

SE04

Isocratic analytical system with variable detector

P/N SE040000

High effective system for routine analysis by constant flow rate of mobile phase (**0,01 - 10 ml/min**) at variable wavelength from **190 up to 600 nm**. It is possible to pre-set wavelength **change during analysis**. Sample is injected using manual injector, **controlling and record of analysis** is done by Chromatographic software **ECOMAC**

ALPHA 10 PUMP



with flow rate **0.01 – 10 ml/min** and limit of pressure **40 MPa** is this pump suited for analytical applications in liquid chromatography. It is designed with **main and auxiliary pump heads connected in series** with piston diameter of 1/8".

Quite new concept of electronic controlling, pump drive, pistons suspensions, shape of cams, pressure transducer and check valves expand its functions.

Intuitive operating using simple keypad allows easy chose functions as follow:

- **Flow rate**
- **Maximal flow rate- PURGE (for priming and washing)**
- **Low pressure limit**
- **High pressure limit**
- **Pulsation compensation on-off**
- **Pressure unit (PSI, MPa or bar)**
- **Control mode (by keypad, RS232 or using voltage)**
- **Display brightness**

There is possibility to use this pump by high pressure gradient mode, where are two, tree or four unit controlled from PC using **RS232 or voltage**.

By work with buffered solvents is it possible to use pistons back washing.

SAPPHIRE 600 UV-VIS VARIABLE WAVELENGTH DETECTOR



is a detector with continuously variable wavelength in the range of **190 – 600 nm** and a noise level $\pm 0.5 \times 10^{-5}$ AU.

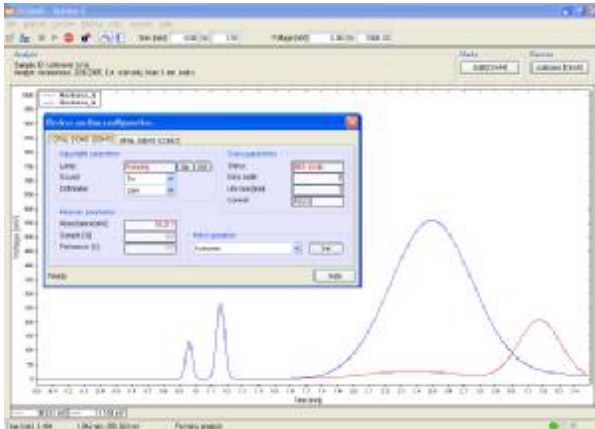
The unit may be used for routine **analytical chromatography** as well as for **preparative chromatography**, according to the selected cell.

The unit is easy to operate, **reference and sample** signals are available for detector **diagnostics** as well as information on **lamp operating hours**.

Output signal is available in both **digital and analogue** form on the output connector. It is possible to **control the unit using the keypad or an RS232 interface** Connecting capillaries are led from the detector's right side panel.

The detector is equipped with a high standard **deuterium lamp** in a special socket that enables **easy changing**. Wavelength can be **programmatically changed** during the performance of an analysis. The detector performs **automatic wavelength calibration** after the lamp has been switched on. A HPLC 04 analytical cell is included as a component of the detector

SOFTWARE ECOMAC



is designed with maximal effort to do easy operation of chromatographic systems ECOM. It is suited for units controlling and data collecting. Equipments are connected to the PC using RS232, or USB (by means of RS232/USB converter). Software detects automatically almost of all units, so there is no need complicated communication installation.

Program most important features:

- Easy installation
- Connecting using USB or RS232
- No need A/D converter
- Possibility to start up to 8 stations at the same time
- Possibility of external start and external mark
- Secured access
- Units controlling and data collecting from one place
- Data export in various formats:

Text formats: native text format, two column text format and CSW Clarity text format

Binary formats: native binary CH-format, CSW (1.7) Raw format and Matlab MAT format

Start of data collecting and eventual marks (for example by fraction collecting) is it possible to do using keyboard or using external unit.

Note: Software ECOMAC allows displaying, storage and export of data, but does not allow peaks shape

calculation, calibration etc. If is need to use such functions, is it necessary add a SW to the system which allow it (for example **Clarity**). It is possible simple export data to any SW so there is not necessary buy A/D converter.

System contains:

Description	P/N
ALPHA 10 Isocratic Pump	PE000000
SAPPHIRE 600 UV-VIS Variable Wavelength DETECTOR	67SH000000
Analytical Injection Loop Valve D	54300000
External sample loop 20 ul SS	54293000
Column 250x4.6mm Kromasil 100-7um C18	CO-C25A7
Box for Bottles MF1	ZA000000
Mobil phase reservoir LCT 02, 1L	56940000
SS Mobile Phase Filter 2um, 1/8"	JR-367008-2
705NR 50ul Hamilton Syringe	80565
ECOMAC Chromatographic software	AF000000
2x Crossed serial cable 9pin RS 232	EKAB-024
2x Cable with converter RS232 - USB	EKAB-025
Panda 30 Start + Mark - USB	SA020000
Accessories for analytical system	SE010100

Computer is not include but could be delivered separately.

