

## ES-20/60, Environmental Shaker-Incubators

**bioSan**

Medical-Biological  
Research & Technologies

Shaker-Incubator **ES-20/60** for biotechnological and pharmaceutical laboratories is a professional category equipment designed for cultivation of micro organisms cells and eukaryotic cells including animal, plant and insect cells. Shaker is equipped with a direct-drive mechanism for platform motion. It provides reliable and stable operation for the long term experiments needed for cell growth. Shaker-Incubator **ES-20/60** provides even (or vigorous) mixing in flasks installed on the platform.

Built-in noiseless thermoresistant brushless fan provides precise temperature distribution inside the chamber (adjustable from +10°C above room temperature up to +80°C). The chamber inside is made of stainless steel. State-of-the-art motor, latest thermal insulation materials, soft-start of the platform motion and temperature **PID-control** decrease the energy consumption and make the shaker-incubator highly energy efficient despite its relatively large size.

### Specifications:

Speed range	50–250 rpm (increment 10 rpm)
Temperature control range	+10°C above ambient ... +80°C
Temperature setting range	+25°C ... +80°C
Setting resolution	0.1°C
Stability	±0.5°C
Maximum load	8 kg
Orbit diameter	20 mm
Timer with sound alarm	1 min–96 hrs (1 min increment)
Display	LCD, 2x 16 signs
Continuous operation	max. 168 hrs
Overall dimensions	590x 525x 510 mm
Weight, not more	43 kg
Power supply	220 V, 50 Hz, 500 W
Heating power	500 W

### Catalogue number:

<b>ES-20/60</b> without platform	BS-010135-AAA
<b>PP-400</b>	BS-010135-FK
<b>P-30/100</b>	BS-010135-BK
<b>P-16/250</b>	BS-010135-CK
<b>P-9/500</b>	BS-010135-AK
<b>P-6/1000</b>	BS-010135-DK

*ES-20/60 with platform P-9/500*



### Heat up time for ES-20/60

from 25°C + **90 min** to 80°C

*ES-20/60 with platform PP-400*



Description and pictures of all platforms can be found on the next page

## Platforms for ES-20/60

Platform	Description	Dimensions	Working dimensions	Used on	Cat. number
1 P-30/100	Platform with clamps for flasks, 100–150 ml (30 places)	360 x 400 mm	360 x 400 mm	PSU-20i, ES-20/60	BS-010135-BK
2 P-16/250	Platform with clamps for flasks, 250–300 ml (16 places)	360 x 400 mm	360 x 400 mm	PSU-20i, ES-20/60	BS-010135-CK
3 P-9/500	Platform with clamps for flasks, 500 ml (9 places)	360 x 400 mm	360 x 400 mm	PSU-20i, ES-20/60	BS-010135-AK
4 P-6/1000	Platform with clamps for flasks, 1000 ml (6 places)	360 x 400 mm	360 x 400 mm	PSU-20i, ES-20/60	BS-010135-DK
5 PP-400	Flat platform with non-slip rubber mat	400 x 360 mm	400 x 360 mm	ES-20/60	BS-010135-FK

1 P-30/100



4 P-6/1000



2 P-16/250



5 PP-400



3 P-9/500

