Basic Version	
User-friendly graphical interface	Simple setting of custom and complex experimental protocols.
Dynamic cultivation protocol	Protocol is based on repetition of defined cycles with different duration from seconds or minutes to days. The entire experiment can take months.
Independent setting of parameters	All experimental parameters/measured values can be set separately. I.e., if the cultivation vessel is illuminated with multiple light channels (red, white, …), each light channel can be set separately.
Setting of cultivation parameters	The parameters can be modified within the individual cycles in: mode (on/off), phase (constant, linear, sinusoid) and intensity.
Changes during running experiment	Cultivation protocol can be easily modified also during the experiment. Notifications about changes are logged automatically.
Protocol save/load	Experimental protocol can be saved in database and again re-loaded from database to another experiment.
Control unit reboot	Experimental protocol is restored automatically after a control unit reboot.
Data visualization	Real-time data visualization in graphs including clear graph tooltips, legend panels, data zoom in and out, data lines filtering, etc.
Linear regression	Application of linear regression on real-time OD data allows to evaluate actual growth rate of biomass.
Experimental events	System events are recorded automatically including additional user-defined information related to the experiment.
Raw data	Recording of raw sensors data is possible.
Calibrations	Accessories (light, OD, pH, O_2 and CO_2 sensor) can be calibrated through the software by user.
Data export	All data or selected sections can be exported into different formats for further processing (for example csv, importable xml, MS Excel/LibreOffice).
Optional modules and accessories support	Turbidostatic, chemostat and pH-modules. Magnetic stirrer, PWM pumps.
Experiment database	Recorded experiments are saved in the database and accessible for filtering and browsing within control software.
Users and rights management	Different user accounts with specific rights can be created for individual users.
Remote access	Remote access provides full access to the control software from remote computer for data check, parameters setting, etc.
Online software upgrades	The upgrade is limited to the compatible software versions.
License	Up to two cultivation devices regardless of their type or combination (including all accessories) can be connected and controlled via Basic Version of control software.

Advanced Version includes all features of Basic Version and contains additional features as for example:	
Copy&Paste	Copy and Paste of protocol cycles through a clipboard. The feature enables to copy&paste setting of one experimental parameter (light, temperature, …) to the others. This is very convenient if the experimental protocol includes many different cycles or if a Multi-Cultivator with multiple vessels and light channels is used. For example, the MC-MIX accommodates 64 independent light channels (8 vessels, 8 channels/vessel) that need to be set separately. For this purpose, the copy&paste icon is an invaluable tool.
Dynamic measuring intervals	Setting the sensor measurement interval in the protocol. This option allows to measure and record different parameters in various intervals from seconds to hours, which can help optimize experimental setups in many ways. For example, to reduce the amount of data recorded in long-term experiments, to optimize feedback regulation of the turbidostatic cultivation, or to obtain a fast chl-a fluorescence response (F_T) to dynamically changing parameters.
Java scripting support	Java scripting support in the protocol. Scripting enables to fine-tune the experimental protocol to fit special aims. For example, it can provide an automatic feedback regulation of light intensity depending on the actual biomass concentration (OD) so that each cell is supplied with a constant light intensity throughout the experiment. Java script can also maintain pH-stat cultivation through the feedback regulation of CO_2 concentration provided by Gas Mixing System (GMS 150). Java scripts are not part of the delivery, they must be created by the user or purchased from PSI.
Protocol export/import	In addition to saving the protocol to the database, the protocol can also be exported to a file on a local computer's disc from which it can be transferred to other control computers and imported into other experiments.
Low-level commands	The Advanced version allows low-level commands to be sent to the device via a graphical user interface (GUI), which can be useful for troubleshooting.
Advanced regression	Application of advanced regression analysis (exponential, polynomial, power, moving average) to selected sections of real-time data in an experimental graph.
Accessories value range	Automatic notification of the actual range of accessories values (light intensity range, pump speed range, etc.).
Start scheduling	Scheduling the start of the experimental allows you to postpone the start of the experiment to a specific date and time.
Additional accessories support: GMS 150 and PP 600	Support for Gas Mixing System GMS 150, additional peristaltic pumps PP 600. The control software allows you to set up automatic experimental protocols, monitor, record and visualize data in real-time. In addition, it enables automatic feedback control of the accessories depending on the actual values of other measured parameters (biomass concentration, pH, etc.).
Automatic notifications	E-mail notifications with different levels of importance can be automatically sent to the user.
Multilicence	Multilicence allows control multiple cultivation devices regardless of their type or combination (Photobioreactors FMT 150, Multi-Cultivators 1000-OD). Approximately 4 cultivation systems can be recommended per control unit (depending on their configuration and the complexity of the protocol used).