What is in the package?

No	Item	Description
1	Vessel system	• Autoclavable bioreactor vessel, 0.5 liter (0.2 to 0.4liter working volume) total capacity. • Stainless steel (316L) headplate • 6 pcs PG13.5 to PG13.5 adaptor • 5pcs silicon septum • Glas Allihn condenser • Screw cap with hole [polyoxymethylene (POM)] • 5 mm stirrer shaft, ball bearing housing • 2 pcs polycarbonate open blade turbine • Sparger, upwards-facing holes
2	Aeration system	• Bronkhorst IQ+FLOW ultra compact Mass Flow Controller
3	Agitation system	• Brushless DC motor with 0.2Nm torque • Closed-loop speed control system: 1-1200rpm
4	Temperature control	• Peltier based thermoelectric temperature control Temperature range: 10-55°C Accuracy: $\pm$ 0.1 $^{\circ}$C
5	pH	• Hamilton EasyFerm Plus PHI K8 120 Measuring Range: pH 0 to 14
6	Dissolved Oxygen	• Hamilton VisiFerm RS485-ECS 120 H2 Optical 4 ppb to 25 ppm (DO) 0 to 62.85 %-vol or 0 to 300 %-sat
7	Peristaltic pumps	• Acid, Base, Feed, Antifoam pumps + tubing PID automatic enactment and control, Fermentation process control (Individually programmable for any task) Range: 10µL/h – 20mL/h
8	Off gas CO_2 analyzer	• ExplorIR®-W 5% CO2 Sensor Based on infrared LED technology
9	Off gas O_2 analyzer	• UV Flux 25% Oxygen Smart Flow Through Sensor Based on fluorescence quenching
10	Software	• Web application Software runs on a server (bioreactor itself), while users connect to it from their computers using an Internet browser (locally or over VPN)