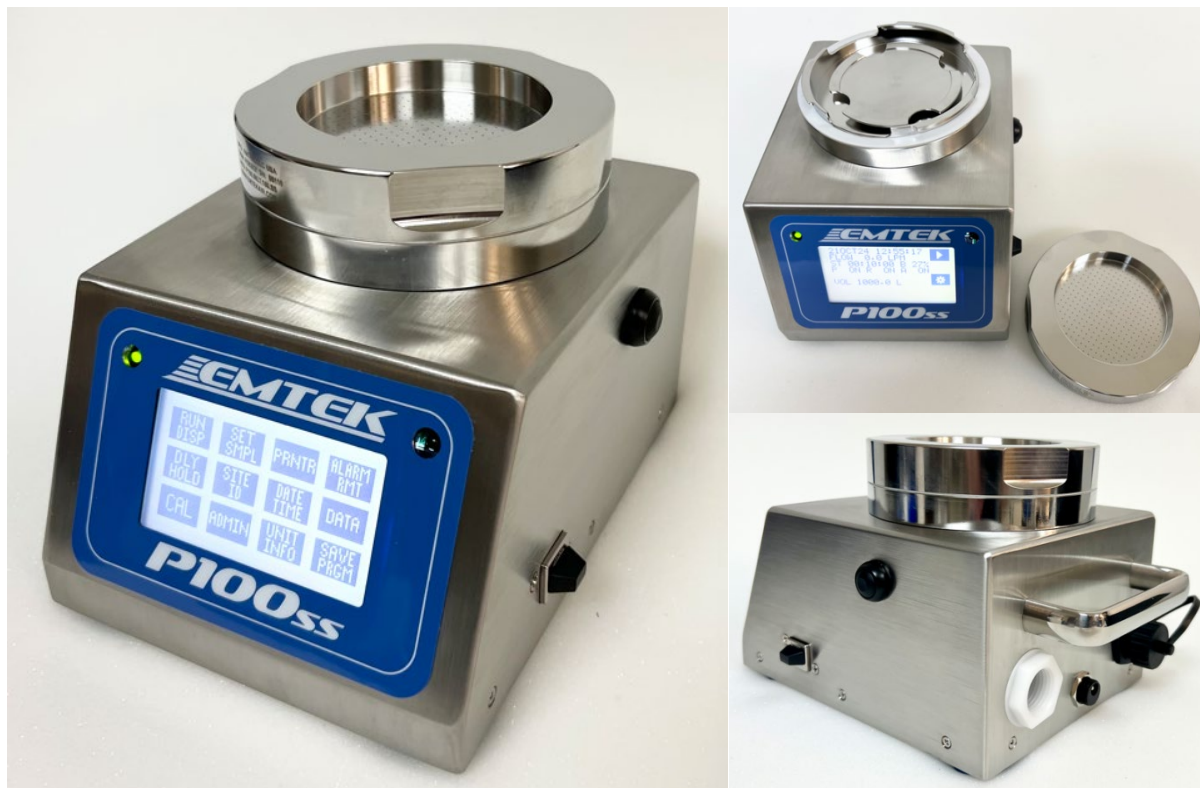


P100ss Portable Microbial Air Sampler

EMTEK's **NEW 316 Stainless Steel, P100ss Portable Microbial Air Sampler** is intended for monitoring of your critical ISO 5 and ISO 7 Zones (e.g., Rooms, Isolators, LAF Hoods, BSC's, BFS Chambers, Filling Lines, etc.), either with direct placement of the **P100ss** or by using it to remotely operate EMTEK's Remote Air Samplers (RAS) placed at key locations within those critical areas, through either flexible, or fixed rigid vacuum tubing. The **P100ss** has substantial chemical resistance with its' 316SS componentry and will be minimally impacted by frequent cleaning with harsh cleaning agents commonly used in those critical zones.



