

# ECS01

## QUATERNARY GRADIENT ANALYTICAL SYSTEM

High effective HPLC system containing **UV-VIS detector**, **column oven**, **analytical pump** and **gradient box**. Detector with continuously variable wavelength 190-800 nm and very low noise level offers **high-speed sampling up to 100 Hz**.

Communication of all units is through **RS232** or **Ethernet(LAN)**. Additional PC A/D converter card is not required for this system.



System contains manual injector and **Clarity** software. All units are supported in Clarity software from installation.

### MAIN PARTS

#### ECD2800 UV-VIS DETECTOR

Detector with continuously variable wavelength in the range of **190-800 nm** and a noise level  $\pm 3 \cdot 10^{-6}$  AU. Unit offers high-speed sampling up to **100 Hz** and wavelength autocalibration. AC 05 analytical cell is included.



#### ECP2010 ANALYTICAL HPLC PUMP

This isocratic pump works with Gradient Box ECB2004 as a **quaternary gradient pump**. Flow rate range is **0.01-10 ml/min** and pressure limit at **40 MPa**. Unit software includes new learning algorithm for pulsation suppression and many testing and diagnostic functions.



#### ECO2080 COLUMN OVEN WITH HEATING AND COOLING

The peltier heating/cooling column oven with a big compartment room can accommodate up to **3 columns** with length up to **25 cm**. Overheating-Security-Fuse prevents destruction of temperature sensitive columns. Temperature range is **0-80 °C**.



#### ECB2004 GRADIENT BOX WITH DEGASSER

Box is suited for handling liquids in ECOM gradient systems. It accommodates a container for solvent bottles, built-in high-efficiency **vacuum degasser** and **four-way gradient valve**. Up to four solvent lines may be degassed simultaneously by one unit. Four-way gradient valve is controlled from the pump ECP2010.



#### CLARITY CHROMATOGRAPHY SOFTWARE

This system is fully controlled by Clarity Chromatography software, which is also a part of delivery. Clarity software complies **CFR21GLP** requirements.



#### SYSTEM CONTAINS

Pcs	Description	P/N
1	ECD2800 UV-VIS Detector	ADA0000X
1	ECB2004 Gradient box with degasser	ABA0000X
1	ECP2010 Analytical HPLC pump	ACA0000X
1	ECO2080 Column Oven	AOA0000X
1	Clarity – Station for 1 instrument	AP000C50
1	Clarity module for HPLC control	AP000A24
1	Anal. injection valve with 20ul sample loop	S203200X
1	Accessories for analyt. system series 2000	ASA00180

**Note:** Column and computer are not included. PC system has to be equipped for handling 3 serial RS232 or 1 Ethernet port at least. Check also Clarity software requirements.

# ECS02

## QUATERNARY GRADIENT ANALYTICAL SYSTEM

High effective HPLC system containing **UV-VIS detector**, **column oven**, **analytical pump** and **gradient box**. Detector with continuously variable wavelength 190-600 nm and very low noise level offers **high-speed sampling up to 100 Hz**.

Communication of all units is through **RS232** or **Ethernet(LAN)**. Additional PC A/D converter card is not required for this system.



System contains manual injector and **Clarity** software. All units are supported in Clarity software from installation.

### MAIN PARTS

#### ECD2600 UV-VIS DETECTOR

Detector with continuously variable wavelength in the range of **190-600 nm** and a noise level  $\pm 3 \cdot 10^{-6}$  AU. Unit offers high-speed sampling up to **100 Hz** and wavelength autocalibration. AC 05 analytical cell is included.



#### ECP2010 ANALYTICAL HPLC PUMP

This isocratic pump works with Gradient Box ECB2004 as a **quaternary gradient pump**. Flow rate range is **0.01-10 ml/min** and pressure limit at **40 MPa**. Unit software includes new learning algorithm for pulsation suppression and many testing and diagnostic functions.



#### ECO2099 COLUMN OVEN WITH HEATING

This column oven allows temperature stabilization above ambient temperature. A big compartment room can accommodate up to **3 columns** with length **up to 25 cm**. Overheating-Security-Fuse prevents destruction of temperature sensitive columns. Temperature range is **ambient temperature +5°-99 °C**.



