



PRESS RELEASE

2024-12-02

TRIO.BAS MODELS DEDICATED TO CLEAN ENVIRONMENTS

VARIED SOLUTIONS FOR CLEANROOM SITE REQUIREMENTS

<u>CHARACTERISTICS</u>	<u>TRIO.BAS™ MULTIFLEX 1</u>	<u>TRIO.BAS™ MULTIFLEX 1+2</u>	<u>TRIO.BAS™ RABS ISOLATOR + 3 SATELLITES</u>
			
<i>Catalog Number</i>	483K, 484K, 485K, 486K	474K, 475K, 476K, 477K	268K, 269K, 270K, 271K
<i>Construction</i>	Stainless steel	Command unit and satellites fabricated in stainless steel	Command unit and satellites fabricated in stainless steel
<i>Satellite Aspirating Chambers</i>	1 fixed	1 fixed + 2 independent	Up to 3 independent
<i>Connection cable</i>	Up to 20 m	Up to 20 m	Up to 20 m
<i>Cable VS Stainless steel tubing</i>	Cable(s) only No complicated stainless steel tubing	Cable(s) only No complicated stainless steel tubing	Cable(s) only No complicated stainless steel tubing
<i>Aspirating chambers</i>	1 stationary	1 stationary + 2 mobile	Up to 3 mobile

<u>CHARACTERISTICS</u>	<u>TRIO.BAS™ MULTIFLEX 1</u>	<u>TRIO.BAS™ MULTIFLEX 1+2</u>	<u>TRIO.BAS™ RABS ISOLATOR + 3 SATELLITES</u>
<i>Aspirating heads</i>	Daily Shift Head option: technopolymer individually packaged sterile heads reduce risk of contamination	Daily Shift Head option: technopolymer individually packaged sterile heads reduce risk of contamination	Daily Shift Head option: technopolymer individually packaged sterile heads reduce risk of contamination
<i>Positioning options in the same environment</i>	1 position	Up to 3 different positions inside cleanroom or isolator	Up to 3 different positions inside cleanroom or isolator
<i>Options to position within separate environments</i>	1 environment	Up to 3 different environments	Up to 3 different environments
<i>VHP Disinfection</i>	Suitable	Suitable	Suitable

