

SC8

8 fold Parallel Stirrer Control.

DAS
Drescher Arnold & Schneider
Aktiengesellschaft für Infor-
mations- und Prozeßtechnologie

GIP.
TECHNOLOGY

Module SC8



The Concept

Using the **SC8** Module for parallel stirrer control, you can individually control eight stirrer plates simultaneously.

■ Continuous or Interval Mode

Each outlet has its own digital setpoint for stirrer speed and magnetic power output, as well as different available operation modes (e.g. continuous or interval).

■ Adjustable Power Output

The **SC8** Module has its own microprocessor and can be operated free-standing or as part of a DASGIP cultivation system.

■ Multifold Parameterization

All device parameters can be changed directly using the operation panel and are listed in the display - individually for each channel. As an example, the speed can be adjusted during operation as well as when operation is stopped.

The Applications

The **SC8** Module is perfect for applications where biological culture vessels have to be stirred with different and controlled speeds.

■ Optimized for Cell Culture

The **SC8C** Module has been developed especially for cell culture applications. Supporting slow rotating stepping motor stirrer plates and adjustable power output, micro carriers, culture broths as well as cell suspensions can be stirred with low stirrer speeds.

■ Optimized for Microbiology

The **SC8F** has been developed especially for microbiology applications. Powerful magnetic stirrer plates with very compact design facilitate the stirring of viscous media. Both stirrer plate types used are encapsulated hermetically in stainless steel housings and are therefore protected against microorganism contamination.

8 fold Parallel Stirrer Control.

The **SC8** is perfect for the optimization of stirrer conditions for individual culture vessels. As part of the **DASGIP** cultivation systems **fedbatch-pro®** or **cellferm-pro®**, individual temperature and stirrer speed profiles can be defined and **pO₂** setpoints can be controlled via the stirrer speed.

The Advantages

The stirrer speed control module **SC8** supports individually controlled stirrer speed setpoints for eight culture vessels.

Stirrer speed, power output and all other parameters can be adjusted digitally at the device and are listed in the display.

■ Maintenance-Free Stirrer Plates

The maintenance-free stirrer plates accord to the requirements of cell culture (**SC8C**) and microbiology (**SC8F**) applications.

■ Simple Powerful PC Software

Several modules can be connected via their serial interfaces with a PC and can consequently be externally controlled using the **DASGIP-EasyAccess** Software, which is included in the delivery. That way, online graphs can be displayed and process values logged.

Specifications	SC8C - Cell Culture	SC8F - Microbiology
Control Unit		
Control output sets	4	4
Dimensions (WxDxH)	300 x 320 x 190 mm	300 x 320 x 190 mm
Permissible ambient conditions	5 to 40 °C at max. 80% humidity	5 to 40 °C at max. 80% humidity
Electrical supply	115 - 230 VAC, 50/60Hz	115 - 230 VAC, 50/60Hz
External digital interface	RS232 / RS485	RS232 / RS485
Alarm contacts global	1 x relay contact (nc/no)	1 x relay contact (nc/no)
Stirring Control		
Speed range and stability	5 - 120 rpm +/- 0.1 rpm	60 - 1500 rpm +/- 1 rpm
Drive		
Stirring volume	25mL - 20L	1mL - 1500mL
Stirring power	0.4 - 4 W adjustable	1 - 20 W adjustable
Dimensions (WxDxH)	180 x180 x60 mm	180 x180 x60 mm
Weight	app. 3.4 kg	app. 3.4 kg
Operating voltage	24 V _{rms}	45 V _{rms}
Permissible ambient conditions	-10 to 56 °C at 100% humidity	-10 to 56 °C at 100% humidity
Max. operating temp. in water	0 to 50 °C	0 to 50 °C