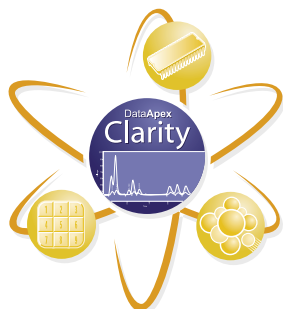# Net-PAD

An external 24-bit A/D converter for LAN

Net-PAD is an external 24-bit A/D converter unit that communicates with PC over Ethernet through TCP/IP protocol. It contains two independent data-acquisition channels. Net-PAD enables users to acquire chromatography data from distant instruments without the necessity of installing additional cables.

Advantages of the Net-PAD converter:

• *Precise and stable high resolution external 24-bit A/D converter unit*
• *Converts signal from any detector with analog output to digital form*
• *Seamless data acquisition anywhere in your facility from the comfort of your office.*
• *Net-PAD provides easy setup, easy access and powerful control.*

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. Net-PAD can simultaneously perform data acquisition from two 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 the autosampler or chromatograph. However, the Clarity Event table allows them to trigger various actions or to control additional devices.

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

3 YEARS WARRANTY

Technical Data

Converter type:	24-bit integrating
Analog inputs:	differential
Number of channels:	2, fully independent and isolated
Input impedance:	> 10 MOhm
Input range:	unipolar or bipolar, each channel independently switchable to 156, 1250 or 10 000 mV
Sample rate:	6.25, 12.5, 25, 50, 100 samples per second
Non-linearity:	< 0.003 %
Temperature dependence:	< 10 ppm/°C
Digital inputs:	4 TTL (5 V)
Digital outputs:	8 TTL (5 V, maximum current load 20 mA), the first four outputs are also equipped with control relays (100 V/0.5 A)
Auxiliary ports:	2x RS232 serial communication
Dimensions:	123 x 105 x 22 mm (w x h x d)
Weight:	310 g
External power supply:	6V/250 mA

Network Communication Parameters

Protocol:	TCP/IP
IP Address:	configurable
Ethernet (LAN):	10 Mb/sec
Connector:	TP45 (twisted pair)

Specification

Part No.:	N2
Warranty:	3 years
Related Products:	Any Clarity online version (p/n C50 or C40) Terminal Board (p/n SV8 or SV9)

Example: Two chromatographs, each with one detector

HPLC — Detector 1 — Channel 1

GC — Detector 1 — Channel 2

Net-PAD

HUB/Switch

Clarity Software

Clarity Software

Chromatographs