



## LAMBDA REDOX potential measurement system

LAMBDA REDOX allows the measurement of the Red-Ox potential and the digital transfer of the data to the PC through its RS-485 interface. The measured data can be visualized and recorded for example by the fermentation software SIAM.

The measurement of Red-Ox potential can be made with the laboratory fermenter-bioreactor LAMBDA MINIFOR, using a sterilizable combined pH/temperature probe with an additional Pt electrode fixed on its glass body. This probe is connected to the MINIFOR fermenter-bioreactor in the same way as the standard pH probe.

It does not require any additional connector, cable or side neck. However, the MINIFOR fermenter-bioreactor must have been equipped with the redox option in advance. The output RedOx signal is then provided on the "PUMP" socket at the rear side of the MINIFOR laboratory fermentor-bioreactor base unit.

### Operation manual

Using the 8-pole cable (art. no. 4810), connect the socket "REMOTE" on the rear panel of the LAMBDA REDOX measurement unit to the "PUMP" socket at the rear side of the MINIFOR. All necessary connections are made just with this single cable. The measured data are transferred by the RS connection line of the MINIFOR.

When connected, numbers on the display of LAMBDA REDOX will light and indicate the value of the redox potential in the medium. The working range of the LAMBDA REDOX is from -999 to +999 mV. Negative values are indicated by lighting of the yellow "MINUS" LED.

Button **ADR** is used for setting of the address of LAMBDA REDOX (see below). Button **OK** is used to memorize the address setting.

Setting of the instrument address:

- 1) Disconnect the 8-pole cable from LAMBDA REDOX.
- 2) Press constantly the button **ADR** while connecting the cable to LAMBDA REDOX again. Message "**ADR**" followed by two numbers will appear on display, indicating the actual address of the instrument.
- 3) Release the button **ADR**.
- 4) By pressing small buttons under the display **Λ Λ** set the desired address value.
- 5) Confirm the setting by pressing button **OK**.



The connector "OUT" on the rear of LAMBDA REDOX can be used for the connection of another pump. It replaces the "PUMP" socket on the rear of the MINIFOR. Sockets "IN" and "POWER" are used only by service personnel.

The RS-485 communication protocol for the LAMBDA REDOX measurement system can be provided on demand.

Do not hesitate to contact LAMBDA should you have additional questions.