



ENTECH
INSTRUMENTS

See What's Really There™



2022
CATALOG

Solutions for Chemical Monitoring & Analysis

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President's Letter



Entech Instruments is continuing its tradition of providing the most advanced and accurate sample preparations systems available for headspace and gas sample analysis by GC and GCMS. Our new Multi-Capillary Column Trapping Systems (MCCTS) are transforming the way that gas phase sample preconcentration is performed prior to GC injection, all without the use of liquid nitrogen or even electronic cooling systems. These "fan cooled", extremely robust and reliable multi-stage capillary column traps manage water and CO₂ hundreds of times better than any packed trap system. This means much faster release for better chromatography, supporting "faster" GC methods, while also demonstrating far better immunity to contamination when exposed to high concentration

samples. Our MCCTS traps have been implemented in a full cryogen free TO15 solution with much faster GC injections and shorter run times than other TO15 systems on the market. Other applications using this revolutionary capillary trapping technology will also soon be announced.

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Entech's patent pending Sorbent Pen™ technology takes SPME to the next level by providing enhanced sensitivity, improved quantitation, and greater robustness than its fiber-based predecessor. Sorbent Pens utilize a unique flow through cartridge that forms a seal on a vial allowing a vacuum to be created within the vial. This new technique called VASE (Vacuum Assisted Sorbent Extraction) has been demonstrated to cover the entire range of analytes from the lightest volatile compounds (Freon 12/Vinyl Chloride and others) to very heavy 5-6 ring PAH compounds, while remaining in the headspace to avoid actual contact with the sample matrix. With 50-150x higher phase loading and the use of traditional adsorbents with thousands of times more surface area than SPME, the Sorbent Pen™ can fully extract difficult compounds from complex matrices providing superior sensitivity and reproducibility. Sorbent Pens are also available for performing Diffusive and Active air monitoring, making the Sorbent Pen technique extremely versatile. Our newly released SPR40 -Sample Preparation Rail promises to be a game changer for headspace sample preparation and general thermal desorption methods. Rather than desorbing a TD tube into a completely different instrument with separate traps, transfer lines, and rotary valves to have to clean and maintain, the SPR40 allows thermal desorption of Sorbent Pens directly into a GC or GCMS to allow dramatically improved recovery, consistency, and easy of maintenance. Watch for a new wave of applications coming out in 2019-2020 using the SPR40 Robotic inlet.

Our unmatched Silonite™ surface coatings continue to be perfected, resulting in the most consistent, durable, and inert coatings available for GC inlet systems and for mercury vapor handling without surface interactions. Silonite™ surface treatments play a vital role in achieving our ultimate goal; to provide our customers with complete solutions for "analytical grade" VOC and SVOC handling and inlet systems that can sample, store, and recover virtually all GCMS compatible compounds.

Finally, for US EPA Method TO-15 and China HJ-759, Entech is proud to be the only supplier that manufacturers and supports the complete solution for sampling and analysis of airborne contaminants using Silonite™ coated stainless steel canisters. Entech has assembled an extraordinary and talented team of Chemists and Service Engineers with a combined knowledge of over 200 years of laboratory and field experience – to provide our clients with premier customer service and on-site support. To our valued customers we would like to say thank you for your patronage through the years and we look forward to servicing your analytical needs for many years to come.

Sincerely,
Daniel B. Cardin – President



Entech Instruments is a leading developer and manufacturer of analytical instrumentation that supports professionals around the world in the Environmental, Industrial Hygiene, Food & Beverage, Product Testing, Forensics, and Clinical Analysis markets.

To provide solutions for such a diverse set of industry applications, Entech has assembled an extraordinary and talented team – a combined knowledge of over 200 years of laboratory and field experience – to provide our clients with premier customer service and on-site support. We invite you to share your application challenges and requirements so we can create a customized solution just for you.

