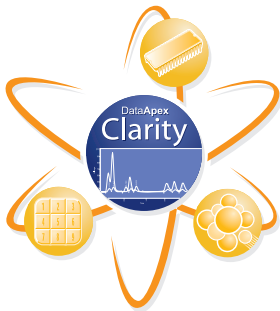


# INT7



## 24-bit A/D converter for PCI slot

INT7 is precise and stable high resolution internal 24-bit A/D converter card that converts signal from any detector with analog output to digital form. It contains up to four data-acquisition channels on one card.

### Advantages of the INT7 A/D converter:

- *No loss of input signal during integration. There are no time delays during which the converter fails to integrate the input signal.*
- *There is no continuous servicing of the input analog switches, which would otherwise cause errors (offset, noise, etc.).*
- *The amount of data entering the computer is substantially smaller, since individual data items already represent partial integrals.*
- *Isolations prevent noise from both other channels and from the PC.*

**Acquisition channels:** The channels are completely independent, equipped with A/D converters with continuous integration, used for processing positive and negative voltages. INT7 can simultaneously perform data acquisition from multiple detectors. Individual channels can be assigned to different chromatographs.

**Digital inputs and outputs:** The card 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. The card is manufactured using the SMT technology and provides excellent reliability and temperature stability.

**Standalone A/D Converter:** For applications other than Clarity the INT7 card 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>	> 10 MOhm
<b>Input range:</b>	unipolar or bipolar, each channel independently 156, 1 250 or 10 000 mV
<b>Sample rate:</b>	10, 25, 50, 100 Hz
<b>Non-linearity:</b>	< 0.0015 %
<b>Temperature dependence:</b>	< 10 ppm/°C
<b>Digital inputs:</b>	4 TTL (5 V), the first two can be controlled using the built-in optocouplers (5 mA current)
<b>Digital outputs:</b>	8 TTL (5V, maximum current load 20 mA), the first four are also equipped with control relays (100 V/0.5 A)
<b>PC Interface:</b>	standard PCI slot (PCI Express cannot be used)

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

	10 V	1 250 mV	156 mV
10 Hz	20 bit	19 bit	17 bit
25 Hz	19 bit	18 bit	16 bit
100 Hz	16 bit	16 bit	15 bit

## Details

<b>Part No.:</b>	I71 - single channel I72 - two channel version I74 - four channel version
<b>Warranty:</b>	3 years
<b>Related Products:</b>	Any Clarity online version Part No. C50, C40 Terminal Board – Part No. SV8

### Example: Two chromatographs, one with multiple detectors

