bioSan
Medical-Biological
Research & Technologies

ES-20/80C, Orbital Shaker-Incubator with cooling

Smart Plus
Product Class

DESCRIPTION

ES-20/80C shaker-incubator for biotechnological and pharmaceutical laboratories is a professional category equipment. The typical applications include - 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 3 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 allows for 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 -12.5 °C from the ambient temperature. Additionally, an excellent sample temperature uniformity of ±0.2 °C at 37 °C is achieved.

CAT. NUMBER

Software included, without platform	Software included, without platform
BS-010173-A01	230VAC 50/60Hz Euro plug
BS-010173-A02	230VAC 50/60Hz UK plug
BS-010173-A03	230VAC 50/60Hz AU plug

SPECIFICATIONS

Temperature setting range	+4°C... +80°C
Temperature control range	12.5°C below ambient... +80°C
Speed control range	50–400 rpm (increment 10 rpm)
Temperature setting resolution	0.1°C
Temperature accuracy at +37°C	±0.1°C
Temperature uniformity at +37°C	±0.2°C
Orbit	20 mm
Display	TFT, 5 inches
Digital time setting	1 min–96 hrs / non–stop (1 min increment)
Timer sound signal	+
Maximum load	10.6 kg
PC system requirements	Intel/AMD Processor, 1 GB RAM, Windows Vista/7/8/8.1/10/11, USB, Bluetooth
Dimensions of the inner chamber	460 × 400 × 325 mm
Overall dimensions (W×D×H)	620 × 620 × 510 mm
Weight	50 kg
Power consumption (230V / 120 V)	810 W (3.7 A) / -
Nominal operating voltage	230 V, 50/60 Hz

ACCESSORIES

PP-400
BS-010135-FK
platform

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

HSP-6/1000
BS-010167-LK
platform

Platform with tight fit clamps for flasks.

HSP-9/500
BS-010167-NK
platform

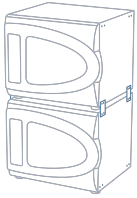Platform with tight fit clamps for flasks.

HSP-16/250
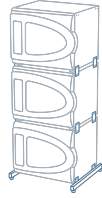BS-010167-MK
platform

Platform with tight fit clamps for flasks.
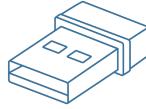
HSP-30/100
BS-010167-KK
platform

Platform with tight fit clamps for flasks.

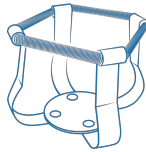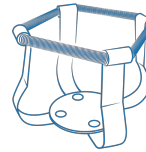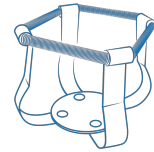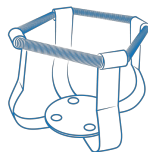|				
Stacking kit for 2 × ES-20/80 | ES-20/80C BS-010167-OK	**Stacking kit for 3 × ES-20/80 | ES-20/80C** BS-010167-PK	**Bluetooth adapter** BS-010425-FK Bluetooth adapter	**UP-168** BS-010135-JK platform Universal platform with clamps can accommodate flasks or bottles of different volume sizes. Clamps are not included with platform and need to be ordered separately.	**SPML** BS-010135-MK double-sided adhesive strips Double-sided adhesive strips. SPML is compatible with UP-168 platform, that fits both on PSU-20i orbital shaker and inES-20/60, ES-20/80 Shakers-Incubators.
TR-44/15 BS-010135-LK rack Adjustable angle test tube rack for UP-168	**TR-21/50** BS-010135-KK rack Adjustable angle test tube rack for UP-168	**HSC-50** BS-010167-DK clamp Tight fit clamp 50 ml - Ø50 mm for UP-168	**HSC-100** BS-010167-EK clam Tight fit clamp 100 ml - Ø65 mm for UP-168	**HSC-250** BS-010167-FK clamp Tight fit clamp 250 ml - Ø85 mm for UP-168
HSC-500 BS-010167-JK clamp Tight fit clamp 500 ml - Ø105 mm for UP-168	**HSC-1000** BS-010167-IK clamp Tight fit clamp 1000 ml - Ø130 mm for UP-168			