

DASGIP Bioblock

Temperature and Agitation Control

Technology

Combined with the DASGIP Temperature and Agitation Control Module TC4SC4B, the DASGIP Bioblock offers an accurate and independent temperature control and a high performance agitation control. The module allows an autonomous control of temperature and agitation in each vessel. The DASGIP Bioblock is suitable for four DASGIP Bioreactors from 60 mL up to 2 L working volume.

■ Temperature Control

Individual electrical heating elements with an integrated safety temperature sensor and separate cooling coils are activated via solenoid valves, in each well. The temperature range of the DASGIP Bioblock is 5 to 99°C.

■ Agitation Control

An agitation control between 60 to 1500 rpm is offered by well-internal magnetic stirring drives. Overhead drive is also available in ranges between 30 and 1250 rpm, a high speed overhead drive for special applications obtains up to 1600 rpm.

Additionally DASGIP provides a Bioblock version without magnetic drives. The temperature range and regulation is similar to the model described above. In combination with the DASGIP Temperature Control Module TC4 this Bioblock serves exclusively accurate and individual tempering in four Bioreactors.



Module Bioblock

Application

■ Microbiology

Performing active cooling and individual tempering, the Bioblock is suitable for all applications in microbiology. With the option of an extended temperature range of up to 99°C, it perfectly fits even special applications in biocatalysis or biofuels development.

■ Cell Culture

Particularly by using overhead-driven agitation the Bioblock suits the use in animal and human cell culture. Individual temperature profiles are easy to program. Active cooling to 4°C guarantees best possible protection of cells and products.

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Benefits

The temperature and agitation control module TC4SC4B facilitate the parallel but individual control of set-points and profiles for temperature and stirrer speed. Users of the DASGIP Bioblock benefit from easy and user-friendly handling. Temperature, stirrer speed as well as the outlet configuration for overhead or magnetic drives can be adjusted directly at the device.

All settings are listed in the display. Culture vessels can be directly inserted into the Bioblock without any additional connections. The seamless integration with the DASGIP Module TCSC4B provides the optimal solution for precise and reliable control of temperature and agitation in all microbial and cell culture applications.

Module Bioblock

Technical Data

Module	
Bioblock Dimensions (W x D x H)	425 x 520 x 111 mm (16.7" x 20.5" x 4.4")
Number of Wells	4
Suitable Working Volume	60 – 2000 mL
Power Supply	110 to 240 V _{AC} 50/60 Hz
Weight in kg	20kg (18kg for the Bioblock version without magnetic drives)
DASGIP Bioblock Modules	
Temperature Control Module	TC4
Temperature and Agitation Control Module	TCSC4B

Agitation Control	
Magnetic Drive	60 to 1500 rpm (+/- 1 rpm)
Overhead Drive	30 to 1250 rpm (+/- 1 rpm)
High speed Overhead Drive	100 to 1600 rpm (+/- 1 rpm)
Temperature Control	
Temperature Range	5°C - 99°C (+/- 0.1°C)
Integrated Temperature Sensor	Platinum RTD (100 Ω)
Heating Power per Output	4 x 2,2 A (4 x 500 W at 230 V _{AC} 4 x 250 W at 115 V _{AC})
Cooling Valve Power	4 x 0,2 A (110-150V _{AC}) (110 - 240 V _{AC} 50 / 60 Hz)