



RAC SERIES – ISO 14698-1 ANNEX B COMPLIANT REMOTE ACTIVE COUNT AIR SAMPLING HEADS FOR MONITORING THE MICROBIOLOGICAL AIR QUALITY IN CLEANROOMS

SISTEMA'S REMOTE ACTIVECOUNT MICROBIOLOGICAL AIR SAMPLING HEADS PROVIDE A REMOTE-CONTROLLED ACTIVE AIR SAMPLING AND ARE KEY FOR REMOTE CONTROLLED MONITORING OF THE MICROBIOLOGICAL AIR QUALITY IN CLEANROOMS AND SIMILAR CONTROLLED PRODUCTION AREAS.

BEING AVAILABLE IN SEVERAL CONFIGURATIONS SUCH AS **TRI-CLAMP MOUNTED**, **WALL MOUNTED** OR **STAND-ALONE VERSIONS** AND BEING **CONFIGURABLE FOR VARIOUS FLOW RATES INCLUDING 4 LPM | 10 LPM | 28.3 LPM | 50 LPM | 100 LPM** EVERY RAC UTILIZES AN **EXTERNAL VACUUM SOURCE** AVOIDING ANY DISTURBANCE OF THE AIRFLOW DURING THE SAMPLING PROCESS.

THE DESIGN OF THE REMOTE ACTIVECOUNTS BASING ON THE **IMPACTION PRINCIPLE** ENSURES **HIGH PHYSICAL AND BIOLOGICAL COLLECTION EFFICIENCY** IN ACCORDANCE WITH ISO 14698-1 IN AREAS WITH LOW LEVELS OF BIOCONTAMINATION. RAC SERIES SAMPLING HEADS ARE ENTIRELY **MADE IN MIRROR POLISHED 316L STAINLESS STEEL ALLOY** ENABLING **LIFETIME STERILIZATION (AUTOCLAVATION)**.

SISTEMA'S RAC SERIES MICROBIAL AIR SAMPLING HEADS CAN BE INTEGRATED INTO ANY EXISTING OR TO YET TO BE BUILT FACILITY MONITORING SYSTEM. AN OPTIONAL START/STOP SAMPLE FUNCTIONALITY COMING WITH LED STATUS INDICATORS CAN BE MADE PART OF A RAC SAMPLING HEAD (SEE RAC-3 VERSIONS). ALTERNATIVELY A RAC CAN BE CONTROLLED FROM ANY LOCATION OF THE MONITORING SYSTEM USING TOUCHSCREENS OR SIMILAR INTERFACES.

THE DESIGN OF SISTEMA'S RAC SERIES GUARANTEES A **CORRECT IMPACT VELOCITY** FOR ANY PARTICLES DOWN TO +/- 1.0 µm, ENSURES VIABILITY BY **AVOIDING MECHANICAL DAMAGE TO THE MICROBIAL PARTICLES** AND **AVOIDS FALSE POSITIVES**. ITS **SMALL FOOTPRINT** ALLOWS PLACING NEXT TO CRITICAL OPERATIONS.

WITH VARIOUS CONFIGURATIONS ENABLING A MULTITUDE OF IN FIELD INSTALLATIONS SUCH AS ON WALLS, CLOSE TO CRITICAL EQUIPMENT, IN ISOLATORS OR FILLING LINES SISTEMA'S REMOTE ACTIVECOUNT IS SUITABLE FOR EVERY IMAGINABLE SCENARIO OF AN ACTIVE AIR MONITORING IN CRITICAL ENVIRONMENTS.

TECHNICAL SPECIFICATIONS

- **ENTIRELY MADE IN 316 L STAINLESS STEEL ALLOY, MIRROR POL.**
- **DESIGNED AS IMPACTION AIR SAMPLER**
- **90 mm Ø STANDARD MEDIA PLATE**
- **EXTERNAL VACUUM PUMP**

