



C2K CANISTER PRECONDITIONING SYSTEM

PRINCIPLE OF OPERATION

The Analytical Process Systems, Inc. Canister Test System (C2K) guarantees test compliance per the US EPA CFR 40, 86.132 and California Air Resources Board - Evaporative Emissions Standards and Test Procedures. Since 1992, the APS C2K has commanded the largest worldwide installed base from automotive OEMs, Tier I Suppliers, and Government and Independent Test Laboratories.

Designed to support testing for both certification and compliance, research and development, the C2K utilizes recipe-driven and user-configurable test procedures with a robust data acquisition system designed for flexible report generation. The modular platform supports simultaneous testing for up to nine independent loading stations and scale bays.

USER-FRIENDLY INTERFACE

The C2K uses a PC-based control system and operator interface running Windows. APS's SureTest™ software provides a intuitive graphical user interface for ease of system operation.

PROGRAMMABLE TEST MENUS OFFERED //

- Purge only
- Working capacity determination
- New canister preconditioning or stabilization routine
- CARB/US EPA 2-day and 3-day diurnal
- ORVR loading
- Live fuel loading

C2K HARDWARE //

- Industrial PC with 15" touch screen
- (4) USB ports
- (1) 10/100 Ethernet network port
- Scale resolution = .01 g
- Keyboard
- Modular stations (Optional)
- Modular scale bay (Optional)

ANALOG CALIBRATION FOR THE FOLLOWING INPUTS //

- Butane mass flow controllers
- Nitrogen mass flow controllers
- Purge air mass flow controllers
- ORVR butane mass flow controllers
- ORVR nitrogen mass flow controllers
- Live fuel air mass flow controller

AUTOMATIC OR MANUAL OPERATIONS //

- Leak check
- Data acquisition and report generation
- Breakthrough determination
- Butane supply monitoring
- System diagnostics



2 Station
2 Scale Cabinet

Main Control
Cabinet

Purge Air
System

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THE C2K OFFERS THE FOLLOWING CANISTER RECIPE OPTIONS

<p>PURGE CYCLE SETTINGS</p> <p>Purge flow rate (slpm)</p> <p>Number of canister volumes (9999)</p> <p>Purge auxiliary canister? (y/n)</p> <p>Pause after purge (minutes)</p>	<p>LOAD CYCLE SETTINGS</p> <p>Load flow rate (grams/hour)</p> <p>Percent butane (1% – X%)</p> <p>Pause after load (minutes)</p> <p>Use primary scale number? (y/n)</p> <p>Use auxiliary scale number? (y/n)</p>
<p>ADDITIONAL RECIPES</p> <p>Number of purge/fill cycles (9999)</p> <p>Use live fuel? (y/n)</p> <p>Live fuel flow rate (slpm)</p> <p>Use leak check? (y/n)</p> <p>Use load first check? (y/n)</p> <p>Use end on purge check? (y/n)</p>	<p>LOAD METHOD</p> <p>No load (y/n)</p> <p>Load by time (minutes)</p> <p>Working capacity multiplier (x-x)</p> <p>Load by weight (grams)</p> <p>Load by breakthrough (grams)</p>

GENERAL SPECIFICATIONS

FLOW RATES		
Purging	22.7 slpm	
Butane	7-135 g/hr	Standard
Butane	1-15 g/hr	Low flow option

ENCLOSURE DIMENSIONS //	72"H x 24"W x 32"D
MASS FLOW CONTROLLERS //	Accuracy +/- 1% of full scale Repeatability +/- 0.15% of full scale
WETTED PARTS //	Stainless Steel, Teflon®, Viton®, or PVC
POWER REQUIREMENTS //	120/60VAC, Single Phase, 20 A circuit 220/60VAC, Single Phase
CANISTER PURGING //	Conditioned air at 77 °F +/- 9°F and 50 +/- 25 GR/# 300 bed volumes of air through the canister
CANISTER PRECONDITIONING //	Stabilize with a minimum of 10 purge/load cycles to 2 gram breakthrough Determine working capacity by loading to 2 gram breakthrough
CANISTER LOADING //	User selectable nitrogen and butane percentage by volume 2 gram breakthrough determination using auxiliary canister User selectable working capacity test procedure, no scale or auxiliary canister required

SAFETY AND DIAGNOSTICS SYSTEMS //

- Access password protection
- Gas detection
- Out of tolerance alarms
- Facility interlocks
- Door interlocks
- Dial-up diagnostics
- Manual input/output forcing

SYSTEM OPTIONS //

- Service-style purge and load stations
- Integral SHED testing
- NDIR analyzers for breakthrough determination
- Carbon dioxide fire suppression
- Type "X" positive pressure purge
- Special configurations available
- CE mark
- UPS battery backup
- Gas cabinet with auto switch-over
- Electric vacuum pump
- Remote station bays
- Remote scale bays