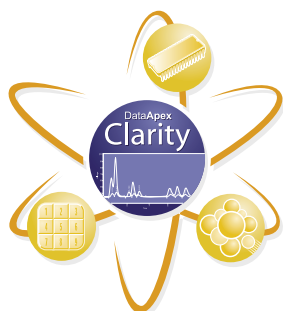


# INT9



## An internal 24-bit A/D converter for PCI

INT9 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 independent data-acquisition channels on one card.

### Advantages of the INT9 A/D converter:

- Continuous integration of input signal.
- 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.
- Integration frequency up to 400 Hz enables Fast GC application.

CLARITY SOFTWARE

CONTROLS

EXTENSIONS

HARDWARE

**Acquisition channels:** The channels are completely independent, equipped with A/D converters using continuous integration and able to process both positive and negative voltages. INT9 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 provides excellent reliability and temperature stability.

**Standalone A/D Converter:** For applications other than Clarity, the INT9 card can be supplied as standalone hardware with a set of drivers for Windows OS.

**3 YEARS WARRANTY**



## 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 or bipolar, each channel independently switchable to 156, 1 250 or 10 000 mV
<b>Sample rate:</b>	6.3, 12.5, 25, 50, 100, 200, 400 samples per second for 50Hz mains frequency filter 7.5, 15, 30, 60, 120, 240, 480 samples per second for 60Hz 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), the first four outputs 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
6.3 Hz	21.5 bit	21.5 bit	20 bit
25 Hz	21 bit	21 bit	20 bit
100 Hz	19.5 bit	19.5 bit	19.5 bit

## Specification

<b>Part No.:</b>	I91 - single channel I92 - two channel version I94 - four channel version
<b>Warranty:</b>	3 years
<b>Related Products:</b>	Any Clarity online version (p/n C50 or C40) Terminal Board (p/n SV8 or SV9)

Example: Two chromatographs, one with multiple detectors