FEATURES & MAJOR PROS

- **THIRD PARTY VALIDATED ACC. TO ISO 14698-1 CLEANROOMS AND CONTROLLED ENVIRONMENTS**
- **SMALL FOOTPRINT** FOR EASY PLACEMENT IN CRITICAL ENVIRONMENT
- **OPTIONAL TRI-CLAMP MOUNTING** FOR INSTALLATION IN ISOLATORS, FILLING LINES OR MACHINES.
- AVAILABLE IN **VARIOUS FLOWRATES** 4 - 10 - 28.3 - 50 - 100 LPM
- **LIFETIME AUTOCLAVE STERILIZATION** OF COMPLETE IMPACTOR HEAD (RAC-2)
- **LOW MAINTENANCE**
- **OPTIONAL START/STOP BUTTON AND LED INDICATORS** 'STAND-BY' & 'SAMPLING ACTIVE' (RAC-3)
- **AIRFLOW CONTROL VIA INEGRATED CRITICAL ORIFICE OR EXTERNAL MASS FLOW CONTROL**
- **SAMPLING DURATION OF UP TO 8 HOURS** (DEPENDING ON PETRI DISH FILL AND CHOSEN AIRFLOW)









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APPLICATIONS

- REMOTE CONTROLLED CLEANROOM AND CONTROLLED ENVIRONMENT BIO-CONTAMINATION MONITORING.
- MICROBIAL MONITORING IN ASEPTIC OPERATIONS
- EXTENDED MONITORING OF VIABLE & NON-VIABLE PARTICLE LEVELS IN ONE SYSTEM
- LAF CABINET MONITORING & ISOLATOR MONITORING & FILLING LINE MONITORING

ITEM NUMBER ¹ / PICTURE	ITEM DESCRIPTION (<i>d50</i> VALUE)	CONFIGURATION
	2 SEGMENT STAND-ALONE RAC-2 CONNECTED VIA BEV-A-LINER HOSE OPERATED VIA EXTERNAL START/STOP AND COMING WITH CRITICAL ORIFICE	
RAC - 2 - 4 LPM	4 LPM (1,20) PROVIDING XL SAMPLING TIME	113 HOLES (Ø 0,3 mm)
RAC - 2 - 10 LPM	10 LPM (1,39) PROVIDING XL SAMPLING TIME	113 HOLES (Ø 0,45 MM)
RAC - 2 – 1 CFM	28,3 LPM = 1 CFM (1,60)	113 HOLES (Ø 0,7 MM)
RAC - 2 - 50 LPM	50 LPM (1,61)	200 HOLES (Ø 0,7 MM)
RAC - 2 - 100 LPM	100 LPM (1,61)	400 HOLES (Ø 0,7 MM)
	2 SEGMENT TRI-CLAMP ² MOUNTED RAC-2 OPERATED VIA EXTERNAL START/STOP AND COMING WITH CRITICAL ORIFICE.	
RAC - 2 - 4 LPM	4 LPM (1,20) PROVIDING XL SAMPLING TIME	113 HOLES (Ø 0,3 MM)
RAC - 2 - 10 LPM	10 LPM (1,39) PROVIDING XL SAMPLING TIME	113 HOLES (Ø 0,45 MM)
RAC - 2 – 1 CFM	27,3 LPM = 1 CFM (1,60)	113 HOLES (Ø 0,7 MM)
RAC - 2 - 50 LPM	50 LPM (1,61)	200 HOLES (Ø 0,7 MM)
RAC - 2 - 100 LPM	100 LPM (1,61)	400 HOLES (Ø 0,7 MM)
	3 SEGMENT STAND-ALONE RAC-3 CONNECTED VIA BEV-A-LINER HOSE. COMING WITH INTEGRATED START/STOP FUNCTIONALITY AND STATUS LEDS AND CRITICAL ORIFICE.	
RAC - 3 - 4 LPM	4 LPM (1,20) PROVIDING XL SAMPLING TIME	113 HOLES (Ø 0,3 MM)
RAC - 3 - 10 LPM	10 LPM (1,39) PROVIDING XL SAMPLING TIME	113 HOLES (Ø 0,45 MM)
RAC - 3 – 1 CFM	27,3 LPM = 1 CFM (1,60)	113 HOLES (Ø 0,7 MM)
RAC - 3 - 50 LPM	50 LPM (1,61)	200 HOLES (Ø 0,7 MM)
RAC - 3 - 100 LPM	100 LPM (1,61)	400 HOLES (Ø 0,7 MM)
SURCHARGE ACCESSORIES		
RAC – LID (COVER) ³		
WALL MOUNTED 90° PLATE ⁴		
316L REMOTE FUNNEL ⁵		
EXTRA CRITICAL ORIFICE ⁶		

¹ ALL RAC VERSIONS COMING WITH CRITICAL ORIFICE OF AN INNER DIAMTER ACC. TO RAC CONFIGURATION.

² DN25 AS STANDARD TRICLAMP SIZE. ALTERNATIVE SIZE SUCH AS DN50 AVAILABLE ON REQUEST.