~ The Entech Team

Sub-Slab & Vapor Intrusion Monitoring

No Grout. No Mess. No Contamination. Better Results.

Monitor gases directly under the slab of buildings to determine the potential for intrusion into the indoor environment. A vacuum tight seal is made through the building's foundation, with a unique "triple seal" using two O-rings and a water dam that ensures that only gases from beneath the slab will be drawn into the sample train and canister. After sampling, the slab face sealing fitting is removed allowing a temporary plug to be installed.

Chameleon Soil Gas Sampler shown with Entech Slab-Tight™ Sampler.



Advantages:

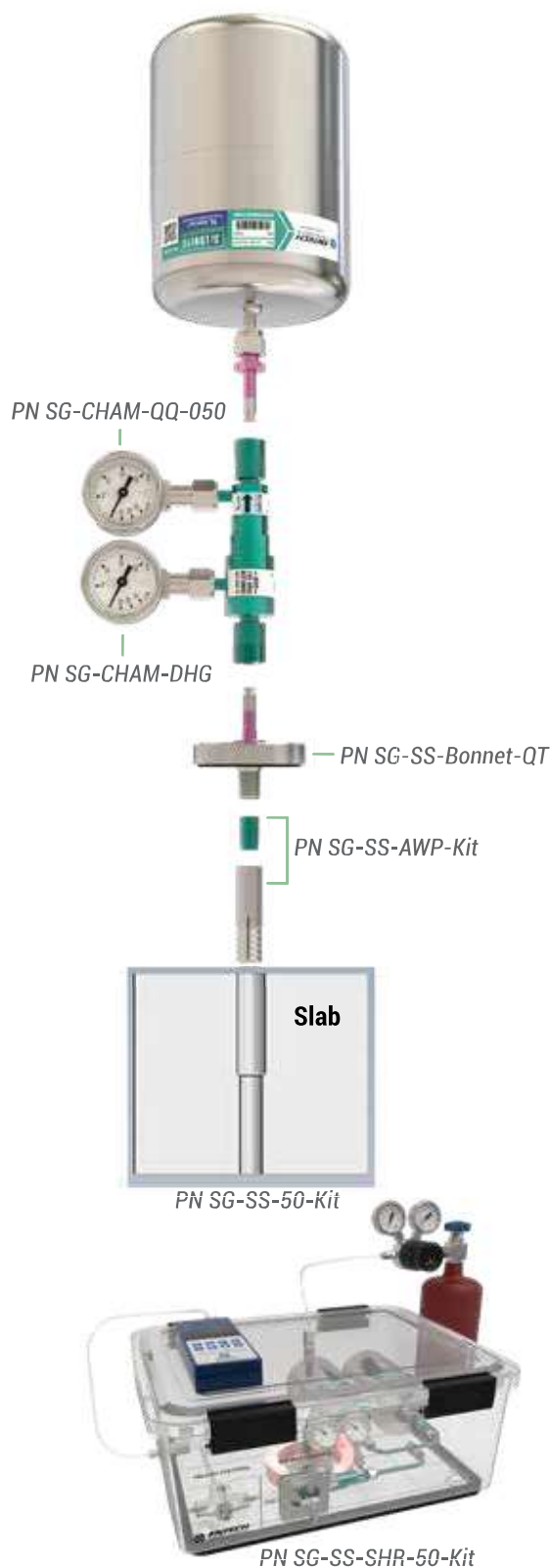
- Most reliable, non-contaminating slab vapor seal on the market.
- Shortest and most inert flow path ensures complete recovery and no sample carryover.
- Chameleon controls the flow rate to avoid disturbing the equilibrium of VOCs between gas, adsorbed soil, and dissolved water phases.
- Avoids the use of contaminating plastic tubing. All surfaces are Silonite™ ceramic lined stainless steel to prevent outgassing of contamination while ensuring maximum compound recovery.
- Compatible with Entech Soil Gas Shroud for "complete flow path" leak testing right up to the canister.