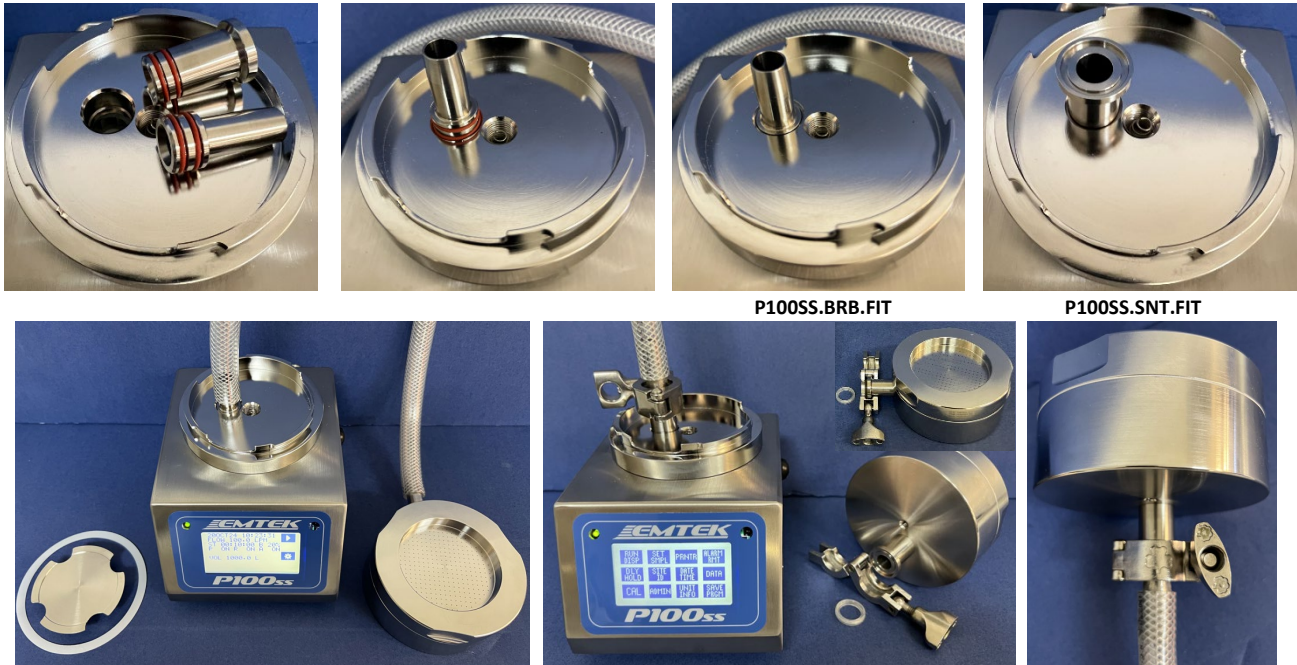
P100ss – General Specifications

- Model/Part#: P100ss.001
- Mass Flow Controlled Sample Rates of 28.3 and 100 LPM w/Applicable Inlet Cover
- Battery Life: ≥ 10 hrs. @ 28.3 LPM & ≥ 6 hrs. @ 100 LPM / Full Charge in 2.5-3 hrs.
- Dimensions: LxWxH = 7 x 5.375 x 5.5 inches (17.8 x 13.7 x 14 cm) / Weight: 7.3 Lbs (3.3 kg)
- LCD View Screen w/Touch Screen Interface
- P100ss Enclosure – 316 Stainless Steel – Grained Finish
- Inlet Base, Media Stage, Inlet Cover, Handle (28.3 or 100 lpm) – 316SS/Polished/Electropolished
- Inlet Cover Gasket – Teflon
- HEPA Filtered Exhaust, 0.22 Micron (w/remote exhaust tubing option, P100.RMTEXH.KIT)
- LCD/Touchscreen Overlay – Polycarbonate
- Blue Silicone Rubber Feet
- Communication: IP67 USB & RJ45 Connectors
- IR Remote – 5 Channel (Up to 40' / Line of Site)
- Test Media Stage w/Adjustable height to accept 15-40ml Fill 90mm Test Plates



P100ss – Remote Sampling Simplified Connectivity

NEW Remote Sampler Connection Options include press in 0.500" Barb and 25mm Sanitary Connectors. Simply remove the inlet cover and media stage to access the vacuum connection port and press in the desired connector type. Remote sampling with applicable RAS can be performed up to 65'/20m from the P100 at 28.3 LPM and 12'/3.7m at 100 LPM.



