



Orbital Shaker-Incubator ES-20/80

Description

The orbital shaker incubator ES-20/80 is particularly suitable for biotechnological and pharmaceutical laboratories.

Typical applications

- Microbial and cell culture cultivation
- Protein expression
- Solubility studies
- General mixing
- As well as other various applications in the fields of biology and chemistry

The unit is equipped with a newly developed triple eccentric mechanism for platform motion that provides supreme balancing characteristics, superior reliability and quiet operation.

The achieved stability of the unit during vigorous mixing allows for stacking installation of up to three units which enables to save space.

The new display and easy to use user interface provide a clear and intuitive control of parameters and also allow data logging, storage and display over time. Additional features like out of balance sensor and automatic thermostat failure detection make this shaker-incubator an advanced and safe product.

Bluetooth connectivity to PC allows for data management, data logging, parameter control and profiling in a dedicated software that can be requested separately.



ES-20/80 with platform HSP-16/250

A built-in heat-resistant brushless fan provides precise temperature distribution inside the chamber (from 10°C above ambient up to +80°C).

The inner chamber is made of stainless steel. State-of-the-art motor, thermal insulation materials and parameter PIDcontrol decrease the energy consumption and make the shaker-incubator highly energy efficient despite its relatively large size.









Technical Data

Order No. Shaker-Incubator ES-20/80 Please order shaking platform separately. (siehe Seite 3)	104.3540 (basic unit)
Temperature setting range	+25°C up to +80°C
Temperature control range	5°C above ambient up to +80°C
Speed control range	50 – 400 rpm (increment 10 rpm)
Temperature setting resolution	0.1°C
Temperature stability	±0.1°C
Temperature accuracy at +37°C	±0.1°C
Temperature uniformity at +37°C	±0.3°C
Maximum load	10.6 kg
Orbit	20 mm
Digital time setting	1 min–96 hrs / non–stop (1 min increment)
Timer sound signal	Yes
Display	TFT, 5 inches
Overall dimensions (W×D×H)	620 × 530 × 510 mm
Dimensions of the inner chamber	460 × 400 × 310 mm
Weight	48 kg
Nominal operating voltage	230 V, 50/60 Hz
Power consumption	500 W (2.2 A)





Optional Platforms for Shaker-Incubator ES-20/80



Platform HSP-6/1000

With 6 clamps füo 1000 ml flasks.

Dimensions: 360 × 400 mm **Order No.:** 105.3534



Platform HSP-30/100

With 30 clamps for 100 ml flasks

Dimensions: 360 × 400 mm **Order No.:** 105.3531



Platform HSP-9/500

With 9 clamps for 500 ml flasks.

Dimensions: 360 × 400 mm **Order No.:** 105.3533



Platform HSP-16/250

With 16 clamps for 250 ml flasks

Dimensions: 360 × 400 mm **Order No.:** 105.3532



Platform UP-168

Universal platform for holding flasks/bottles in clamps.

(These are not included in the scope of delivery and must be ordered separately (see below).



Platform PP-400

Flat platform with non-slip silicone mat

Dimensions: 360 × 400 mm **Order No.:** 105.3535



Dimensions:

360 × 400 mm **Order No.:**

105.3536



Adapter TR-21/50

Adjustable angle test tube rack for platform UP-168.

Max. Capacity: 21 x 50 ml tubes



Max. number of clamps for platform UP-168

100 ml 16 250 ml 9 500 ml 9 1000 ml 4

Clamps for Platform UP-168

Models

HSC-50, HSC-100, HSC-250, HSC-500, HSC-1000



50 ml - Ø 50 mm 100 ml - Ø 65 mm 250 ml - Ø 85 mm 500 ml - Ø 105 mm 1000 ml - Ø 130 mm



Adapter TR-44/15

Adjustable angle test tube rack for platform UP-168.

Max. Capacity: 44 x 15 ml tubes