Selection auide

Constant temperature incubator shake OD-Monitor

> CO<sub>2</sub> incubato CO<sub>2</sub> incubato shaker

> > Shaker

Mixer Rotator Stirrer

Bead beater homogenizer Ultrasonic homogenizer

> Aluminum block bath Minisize bath

aterbath Hy aking waterbath Co

### **OD-Monitor OD-Monitor A&S/B&L/C&T**

The industry's first Non-contact turbidimeter realizes to measure the turbidity of sample at  $OD_{600}$  while shaking. Adopted among the hundreds of R&D institutions. Operated with Bioshaker (Incubator shaker) in combination.

"Bioshaker BR series" --> P.018-032 Shaker "NR series" --> P.062-066



### **Features**

- •The turbidity can be measured at OD<sub>600</sub> noncontact while shaking.
- •Three models for Large / Small Erlenmeyer flask and Test tube.
- •Operated with Bioshaker (Incubator shaker) in combination

### **Applications**

- Labor-saving acquisition of growth curve.
- •Screening for Microbes such as beneficial bacteria that are sampled difficulty.
- •Automation of IPTG induction [B&L with options].

# Released from the cumbersome turbidity measurement.

Enables you to perform the shaking culture and the measurment of turbidity efficiently at the same time and released from the cumbersome turbidity measurement. Not has a harmful effect on the growth and metabolism of fungus thanks to no-stop stop shaking.

#### Operated with Bioshaker in combination.

Fix ODSensor with the clamp on the platform inside Bioshaker BR-series (w/o BR-180LF-70RT) and put the vessel on it. It can be also used in Shaker NR series.

### Wide variety of customization.

We can customize it widely and flexibly per your request such as for Strictly anaerobic bacteria, Thermophile, Ultra-high concentration, Water bath and so on. Feel free to ask us.

Model	OD-Monitor A&S	OD-Monitor B&L	OD-Monitor C&T	
Measurement method/range	Light transmission, 0.00 to 2.55 (OD600)	Light transmission/Reflected light, 0.00 to 9.99 (OD600)	Light transmission, 0.00 to 2.55 (OD600)	
Vessel and Fluid volume	Vessel: Glass Erlenmeyer flask (*2) Size: 100/200/300/500mL Size: 1/2/3L Fluid volume: 20/40/60/100mL Vessel: Glass Erlenmeyer flask (*2) Size: 1/2/3L Fluid volume: 350/700/1000mL		Vessel: Glass Test tube Size: φ16.5/18.0mL Fluid volume: 5mL or 10mL	
Shaking conditions	Orbital shaking 80 to 400r/min (Shaking width 25mm) 80 to 200r/min (Shaking widthr 30/40mm) 80 to 250r/min (Shaking width 50mm)	Orbital shaking 100 to 250r/min (Shaking width 25/50mm)	Reciprocal shaking 100 to 250r/min (Shaking width 25/50mm) Angle of Test tube 90/45/30°	
Measurement intervals	1/5/10/30/60/120/240min			
Measurement channel	1 to 8 (*1)	1 to 4 (*1)	1 to 8 (*1)	
Ambient temp. range	15 to 50°C			
Other functions	Alarm for specific value at OD, Transformation to Spectrophotometer in measurment value, USB flash drive (CSV file), Operation for pump unit (B&L) when above specified OD value.			
Standard accessories for ODBox	1 x Flat cable (2m) * For A&S, 1 x Power code			
Standard accessories for ODSensor	1xVibration absorbing pad of Flask (large and small), 1 x Flat cable (0.5m)	1 x Flask stand (1L) , 1 x Flat cable (2m)	1 x Magnet adapter (2 types), 4 x Flat cable (2m)	

(\*1)A&S/B&L equipped with 1 channel per 1 set of ODSensor. Some number of ODSensor should be required depending the number of samples. Although C&T equipped with 8 channels per 1 set of ODSensor it can be only connected with 1 set of ODSen. ODSensor with maxmum number of channel cannot be put in Bioshaker depending its size. Ask us for details.

(\*2)Flask clamp not come with. It is as an option.

## The capacity (number of installation and measument) of ODSensor in Bioshaker BR-series.

A&S and B&L: In BR-series the number of measurement of the unit equal to that of installation of the unit.

C&T: The number of measurement to the number of installation is by 8 times.

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BR series	ODSensor-S	ODSensor-L	ODSensor-T (at 45°)
BR-21/22/23	3 sets	1set (Up to 2L)	2 sets = 2 x C&T
BR-40/41/42/43	5 sets	2 sets (*1)	3 sets = 3 x C&T
BR-300LF	8 sets	4 sets	5 sets = 5 x C&T
BR-180LF/GBR	16 sets = 2 x A&S	5 sets = 2 x B&L	12 sets = 12 x C&T
BR-3000LF	20 sets = 3 x A&S	8 sets = 2 x B&L	14 sets = 14 x C&T





Combination of OD-Monitor C&T and BR-23FP



Combination of OD-Monitor A&S and BR-43FL