#### ECB2004 GRADIENT BOX WITH DEGASSER

Box is suited for handling liquids in ECOM gradient systems. It accommodates a container for solvent bottles, built-in high-efficiency **vacuum degasser** and **four-way gradient valve**. Up to four solvent lines may be degassed simultaneously by one unit. Four-way gradient valve is controlled from the pump ECP2010.



#### CLARITY CHROMATOGRAPHY SOFTWARE

This system is fully controlled by Clarity Chromatography software, which is also a part of delivery. Clarity software complies **CFR21GLP** requirements.



#### SYSTEM CONTAINS

Pcs	Description	P/N
1	ECD2600 UV-VIS Detector	ADB0000X
1	ECB2004 Gradient box with degasser	ABA0000X
1	ECP2010 Analytical HPLC pump	ACA0000X
1	ECO2099 Column Oven with heating	AOB0000X
1	Clarity – Station for 1 instrument	AP000C50
1	Clarity module for HPLC control	AP000A24
1	Anal. injection valve with 20ul sample loop	S203200X
1	Accessories for analyt. system series 2000	ASA00180

**Note:** Column and computer are not included. PC system has to be equipped for handling 3 serial RS232 or Ethernet ports at least. Check also Clarity software requirements.

# ECS04

## QUATERNARY GRADIENT ANALYTICAL SYSTEM WITH AUTOSAMPLER

High effective HPLC system containing **UV-VIS detector**, **column oven**, **analytical pump**, **gradient box** and **autosampler**. Detector with continuously variable wavelength 190-800 nm and very low noise level offers **high-speed sampling up to 100 Hz**.

Communication of units is through **RS232** or **Ethernet(LAN)**. Additional PC A/D converter card



is not required for this system. System contains autosampler and **Clarity** software. All units are supported in Clarity software from installation.

### MAIN PARTS

#### ECD2800 UV-VIS DETECTOR

Detector with continuously variable wavelength in the range of **190-800 nm** and a noise level  $\pm 3 \cdot 10^{-6}$  AU. Unit offers high-speed sampling up to **100 Hz** and wavelength autocalibration. AC 05 analytical cell is included.



#### ECO2080 COLUMN OVEN WITH HEATING AND COOLING

This column oven allows precise temperature stabilization in the **range 0-80°C**. A big compartment room can accommodate up to **3 columns** with length **up to 25 cm**. Peltier technology offers the possibility of heating and cooling independently from room temperature.



#### AUTOSAMPLER L-3320

Automatic autosampler ensuring excellent accuracy and linearity of sample injection. Very low sample residue contamination,  $\mu$ l pick-up mode achieves zero sample loss. Automated selfchecking. Rheodyne valve ensures reliable operation.



#### CLARITY CHROMATOGRAPHY SOFTWARE

This system is fully controlled by Clarity Chromatography software, which is also a part of delivery. Clarity software complies **CFR21GLP** requirements.



**Note:** Column and computer are not included. PC system has to be equipped for handling 3 serial RS232 or 1 Ethernet port at least. Check also Clarity software requirements.

#### ECP2010 ANALYTICAL HPLC PUMP

This isocratic pump works with Gradient Box ECB2004 as a **quaternary gradient pump**. Flow rate range is **0.01-10 ml/min** and pressure limit at **40 MPa**. Unit software includes new learning algorithm for pulsation suppression and many testing and diagnostic functions.



#### ECB2004 GRADIENT BOX WITH DEGASSER

Box is suited for handling liquids in ECOM gradient systems. It accommodates a container for solvent bottles, built-in high-efficiency **vacuum degasser** and **four-way gradient valve**. Up to four solvent lines may be degassed simultaneously by one unit. Four-way gradient valve is controlled from the pump ECP2010.



#### SYSTEM CONTAINS

Pcs	Description	P/N
1	ECD2800 UV-VIS Detector	ADA0000X
1	ECB2004 Gradient box with degasser	ABA0000X
1	ECP2010 Analytical HPLC pump	ACA0000X
1	ECO2080 Column Oven with heating and cooling	AOA0000X
1	Autosampler L3320 for 2x48 vials	ARA03320
1	Clarity – Station for 1 instrument	AP000C50
1	Clarity module for HPLC control	AP000A24
1	Clarity SW module for AS control	AP000A26
1	Accessories for analyt. system series 2000	ASA00180