



*See What's Really There™*

**Flow Professor™  
Calibration System**



**FLOW  
PROFESSOR**  
Calibration System

***Solutions for Time Integrated Canister Sampling.***



## Flow Professor™ Calibration System

The best solution for low level EPATO-15 monitoring.

Introducing the all-new Flow Professor™, the easiest and most accurate way to calibrate your Entech CS1200E field samplers. Using the latest CS1200E technology updated in 2014, the Flow Professor™ automates the complete calibration process for sampling into canisters as small as 450mL and as large as 15L. From within the easy to navigate Flow Professor™ software, simply set canister size, sampling duration, and the remaining canister vacuum desired at the conclusion of sampling (typically 2"Hg); then attach the Flow Professor™ to the front of the CS1200E and select Start Calibration from the software menu. The Flow Professor™ system proceeds to automatically adjust the flow setting of the CS1200E to obtain the ideal flow rate, every time. Attempting to achieve such precise calculations and flow controller adjustments manually would be difficult and time consuming at best. The Flow Professor™ makes it all easy!

Flow Professor™ Calibration System shown with CS1200ES Sampler and 6L Silonite™ Canister.

Description	Unit	Part #
<b>Flow Professor™</b> (CS1200E Calibration System)	EA	39-FP-03
<b>100cc Ballast Assembly</b>	EA	39-FP-BALLAST
<b>600cc Ballast Assembly</b>	EA	39-FP-BALLAST-600



## Features

- Time Integrated Sampling**  
 With the CS1200E and FlowProfessor calibration system, accurately fill canisters with integration times from 15 minutes to 1 month at more stable and reliable flow rates and verified recovery of TO-14 / TO-15 compounds. The CS1200E can be also be easily capped off during shipping to prevent any risk of sampler contamination.
- Silonite™ Coated Filter and Inlet Lines**  
 A large Silonite™ coated stainless steel filter is positioned at the inlet to maintain an inert and unobstructed flow path by eliminating particles. CS1200E Inlet lines are electropolished, then Silonite™ coated. (An optional Silonite™ coating of complete sampler is also available.)
- Vacuum Gauge**  
 Our exclusive gauge with a leak-tight ¼" compression fitting avoids any need for absorptive Teflon® tape in the CS1200E controller flow path.
- Sapphire Restrictor**  
 The CS1200E includes a precise sapphire flow element to provide stable operation from -20° – 50°C.

## Precise Sampling. Every time.

The Flow Professor™ automatically adjusts the flow setting of the CS1200E to obtain the ideal flow rate, every time.

Calibrate up to four CS1200E's at the same time!



## About the Entech CS1200E

The CS1200E features fantastic low-flow stability, and accurate sampling for a 6L canister can be set from 1 hour to a full 2 weeks. Can you imagine doing continuous monitoring at a field location and only collecting 2 samples a month? Now that process is easily automated with the Flow Professor™. Even the quality of the restrictor and diaphragm are verified to ensure consistent flow rates. Generate a calibration report for easy long-term reference and send the CS1200E out to the field in Entech's new shipping boxes that perfectly protect both canister and CS1200E flow controller in a single compact package.

**The Flow Professor™ + CS1200E + Silonite™ Sampling Canister = Your Secret to Success. A winning combination for today's modern air laboratory.**

## Time Integrated Sampling

Time integrated VOC concentrations can be determined by sampling into canisters at a constant flow rate. The CS1200E allows for a very wide range of constant flow sampling rates by changing the value of the restrictor on the inlet. For any given restrictor, the flow rate can be adjusted by a factor of 2–3x. This is easily accomplished by turning a flow adjustment on the vacuum controller body. Sapphire orifices combined with pressure regulation offer superior flow stability when compared to needle valve or frit regulated controllers. Different orifices are available to fill a 6L canister over 1, 3, 8, 24 hours, or even a full 2 weeks. Part numbers for CS1200E flow controllers are separated by flow range. One flow range can be changed to another by attaching the appropriate critical orifice. Changing orifices on the CS1200E is much easier than with other flow controllers since no pipe fittings and Teflon® tape is involved. Silonite™ coated flow controllers are designated with an "S" following the part number.

## A Compact and Clean Flow Path

The CS1200E includes a high-resolution, vacuum gauge with a ¼"compression fitting. This design, exclusive to Entech, completely eliminates messy and absorptive Teon® tape from the controller flow path. A threaded inlet cover prevents filter contamination and also acts as a rain guard when sampling to prevent moisture from clogging the inlet filter or orifice. This feature is ideal for sampling in wet environments, or when performing trace-level measurements with required detection limits below 200 part-per-trillion.

## When To Use a Ballast

Flow Rate	Ballast Required	Restrictor Range
0 - 4.9 cc/min	None	4, 4+, 5, 6, 7
5 - 99 cc/min	100 cc	1, 2, 2+, 3, 3+, 4
100 - 600 cc/min	600 cc	0, 1

## Amazing Low-Flow Stability

*More stable and reliable low rates than any other available low controller.*

## Silonite™ Coated Inlet Lines

*The CS1200E features Inlet lines that are electropolished, then Silonite™ coated.*

## Silonite™ Coated Filter

*A large Silonite™ coated stainless steel filter is positioned at the inlet to maintain an inert and unobstructed low path by eliminating particles.*

## New Kit Packaging

*Our new kit packaging features an integrated accessories box for the CS1200E and room for one 6L Canister, or four 1.4L MiniCans™.*

PN: 29-22062 and 29-22064



**CS1200E Passive Canister Sampler and 1.4L MiniCan™ shown with our 1L / 1.4L. (Sampler and Canister sold separately)**

## MINIMUM COMPUTER REQUIREMENTS:

**Requires a 64-bit Processor and Operating System**

**OS:** Windows 7 or 10 Professional 64-bit computer with .Net Framework 4.7.1 or later

**Processor:** Dual-Core, Pentium I5 (WIN7 Gen6 is max) Processor or better

**Memory:** 8GB of RAM

**Monitor:** 1280x768 (16:10 aspect ratio)





**7200**  
Preconcentrator



**7650-L20**  
GC Gas Autosampler



**7016D**  
Canister Autosampler



**5400B**  
Thermal Transfer System



**3108D**  
Canister Cleaning System

## The Recognized Global Leaders in Environmental Air Analysis.

### Learn more about us:



[entechinst.com](http://entechinst.com)



[facebook.com/entechinst](https://facebook.com/entechinst)



[twitter.com/entechinst](https://twitter.com/entechinst)



[linkedin.com/company/entech-instruments-inc](https://linkedin.com/company/entech-instruments-inc)

Entech Instruments  
2207 Agate Court  
Simi Valley, CA 93065  
Phone: 805-527-5939

The Flow Professor™ - 220630 - 12.0



*Our new kit packaging is ideal for field sampling. Packaging includes an integrated sampling accessories box plus room for one 6L canister, or four 1.4L MiniCans™.*

**PN: 29-22062 and 29-22064**