

## Orbital Shaker-Incubator - ES-20

### Description

The ES-20 is a compact bench-top shaker incubator used for mixing of biological liquids as well as for incubation and cultivation of biological liquids according to the operator set program.

Built-in microprocessor thermocontroller provides constant temperature control in the incubator chamber.

Forced heated air circulation inside the transparent plexiglas chamber guarantees even temperature distribution.

Dismountable construction makes transportation easy.

Orbital shaking is controlled by the digital tachometer (rpm) and Digital time setting regardless of the temperature. The unit is equipped with the direct-drive system ensuring most reliable stable long-time operation (up to 30 day nights).

The ES-20 is extremely easy to operate, with very straightforward setup of temperature, speed and time, using the two line set-up and status display, which clearly indicates both set and actual values for each of the three parameters.

### Accessories/Applications

Five optional platforms for use of the ES-20 for:

- Growth cell cultures in flasks and other laboratory glassware;
- Extraction of tissue samples at normal temperatures;
- Other sample preparation processes.

Available platforms see page 3.



ES-20 with platform UP-12



## Shaker-Incubator ES-20



### Technical Data

Order No.	104.3500
Temperature setting range	+25°C to + 42°C
Temperature control range	5°C above ambient + 42°C
Speed control range	50 – 250 rpm
Setting resolution	0.1°C / 10 rpm
Temperature stability	±0.5°C
Temperature accuracy at +37°C	±0.5°C
Temperature uniformity at +37°C	±0.5°C
Orbit	10 mm
Display	LCD, 2 x 16 signs
Digital time setting	1 min - 96 h / non-stop
Timer sound signal	Yes
Plexiglas walls thickness	7 mm
Maximum load	2.5 kg
Dimensions of the inner chamber	305 × 260 × 250 mm
Overall dimensions (WxDxH)	340 x 340 x 435 mm
Weight	13.2 kg
Power consumption	160 W, 0.7 A
Nominal operating voltage	230 V, 50/60 Hz

## Optional Platforms for ES-20



### Platform PP-4

Flat platform with non-slip silicone mat for Petri dishes, culture flasks, agglutination cards.

**Dimensions:**  
215 × 215 mm (W x D)

**Order No.:** 105.3511



### Platform P-16/88

With spring holders for up to 88 tubes up to 30 mm diameter (e. g. 10 ml, 15 ml, 50 ml tubes).

**Dimensions:**  
275 x 205 mm (W x D)

**Order No.:** 105.3516



### Platform P-12/100

With clamps for flasks, 100-150 ml (12 places).

**Dimensions:**  
250 × 190 mm (W x D)

**Order No.:** 105.3514



### Platform P-6/250

With clamps for flasks, 250 - 300 ml (6 places).

**Dimensions:**  
250 × 190 mm (W x D)

**Order No.:** 105.3515



### Platform UP-12

Universal platform with adjustable bars for different types of flasks, bottles, and beakers with silicone mat.

**Maximum Capacity:**  
4 x 0,25 l flasks  
2 x 0,5 l flasks  
1 x 1 l flask  
1 x 1 l bottle

**Dimensions:**  
270 x 195 mm (W x D)

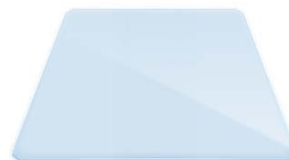
**Order No.:** 105.3512



### HB-200

Additional holding bar for UP-12.

**Order No.:** 105.3513



### SPM

Double-sided adhesive mat. SPM is compatible with PP-4 platform

**Order No.:** 105.9999