



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



3100D Canister Cleaner

3100D Canister Cleaning Systems

Superior oil-free canister cleaning systems for high throughput laboratories.

Canisters are cleaned for reuse by evacuating and refilling with nitrogen or zero air multiple times to completely eliminate VOCs introduced during the previous sampling. After cleaning, canisters are left under vacuum in preparation for resampling. System pressure and vacuum readings control the evacuation and fill times for consistent batch to batch cleaning. Silonite™ coated manifolds and separate fill and evacuation flow paths ensure the most rapid elimination of VOCs and SVOCs possible. These updated systems now include method control of oven temperatures and adaptive feedback and control of the molecular drag pump to improve pump performance and longevity.

The 3112D oven quick-connect manifold accommodates up to twelve 6L canisters or up to 36 1–1.4L Minicans for complete heating during the cleaning process. Connect two ovens and clean up to twenty-four 6L canisters or 72 Minicans simultaneously!

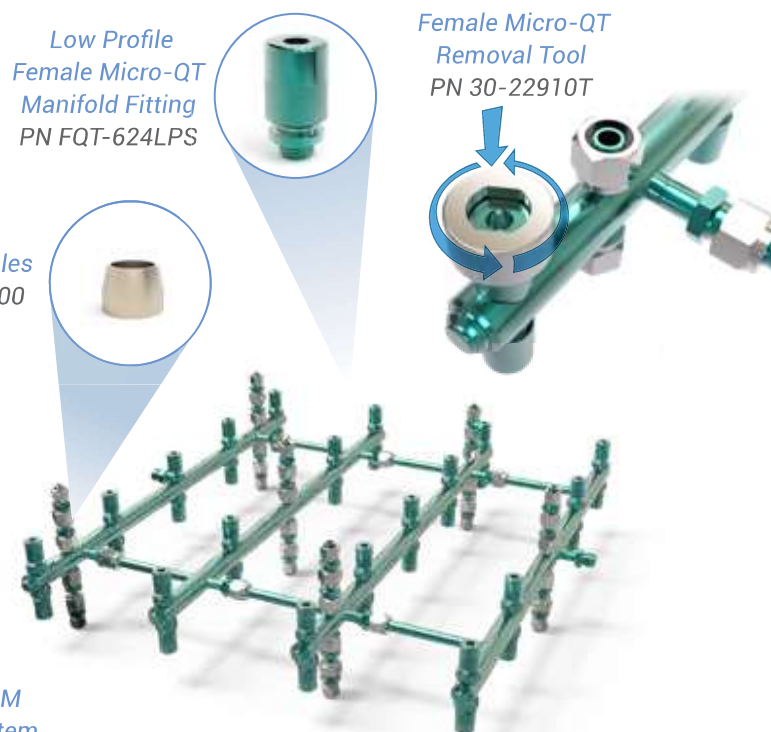
3100D | 3112D Canister Cleaning System



3112D Oven Size

Height: 34 inches (86.36cm)
Width: 33 inches (83.82cm)
Depth: 35 inches (88.9cm)

*Shown Here - 3112DM
Canister Cleaning System*



New Micro-QT™ Quick Connect Manifolds

Description	Unit	Part #
3112D Cleaning System Bundles*		
(12) Position 6L Bundle	EA	3112D
(40) Position Minican or 12 Pos. 6L Bundle	EA	3112DM
(12) Position 6L Bundle w/MQT ports**	EA	3112DMP
All bundles above include items below and a manifold		
3100D & Control Software	EA	3100D
3100D Humidifier	EA	07-10531
6L x 12 Canister Oven ***	EA	09-OV6L12
3112D External Tubing	EA	15-31120
2-Stage Diaphragm Pump – 120VAC	EA	10-20030

* Add "-HV" after part# for 220–240VAC Operation (e.g. 3112D-HV).

** Micro-QT™ ports are plugged. No Micro-QT™ Valves included.

*** Order 09-OV6L12-HV for 220–240VAC Operation. Manifold required.

Description	Unit	Part #
Individual Manifolds and Fittings		
(12) Position Cleaning System Manifold for 6L Can Oven. Holds (12) 6L (or smaller) cans or (2) 15L Cans. †	EA	3100-12
40 / 12 P 3112 Oven Manifold Assembly w/ MQT Fittings Includes 40 MQT Fittings. †	EA	3100-12M
40 / 12P 3112 Manifold Assembly w/ Plugs Includes 40 Plugs. †	EA	3100-12MP
Female Micro-QT Manifold Fitting	EA	FQT-624LPS
Optional Components		
3100A/D Tablet/Bracket Option	EA	3100-TSC

† Does not include oven.

**Both the 3112D and 3108D
Feature Precise Digital Control
& Convective Heating!**

3100D | 3108D Canister Cleaning System

Utilize our new, 8-Position, ¼" and MicroValve™ Expansion Manifolds to clean up to 32 MiniCan™ or Bottle-Vac™ canisters per 3108D oven.



The 3100D Features all-new software.

3108D Canister Cleaning System
6L Canister with 8 position manifold

3108D Oven Size

Height: 37.5 inches (95.25cm)
Width: 21.5 inches (54.61cm)
Depth: 28 inches (71.12cm)

Description	Unit	Part #
3108D Cleaning System Bundles*		
(8) Position 6L Bundle †	EA	3108D
(32) Position Minican or 8 Pos. 6L Bundle †	EA	3108DM
(8) Position 6L Bundle w/MQT ports** †	EA	3108DMP
All bundles above include items below and a manifold		
3100D & Control Software	EA	3100D
3100D Humidifier	EA	07-10531
6L x 8 Canister Oven ***	EA	09-OV6L8
3108D External Tubing	EA	15-31080
2-Stage Diaphragm Pump – 120VAC	EA	10-20030
Individual Manifolds and Fittings		
(8) Pos. 6L Manifold	EA	3100-08
(32) Pos. Minican or (8) Pos. 6L Manifold	EA	3100-08M
(8) Pos. 6L Manifold w/MQT option**	EA	3100-08MP
Female Micro-QT Manifold Fitting	EA	FQT-624LPS
Optional Components		
3100A/D Tablet/Bracket Option	EA	3100-TSC

* Order 3108(D,DM,DMP)-HV for 220–240VAC Operation.
** Micro-QT ports are plugged. No Micro-QT Valves included.
*** Order 09-OV6L8-HV for 220–240VAC Operation. Manifold required.
† Does not include oven.



3100D Humidifier
PN 07-10531



External Manifold for
Dual Oven Connection
PN 3100-03

Misc Parts

Description	Unit	Part #
3100D – External Manifold (2 Oven Parallel Operation)	EA	3100-03
3100D 3112D – Expansion Tubing (2nd Oven Fill / Evacuation Tubing Kit)	EA	15-31020P
3100D 3108D – Expansion Tubing (2nd Oven Fill / Evacuation Tubing Kit)	EA	15-31080P
3100D – 220-240VAC/50Hz Option	EA	3100-230
3100D – 100 VAC Option	EA	3100-100
2-Stage Diaphragm Pump – 240VAC (220-240VAC/50Hz option)	EA	10-20034
2-Stage Pump Kit (Diaphragm Pump Maintenance Kit)	EA	10-20017
3100A/D Tablet/Bracket Option****	EA	3100-TSC
Female Micro-QT Removal Tool	EA	30-22910T