g. with **RoentDek FAMP** modules). Due to its bandwidth of 2-350 MHz and AC-coupled 50 Ohm impedance in-/outputs it is also useful to process AC-coupled NIM signals (-0.8V).

It can be used as an analog bipolar

- FAN in/Fan out
- Signal inverter
- Amplifier/Attenuator (gain 4x to 0.2x)
- Sum amplifier (signal mixer)

with 8 individual channels, each with 3 inputs and 3 outputs.

Each channel has an inverting (*/IN1*) and a non-inverting (*IN3*) input with an amplification gain between 0.2 and 4 (default: 1) plus a inverting input (*IN2*) with fixed gain (=1)*. One of the three outputs is inverting (*/OUT*), two are non-inverting (*OUT*). Maximum input/output signal heights are +/- 2 V.

The 19" rack mount case (one height unit) comes with an internal power adapter for 85-250V AC (50-60Hz)/120-250V DC mains voltage and has a power consumption of 15 Watt.

Size (approx.): 484 mm x 45 mm x 270 mm (width x height x depth)

Insertion depth (incl. mains cable): 330 mm

Weight: 2200g



The **MIXA8** is a multi-purpose module for signal shaping, mixing and multiplying, especially in combination with readout systems for **RoentDek** delay-line detectors. It can reduce the number of TDC or fADC channels needed for the readout of many detector's channels, e.g. when two or more **DLD**, **HEX** or **DET** detectors shall be operated in coincidence.

A two-channel version (**MIXA2**) is also available.

* optionally two non-inverting inputs with gain of 0.2 – 4 and one inverting input with fixed gain (=1)