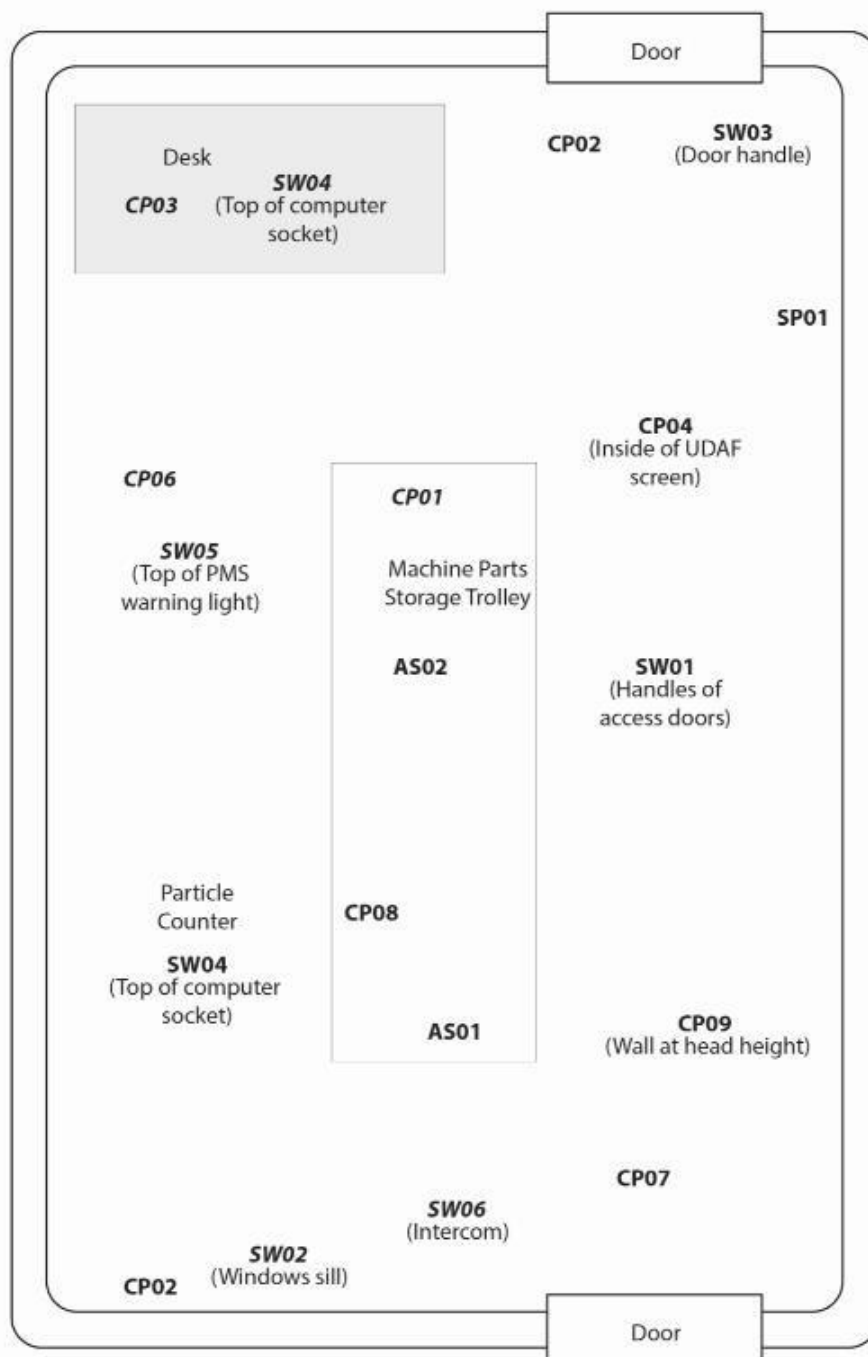
DIFFERENT SATELLITES FOR DIFFERENT APPLICATIONS

<u>MODEL</u>	<u>CATALOG N.</u>	<u>PICTURE</u>
TRIO.BAS™ STATIONARY SATELLITE WITH HEPA FILTER	Cat.N. 262 s/s SATELLITE with HEPA FILTER for CONTACT plate Cat.N. 263 s/s SATELLITE with HEPA FILTER for PETRI plate	
WALL CABLE CONNECTION	Cat. N. 267	

SAMPLING LOCATION EXAMPLES

The different TRIO.BAS models offer formats for the best sampling options according to Cleanroom specifications.

The aspirating chamber(s) can be positioned in locations where risk of contamination is highest (e.g.: AS01 and AS02 of the reported map).



LOCATION OF SAMPLING LEGEND

AS = Active Air Sampling - SP = Passive Air Sampling - CP = Contact plate surface sampling SW = Swab surface sampling

RISK ASSESSMENT APPROACH

Representative locations can be selected by utilizing a risk assessment approach.

A risk rating (high, medium, or low) is given to each location. This is a qualitative assessment based upon proximity to the critical area (such as exposed product or vials) and taking into account the ease of transfer of any contamination towards product, vials, or other critical areas.