P100SS.BRB.FIT

P100SS.SNT.FIT

RAS SAMPLER OPTIONS – General Specifications

- RAS Available in 316SS (".SS."), or Anodized 6061-T6 Aluminum (".AA.") with 28.3 or 100 LPM Sample Rates
- RAS Dimensions: 2.125" (5.4 cm) H x 4.325" (~11cm) OD / Weight: 316SS 6.25 Lbs (~2.8 kg) / ALUM 2.1 Lbs (~1kg)
- Sanitary Connector (316SS) 1.112" (2.8 cm) H x 0.994" OD (25mm) Sanitary Flange.
- Barbed Connector (316SS) 1.5" (3.8cm) L x 0.500" (~1.3 cm) OD, or 1.25" (~3.2cm) x 0.375" (~1cm) OD (for 28.3 LPM Only)
- Media Stage w/Adjustable height to accept 15-40ml Fill 90mm Test Plates

The RAS can be employed for use with either the side or bottom vacuum port, and with either a sanitary or barbed connector.



P/N's as follows: P100.RAS.AA.100.500, P100.RAS.AA.28.500, P100.RAS.SS.28.500, P100.RAS.SS.100.500, add .SNT instead of ".500" for a Sanitary Connector and either "B" or "S" for Bottom or Side for mounting location, e.g., P100.RAS.SS.100.SNTB. The P100ss inlet cover can be used on the RAS Remote Base to minimize cost (P100.RMT.BASE.ASM.SS.500 or P100.RMT.BASE.ASM.500).

P100ss – Additional Accessories (See full Component Schedule for all accessory options)

Portable Printer Kit

- (P/N P100.PRNT.KIT)
- Thermal Printer
 - Printer Label Rolls (2)
 - Connection Cable
 - Printer Charger



Compressed Air/Gas Kit

- (P/N P100.CMPGAS.KIT)
- High Pressure Diffuser
 - Inlet Adapter
 - Sanitary Clamp/Gaskets
 - Tubing, O-Rings
 - HEPA Exhaust Filters



P100ss - DATA/COMMUNICATION

- Ethernet Port: Unit Calibration, PC Communication, and Data Output to Optional Printer
- USB Port: Data Retrieval via USB Drive, or PC
- User Selectable Parameters: Sample Rate, Sample Time or Volume, Delay/Test/Hold, Time Base, Date Format, User ID, etc.
- Sample Run Memory (500 Runs) – Critical Sample Run Parameters Captured
- Sample Run Data Output to Printer, USB, or PC
- Data Control through System Admin/User ID Control (Part 11 Compliant)
- Site Description Entry/Maintenance/Capture
- **PC CONTROL SOFTWARE** - Offers Substantial Operative PC Control of a single, or multiple P100ss's via Ethernet connection to a Local Area Network (LAN). General Control: Start, Stop, Pause, Resume, Set/View: Date, Time, Sample Volume, Sample Time, Delay, Test, Hold, Site ID, Bldg/Room Data View/Output: On Screen, .csv File, print
- **DATA OUTPUT SOFTWARE** – Allows for direct connection to a P100ss allowing for data output as .CSV Files or an encrypted PDF Report

P100ss - PORTABLE MICROBIAL AIR SAMPLING PACKAGE

Standard Package Includes: (P/N: P100ss.PACK)

- P100ss Microbial Air Sampler (316SS Components)
- 316SS Inlet Cover w/Choice of 28.3 LPM, or 100 LPM
- IR Remote Control / 5 Channels (Start/Pause/Stop)
- Inlet Cover and Port & Plug Set (USB, RJ45, Inlet/Outlet Plug)
- Users' Manual & Associated Documents (on 1 8GB USB Drive)
- AC/DC Power Supply/Charger
- NIST Traceable Calibration and Certificate
- Standard 2-Year Warranty
- IQ/OQ/PQ Validation Template
- Hard Transport Case w/Custom Foam Inserts



