

ES-20/80 Orbital Shaker-Incubator with Cooling

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

It is the new version with integrated cooling capability of highly successful shaker-incubator ES 20/80. 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 the included software.

A combination of an electric heating element and a built-in heat-resistant brushless fan provides precise temperature distribution inside the chamber from 10 °C below ambient up to +80 °C. Cooling of the chamber is provided by additional Peltier modules allowing to cool until -10 °C from the ambient temperature. Additionally, an excellent sample temperature uniformity of ±0.3 °C at 37 °C is achieved.

Part number ES-20/80C: 104.3545 Without platform, incl. power plug.



ES-20/80C with platform HSP-6/1000

Temperature setting range	+4°C up to +80°C
Temperature control range	10°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)



Platforms for ES-20/60, Orbital Shaker-Incubator

HSP-6/1000



Platform with 6 clamps for 1000 ml flasks

Dimensions: 360 × 400 mm Part number: 105.3534

HSP-30/100



Platform with 30 clamps for 100 ml flasks

Dimensions: 360 × 400 mm Part number: 105.3531

HSP-9/500



Platform with 9 clamps for 500 ml flasks

Dimensions: 360 × 400 mm Part number: 105.3533

HSP-16/250



Platform with 16 clamps for 250 ml flasks

Dimensions: 360 × 400 mm Part number: 105.3532

UP-168



Universal platform with clamps for flasks/bottles Clamps are not included with platform and need to

Dimensions: 360 × 400 mm Part number: 105.3536

be ordered.

PP-400



Flat platform with non-slip silicone mat Can accommodate various low profile containers

Working Area: 360 × 400 mm Part number: 105.3535

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



Clamps for platform UP-168

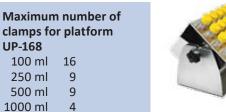
for flasks with

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



Adjustable angle test tube rack for up to 21 tubes 50 ml (for UP-168)

1000 ml - Ø 130 mm



TR-44/15

TR-21/50



Adjustable angle test tube rack for up to 21 tubes 50 ml (for UP-168)