



# Sartocheck 4 MultiUnit

Next Generation of Filter Integrity Testing

Filter Integrity Testing



## Description

The Sartocheck 4 MultiUnit has been developed to enable parallel integrity testing of multiple filters in the biopharmaceutical industry. The MultiUnit is an identical copy of the Sartocheck 4, without the user interface and the data management system. Each MultiUnit connected to a Sartocheck 4 is operated and controlled by this Sartocheck 4 via a RS485 connection.

## Efficiency

Up to 4 MultiUnits can be connected to one Sartocheck 4 allowing to integrity test up to 5 different filter systems in parallel including the testing capabilities of the Sartocheck 4 itself. Testing up to 5 filters in parallel allows to reduce the time required for filter integrity testing in bio-pharmaceutical production significantly and increases the efficiency of your production process.

## Flexibility

There is no relevant distance limitation between the Sartocheck 4 and the connected MultiUnits. The MultiUnits can be placed all over your production facility and are centrally controlled and operated by the Sartocheck 4. A printout of the test results of the MultiUnit is made by the printer of the Sartocheck 4 and the test data can be transferred to a network for review and archiving.

## Data transfer security

The Sartocheck 4 MultiUnit is an independent test unit with its own power supply, electronics and pneumatics. It will maintain the test results even if switched off or if the connection is lost until the handshake com-

munication with the Sartocheck 4 confirms that the test results have been transferred successfully. If the MultiUnit is switched off during the test it will transfer a corresponding error message as soon as the communication has been automatically reestablished.

## Traceability

The Sartocheck 4 test result printout contains the serial number of the MultiUnit, the user name (log-on identity), a unique file name and all the information that has been entered in the batch protocol. The included software, Sartocontrol, can be used to print the test results on an external printer in A4 format.

## Patent pending thermal insulation

The Sartocheck 4 and its Multiunit feature a unique, patent pending separation of the electronic components and the temperature sensitive pneumatics in addition to the efficient vent fan. This superior solution avoids any thermal influence on the integrity test measurement from the unit itself.

## Clean room venting adapter

The Sartocheck 4 and its MultiUnit can be equipped with an optional venting fan adapter that allows to contain the outgoing air in order to avoid any dispersion of particles in a clean room.

## Sartorius Stedim Biotech Validation Package

The MultiUnit is delivered with a comprehensive validation package including an IQ & OQ protocol that can be accomplished by qualified Sartorius Stedim Biotech personnel. Assistance for PQ can also be provided from the Sartorius Stedim Biotech Technical Support team.

## Technical specifications

Power requirements	100–240 V AC 50/60 Hz
Maximum operating pressure	9999 mbar   145 psi
Minimum inlet pressure	4000 mbar   58 psi
<b>Measuring ranges</b>	
Test pressure	100–8000 mbar   1.5–116 psi
Pressure drop	1–2000 mbar   0.01–29 psi
System net volume	
– with internal ref. vessel	9000 ml
– with external ref. vessel	100 l

## Measuring accuracy

Pressure	± 0.1% full scale ± 9.5 mbar
Pressure drop	± 1 mbar
Volume determination	± 4%
Diffusion	± 5%
Water intrusion	± 5%
Bubble point	± 50 mbar   0.7 psi

## Operating conditions

Ambient temperature	+15 to + 35°C
Relative humidity	10–80%
Max distance between SC4 and multiunit (RS485)	100 m

## Order information

Order number	16288---TU
--------------	------------

### Equipment supplied

MultiUnit	16288---TU
Tubing for compressed gas inlet	18104
Tubing for test gas	18103
Test certificate	
Calibration certificate	
Installation and operating instructions	
Validation package	16288---VP
Mains lead (country specific)	

### Accessories

External pressure Transducer	1ZE---0018
Valve kit for ext. venting (1 valve)	1ZE---0025
Valve kit for WIT and   or external pressure sensor (3 valves)	1ZE---0026
Cleaning kit	16288---CK
Clean room venting adapter	1ZE---0021

1. MultiUnit RS485 in | out
2. MultiUnit RS485 in | out
3. MultiUnit PLC in | out
4. Sartochek 4 PLC in | out
5. Sartochek 4 RS485 in | out



1 2 3 4 5

- A. Ext. sensor
- B. Ext. valve
- C. Ext. reference tank
- D. Venting 1
- E. Outlet (test gas)
- F. Venting 2
- G. Inlet comp. gas



A B C D E F G

Sartorius Stedim Biotech GmbH  
 August-Spindler-Strasse 11  
 37079 Goettingen, Germany  
 Phone +49.551.308.0  
 Fax +49.551.308.3289  
 www.sartorius-stedim.com

USA Toll-Free +1.800.368.7178  
 UK +44.1372.737159  
 France +33.442.845600  
 Italy +39.055.63.40.41  
 Spain +34.91.3586102  
 Japan +81.3.3740.5407

Specifications subject to change without notice. Printed and copyrighted by Sartorius Stedim Biotech GmbH W/sart-235 · G  
 Publication No.: SPI2010-e08043  
 Order No.: 85030-530-99