Entech's Slab-Tight™ Sub-Slab Sampler

Complete the Sampling with Chameleon and Silonite™ MiniCan

- Entech's unique Slab-Tight™ sub-slab sampler eliminates interferences created by grout and other slab sealing materials.
- Grout may contain contaminants that can positively bias the results.
- Added Down-hole moisture from the grout may affect the solid/liquid/gas phase equilibria.
- The Entech Slab-Tight™ sub-slab sampler makes a mechanical connection and seal with no chance of contaminating the collected soil gas.
- Tracer Gas Shroud for butane or helium leak checking is available.



Description	Unit	Part #
Sub-Slab Vapor Intrusion Canister Sampling Kit (50cc/min) (600cc, 1L, or 1.4L Cans sold separately)	EA	SG-SS-50-Kit
Slab Anchor, Wedge, and Plug Kit	EA	SG-SS-AWP-Kit
Tool to expand anchor into the concrete	EA	SG-SS-Expander
Face-sealing Bonnet with QT Fitting	EA	SG-SS-Bonnet-QT
Bonnet Wrench - Tightens and releases Bonnet to concrete	EA	SG-SS-Bonnet-Wrench
50cc/min Chameleon with FQT on Inlet & Outlet. Includes down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-QQ-050
50cc plastic preflush syringe	EA	07-20050
16 Gauge Sub-Slab Dispensing Needle	5pk	07-20018
Sub-Slab Vapor Intrusion Canister Sampling Kit (50cc/min) w/ Tracer Gas Shroud (600cc, 1L, or 1.4L Cans sold separately)	EA	SG-SS-SHR-50-Kit
50cc/min Chameleon Shroud Sample Train. Includes 3 way valve, magnetic latch, & down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-TC-050-S
Slab Anchor, Wedge, and Plug Kit	EA	SG-SS-AWP-Kit
Tool to expand anchor into the concrete	EA	SG-SS-Expander
Face-sealing Bonnet with QT Fitting	EA	SG-SS-Bonnet-QT
Bonnet Wrench - Tightens and releases Bonnet to concrete	EA	SG-SS-Bonnet-Wrench
50cc plastic preflush syringe	EA	07-20050
Tracer Gas Shroud for Helium	EA	SG-He-Shroud
1/8" Silonite Line from Probe to 3-Way, w/ FMQT & 1/8" to 1/4" Tube Adapters	EA	SG-SHR-APVI
16 Gauge Sub-Slab Dispensing Needle	5pk	07-20018
Individual Parts	Unit	Part #
Slab Anchor & Plug Kit - Not reuseable. One needed per installation	EA	SG-SS-AWP-Kit
Shroud Foam Sealing Ring	EA	SG-SHR-RNG
Dual Canister Adapter w/ 2 Female Micro-QT™ Valves	EA	39-99014QT
600mL MiniCan with Micro-QT™ Valve	EA	29-MC600QT
1L Silonite MiniCan	EA	29-MC10LQT
Helium Analyzer (0.1-100%)	EA	SG-He-Analyzer
Soil Gas Drill Bit Kit 1/2" and 3/8"	EA	SG-SS-DRILL-Kit
Tracer Gas Shroud for Helium	EA	SG-He-Shroud
16 Gauge Sub-Slab Dispensing Needle	5pk	07-20018
10cc/min Chameleon Shroud Sample Train. Includes 3 way valve, magnetic latch, & down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-TC-010-S
50cc/min Chameleon Shroud Sample Train. Includes 3 way valve, magnetic latch, & down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-TC-050-S
100cc/min Chameleon Shroud Sample Train. Includes 3 way valve, magnetic latch, & down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-TC-100-S
150cc/min Chameleon Shroud Sample Train. Includes 3 way valve, magnetic latch, & down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-TC-150-S
200cc/min Chameleon Shroud Sample Train. Includes 3 way valve, magnetic latch, & down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-TC-200-S