



SE01 Isocratic analytical system with detector OPAL

P/N SE010000

High effective system for routine analysis by constant flow rate of mobile phase (0,01 - 10 ml/min) at one wavelength given used **interference filter**. Sample is injected using manual injector, **controlling and record of analysis** is done by Chromatographic software **ECOMAC**.

System contains:

Description	P/N
ALPHA 10 Isocratic Pump	PE000000
OPAL UV-VIS Fixed Wavelength	6500000
Interference filter	of choice
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.

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**

Two LED displays allows to watch (also from a distance) adjusted flow rate and operating pressure. By pump function choosing, give you this displays enough of information for adjusting.

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 possible to use pistons back washing.

UV-VIS FIXED WAVELENGTH DETECTOR is with an **interference filter**. By means of this filter can be this unit adjusted at one fixed wavelength in range of **200 – 800 nm**. Noise level at 254 nm is $\pm 0.5 \times 10^{-5}$ AU with an empty cell. (Filter is not include price)

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** The detector is equipped with a high standard **deuterium lamp** in a special socket that enables **easy changing**. **By wavelengths up to 600 nm has to be used tungsten lamp instead deuterium lamp**.

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**

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:

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.