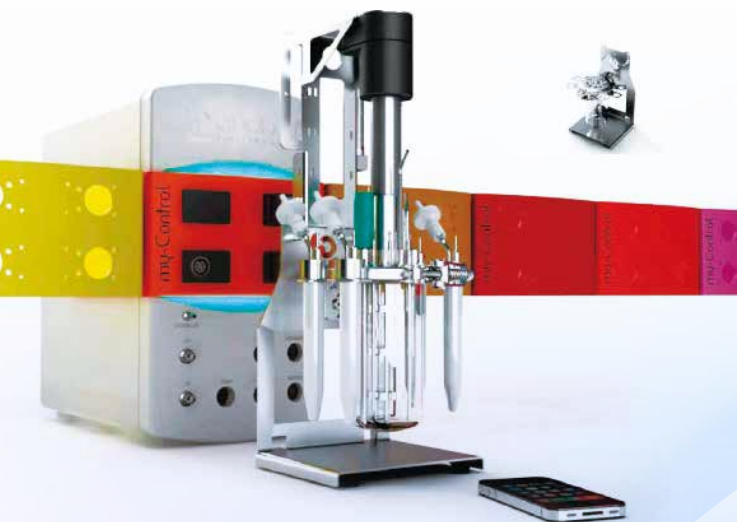




# 讓細胞 / 微生物 生長條件完全掌控

pH 值、溶氧量、溫度、PID 控制參數自動調整，  
精密調控讓細胞維持在最合適生長的環境，利用有限空間發揮最大產能。



## miniBio 迷你版生物反應器

- 250 ml , 500 ml , 1 L
- 小空間創造大量數據
- 適合早期條件測試與細胞株篩選
- 體積雖小規格不縮水

## Autoclavable bioreactor 易滅菌型生物反應器

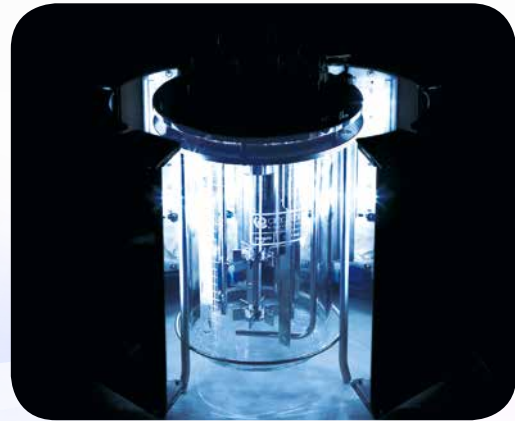
- 2 , 3 , 5 , 7 , 15 , 20 L
- 標準玻璃槽體
- 滿足所有細胞條件測試需求
- 適合產程開發，中型製程

❖ 細胞與微生物實驗室皆可使用！



## Photo Bioreactor 光生物反應器

於生物反應器外加 LED 光源，  
提供穩定且不升溫的光源。  
促進光合成微生物，  
如植物、藻類……等生長。



## Specifications

	MiniBioBundle Cell Culture	MiniBioBundle Microbial	BioBundle Cell Culture	BioBundle Microbial
Control system	my-Control	my-Control	ez-Control	ez-Control
Total Volume	250 ml, 500 ml, 1,000 ml	250 ml, 500 ml, 1,000 ml	1 L, 2 L, 3 L, 5 L, 7 L, 15 L, 20 L	1 L, 2 L, 3 L, 5 L, 7 L, 15 L, 20 L
Working Volume	200 ml, 400 ml, 800 ml	200 ml, 400 ml, 800 ml	0.9 L, 1.7 L, 2.7 L, 3.2 L, 5.4 L, 12 L, 16 L	0.9 L, 1.7 L, 2.7 L, 3.2 L, 5.4 L, 12 L, 16 L
Agitator	Lipsealed with marine impeller	Lipsealed with Rushton impellers	Lipsealed with marine impeller	Lipsealed with Rushton impellers
Aeration	Air supply via sparger	Air supply via sparger	Air and Oxygen supply via sparger	Air and Oxygen supply via sparger and overlay
Exhaust gas	Optional gas outlet	Gas outlet condenser	Gas outlet condenser	Gas outlet condenser
Sampling	Sample pipe included	Sample pipe included	Sample pipe included	Sample pipe included
	Sample system optional	Sample system optional	Sample system optional	Sample system optional
pH	Measurement via pH sensor control via liquid alkali pump and CO <sub>2</sub> gas supply	Measurement via pH sensor control via liquid alkali or acid addition pump	Measurement via pH sensor control via liquid alkali pump and CO <sub>2</sub> gas supply	Measurement via pH sensor control via liquid alkali and acid addition pump
Temperature	Measurement via Pt-100	Measurement via Pt-100	Measurement via Pt-100	Measurement via Pt-100
	Heating only via heating blanket	Heating and cooling via Peltier system	Heating only via heating blanket	Heating via heating blanket cooling by cold water in heat exchanger
Dissolved Oxygen	Measurement via DO <sub>2</sub> sensor control via Air and O <sub>2</sub> gas supply	Measurement via DO <sub>2</sub> sensor control via Air supply and agitation speed	Measurement via DO <sub>2</sub> sensor control via Air and O <sub>2</sub> gas supply	Measurement via DO <sub>2</sub> sensor control via Air and O <sub>2</sub> supply and agitation speed
Foam	Option	Measurement via Foam sensor control via anti-foam addition pump	Option	Measurement via Foam sensor control via anti-foam addition pump
Level	Option	Option	Option	Option
Liquid additions	4 fixed in topplate and 1 septum port	4 fixed in topplate and 1 septum port	3 ports in triple inlet and one inoculum port	3 ports in triple inlet, one inoculum port 1 and septum port

❖ 配備彈性市場上第一

只要您想得到的配備組合，皆可為每位客戶量身訂做！！