P100ss – Portable Microbial Air Sampler - Additional Specifications

Sample Time/Volume	Variable (User Defined), Maximums: 120-minutes/3396 Liters* @ 28.3 LPM, 30-min/3000L @ 100 LPM
Delay/Test/Hold Times	Variable (User Defined)
Sample Flow Rates	28.3 LPM (1 CFM), or 100 LPM (Requires separate inlet covers for the 28.3 & 100 LPM Sample Rates)
Flow Rate Control	Electronic, Closed-Loop, Mass-Flow Control / $\pm 1.5\%$ Tolerance Mass Flow Sensor
Printer (Optional)	Thermal Label or Paper
Control System (CPU)	Microprocessor Controlled (32bit PIC Processor)
Sample Run Data Output	Optional Printer/Label or Paper Output, .CSV Files, or Encrypted PDF Report via USB or PC Software
Memory	512kb Flash Program, 128kb RAM Data, 1mb Sample Runs, 512kb EPROM Calibration Set Points
Serial #/Unit Equipment ID #	Fixed/User Defined
Site Descriptions	User Created/Deleted/Selectable
Program Descriptions	User Created/Deleted/Selectable (Includes: Sample Rate, Volume/Time, Flow/Volume Units, Delay/Test/Hold)
Sample ID Assignment	Unique System Generated (Unit Serial # + 5 digit string) / Non-Repeating until >999,999 samples
Input/Output	USB Client 1.1, Ethernet 10BaseT-/100-BaseT
Audible/Visual Alarm Notification	Internal (with User Volume Control) & Alarm Screen Popup for Flow & Low Battery Alarm
Alarms/Notifications	Flow Alarm $\pm 5\%$ (On/Off) / Low Battery Alarm / Calibration Due Notification
AC/DC Power Supply	OPERATION REQUIRES AC POWER Input: 100-240 VAC, 50/60 Hz, 130VA-168VA 1.4 AMPS / Output: DC 18V 3.6A
Operating Range	5-40° C, 10-80% RH, non-condensing*; Indoor Use; Max Altitude 6560 feet (2000 meters) *Note: As temperature increases from 30 to 40° C, humidity range drops from 80 to 50% linearly.
Operational Tubing Length w/Remote Sampler (RAS)	Maximum Tubing Length at 28.3LPM up to 65 Feet (20 Meters) / 0.500" ID Maximum Tubing Length at 100LPM up to 12 Feet (3.7 Meters) / 0.500" ID
Calibration/Verification Required	Flow Rate (28.3/1 CFM and/or 100 LPM) / Sample Timer (Frequency: 12 Months Suggested)
Installation Category/Pollution Degree	Category 1 / 1 & 2
Regulatory/Safety	Complies with ISO 14698-1, EN17141, EU GMP Annex 1, CE Mark
Administrative Control Options	Data Storage/Deletion, User & Admin Accounts, Forced User Login, Sample Programs, Date/Time Settings, Calibration Due Notification, IP Addressing, Flow Rates, Flow Alarm
Admin & User Accounts	A combination of 100 Total accounts can be created
Battery Life/Charging	≥ 10 hrs. @ 28.3 LPM & ≥ 6 hrs. @ 100 LPM / Full Charge in 2.5-3 hrs.
Inlet Cover / Capture Velocity & D50	28.3 LPM = $\Phi 0.28$ mm*300 holes / 25m/s & $0.67\mu\text{m}$ (P/N P100.INLT.28.SS & P100.INLT.28.AA) 100 LPM = $\Phi 0.53$ mm*300 holes / 25m/s & $0.92\mu\text{m}$ (P/N P100.INLT.100.SS & P100.INLT.100.AA)

For additional information on all sampling options, available components, and pricing, please contact EMTEK, or your local area distributor.