The indications reported on the table could be used:

- Proximity to the Critical Area
- Easy of contamination transfer
- Risk rating

<u>PROXIMITY TO CRITICAL AREA</u>	<u>EASY CONTAMINATION TRANSFER</u>	<u>RISK RATING</u>
NEAR	HIGH	A
CLOSE	HIGH	A
FAR	HIGH	B
NEAR	MEDIUM	B
CLOSE	MEDIUM	B
FAR	MEDIUM	B
NEAR	LOW	B
CLOSE	LOW	C
FAR	LOW	C

ACTIVE AIR SAMPLING

<u>LOCATION</u>	<u>SAMPLER</u>	<u>PROXIMITY</u>	<u>EASY TRANSF</u>	<u>RISK RATING</u>	<u>JUSTIFICATON</u>
AS01	ACTIVE SAMPLER	FAR	MEDIUM	B	Closed to UDAF (Unidirectional Air Flow)
AS02	ACTIVE SAMPLER	NEAR	HIGH	A	Within the UDAF (Unidirectional Air Flow)

PASSIVE AIR SAMPLING

<u>LOCATION</u>	<u>SAMPLER</u>	<u>PROXIMITY</u>	<u>EASY TRANSF</u>	<u>RISK RATING</u>	<u>JUSTIFICATON</u>
SP01	PASSIVE SAMPLER OPEN PETRI	FAR	MEDIUM	B	Near main transit route (exit). Indicates the contamination settled from air
SP02	PASSIVE SAMPLER OPEN PETRI	FAR	MEDIUM	B	Near main transit route (exit). Diametrically opposed to the other settle plate. Indicates contamination settled from air

CONTACT PLATE SURFACE SAMPLING

<u>LOCATION</u>	<u>SAMPLER</u>	<u>PROXIMITY</u>	<u>EASY TRANSF</u>	<u>RISK RATING</u>	<u>JUSTIFICATON</u>
CP01	CONTACT PLATE 55	NEAR	HIGH	A	Trolley to hold / transfer air sampler
CP02	CONTACT PLATE 55	FAR	MEDIUM	B	Check floor cleanliness along access route
CP03	CONTACT PLATE 55	FAR	MEDIUM	B	The desk: the most used area in room
CP04	CONTACT PLATE 55	NEAR	HIGH	A	Difficult to clean area in UDAF
CP05	CONTACT PLATE 55	FAR	MEDIUM	B	High level area difficult to clean
CP06	CONTACT PLATE 55	NEAR	HIGH	A	Difficult to clean area
CP07	CONTACT PLATE 55	FAR	MEDIUM	B	General floor surface cleanliness
CP08	CONTACT PLATE 55	CLOSE	MEDIUM	B	Check of Cleanroom cleanliness
CP09	CONTACT PLATE 55	FAR	MEDIUM	B	Wall cleanliness at mid-height

SWAB SURFACE SAMPLING

<u>LOCATION</u>	<u>SAMPLER</u>	<u>PROXIMITY</u>	<u>EASY TRANSF</u>	<u>RISK RATING</u>	<u>JUSTIFICATON</u>
SW01	SWAB	NEAR	HIGH	B	Door Handles to UDAF access, potentially touched by operators
SW02	SWAB	FAR	MEDIUM	B	Window sill for potential dust settling
SW03	SWAB	FAR	MEDIUM	B	Door handles in difficult to clean and frequently used area
SW04	SWAB	FAR	MEDIUM	B	Difficult to clean above floor level area
SW05	SWAB	FAR	MEDIUM	B	Check of FMS system cleanliness
SW06	SWAB	FAR	MEDIUM	B	Difficult to clean intercom area

CONCLUSIONS

TRIO.BAS has instrument design options for the varied and specific types of sampling locations typically monitored in a cleanroom. Aspirating chambers can be positioned in specific areas identified as having potentially high risks of contamination (see example AS01, AS02).

REFERENCES

Cleanrooms and Air Quality – A risk based approach by Dr. Tim Sandle (tim.sandle@bpl.co.uk).



TRIO.BAS™
MULTIFLEX 1



483K, 484K, 485K, 486K

TRIO.BAS™
MULTIFLEX 1+2



474K, 475K, 476K, 477K

TRIO.BAS™
RABS ISOLATOR + 3
SATELLITES



268K, 269K, 270K, 271K