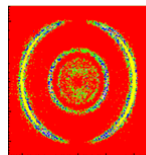


LA1 Level Adapter: (LV)TTL-NIM-TTL



RoentDek
Handels GmbH
Supersonic Gas Jets
Detection Techniques
Data Acquisition Systems
Multifragment Imaging Systems

The **RoentDek LA1** level adapter series features different converters for logic signals like NIM, TTL and LV-TTL. Each unit is factory-fixed for a specific conversion task:

in	out1	out2
NIM	f.w. NIM	NIM
NIM	f.w. TTL	NIM
NIM	f.w. NIM	f.w. NIM
NIM	f.w. TTL	f.w. NIM

in	out1	out2
(LV)TTL	f.w. NIM	NIM
(LV)TTL	f.w. TTL	NIM
(LV)TTL	f.w. NIM	f.w. NIM
(LV)TTL	f.w. TTL	f.w. NIM

Output signals can have fixed width (f.w. NIM or f.w. TTL, adjustable by a potentiometer within certain boundaries) or have the same width as the input signal. The fixed output width is selectable between < 10 ns (6 ns for NIM) and 2.5 μ s.

(LV)TTL input and output impedance are factory-set to 50 Ohm or 1kOhm (NIM in-/output 50 Ohm).

Trigger threshold is set to

- + 1.4 V for (LV)TTL in
- 0.35 V for NIM in

Maximum rate is 100 MHz (or limited by the length of input and/or output signals).



Figure: RoentDek LA1 configured as TTL-NIM converter.

The unit has a power consumption of about 3 W (0.6 A at +5 V) via a USB socket as power input (no data connections). We strongly recommend using only the included external USB power supply (5.2 V/2.5 A) and the included USB cable instead of connecting the **LA1** to a PC or using any standard USB components. Newer models feature a “Low USB Voltage” LED, indicating a weak power input or cable when lit. The **LA1** may still function normally but proper outputs must be verified).

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