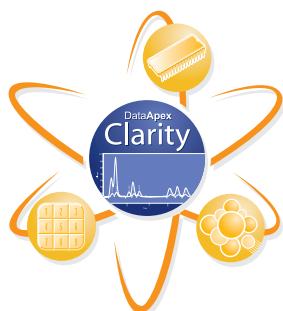


# Colibrick



## An external 24-bit A/D converter for USB

Colibrick is precise and stable high resolution external 24-bit A/D converter unit that converts signal from any detector with analog output to digital form. It contains up to four independent data-acquisition channels.

### Advantages of the Colibrick converter:

- Continuous integration of input signal.
- Isolations prevent noise from the PC.
- Integration frequency up to 400 Hz enables Fast GC application.
- The states of digital inputs and outputs are indicated on the front panel.
- Excellent reliability and temperature stability.
- Power supply from USB

**Acquisition channels:** The channels are completely independent, equipped with A/D converters using continuous integration and able to process both positive and negative voltages. Colibrick can simultaneously perform data acquisition from multiple detectors. Individual channels can be assigned to different chromatographs.

**Digital inputs and outputs:** The unit includes four digital inputs and eight digital outputs. The first four digital outputs are also equipped with relay contacts.

Digital inputs and outputs are generally used to synchronize Start and Stop of the analysis with autosampler or chromatograph. However, Clarity Event table enables to use them to trigger various actions or to control additional devices.

**Standalone A/D Converter:** For applications other than Clarity, the Colibrick unit can be supplied as standalone hardware with a set of drivers for Windows OS.



## Technical Data

<b>Converter type:</b>	24-bit integrating
<b>Analog inputs:</b>	differential
<b>Number of channels:</b>	1, 2 or 4 fully independent and isolated
<b>Input impedance:</b>	> 1 MOhm
<b>Input range:</b>	unipolar and bipolar, each channel independently 156.26, 1 250 or 12 123 mV
<b>Sample rate:</b>	6.25, 12.5, 25, 50, 100, 200, 400 samples per second for 50 Hz mains frequency filter 7.5, 15, 30, 60, 120, 240, 480 samples per second for 60 Hz mains frequency filter
<b>Non-linearity:</b>	< 0.003%
<b>Temperature dependence:</b>	< 10 ppm/°C
<b>Digital inputs:</b>	4 TTL (5 V)
<b>Digital outputs:</b>	8 TTL (5 V) maximum current load 20 mA, maximum total current load for all outputs 100 mA 4 of them also as relay contacts - normally open (i.e. contact closure) max. current 0.5 ADC, max. voltage 100 VDC, max. switching power 10 VA, max. resistance 150 mΩ
<b>Dimensions:</b>	105 x 124 x 22 mm (W x H x D)
<b>Weight:</b>	290 g
<b>PC interface:</b>	USB
<b>Power supply:</b>	from USB

### Typical noise free resolution for various acquisition speeds and input ranges

	12 123 mV	1250 mV	156.26 mV
6.25 Hz	21 bit	21 bit	20 bit
25 Hz	21 bit	21 bit	20 bit
100 Hz	19 bit	19 bit	19 bit
200 Hz	16 bit	16 bit	16 bit
400 Hz	16 bit	16 bit	16 bit

## Specification

<b>Part No.:</b>	U31 - single channel U32 - two channels version U34 - four channels version
<b>Warranty:</b>	3 years

