CleanAir®
ENGINEERING



CleanAir
COYOTE

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Portable Mass Flow Controller and Gas Blender

Control, blend and deliver calibration gas to analyzers with up to three independent mass flow controllers, from a portable case built for the field.

CleanAir COYOTE

Portable Mass Flow Control

Product Overview

A compact, portable gas-flow control and blending system for analyzer calibration, FTIR dynamic spiking, and controlled delivery of calibration gases. Each channel can run on its own for single-gas delivery, or the outlets can be combined through an external mixing manifold before the stream reaches the analyzer.

- Up to three independent MFCs
- MEMS thermal mass-flow sensing
- 4.3" color touchscreen HMI
- Web-enabled remote operation
- On-board blending calculator
- Rugged, industrial case, 8.2 lbs.

Applications

- Analyzer calibration
- FTIR dynamic spiking
- Calibration gas dilution and blending
- CEMS calibration support
- Source testing and field programs
- Laboratory gas delivery
- Batch volume delivery

Additional Features

- MODBUS TCP/IP digital I/O
- 4–20 mA analog output per channel
- Data retrieval by USB or FTP
- Runs on 12 VDC for mobile power

Precise gas blending, adapted for the field.



With up to three, independently-controlled gas channels, an on-board blend calculator, and remote access over Ethernet, the COYOTE delivers precise calibration gas wherever the work takes it.

Contact CleanAir to Rent, Purchase, or Configure.

1-800-553-5511
info@cleanair.com

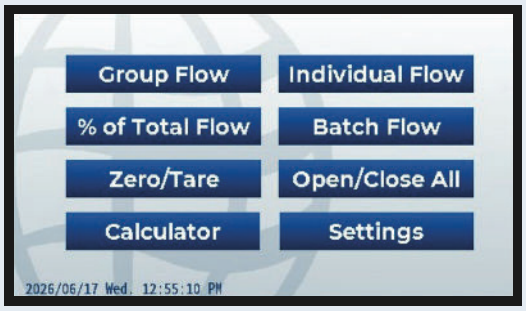
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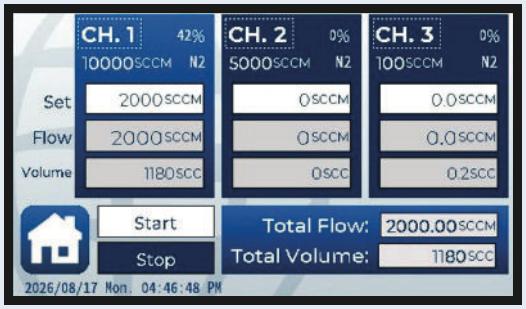
User Interface

Main Menu



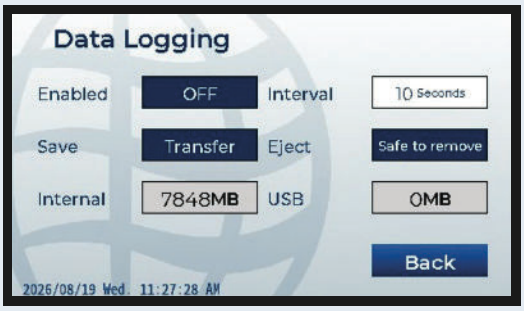
Five operating modes, tare, and settings from one screen

Group Flow



Set point, flow and volume for all 3 channels at once.

Data Logging



Log interval, internal memory, and USB transfer

3 MFC Version Shown.

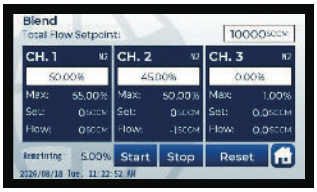


Front panel: 3 inlets, 3 outlets, analog output terminal, RS-485 COM switch, 12 VDC power, USB and Ethernet.

Single-Channel Flow



% of Total Flow



Blend Calculator



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Technical Specifications

POWER REQUIREMENTS	120 VAC, 60 Hz through an external AC/DC power adapter. 12 VDC, 2 A, 5.5 mm x 2.1 mm center-positive barrel connector, 24 W		
DIMENSIONS	Pelican 1300 Case, 10.7" (W) x 9.76" (D) x 6.89" (H)		
WEIGHT	Approximately 8.2 lbs. (3 MFC Model)		
OPERATING TEMPERATURE RANGE	41° F to 104° F		
MASS FLOW CONTROLLERS	Channel 1: 10,000 SCCM, Channel 2: 5,000 SCCM, Channel 3: 100 SCCM (Standard 3-channel rental config.) Custom builds available: 1–3 channels and alternate Alicat MFC ranges.		
FLOW MEASUREMENT PRINCIPLE	Alicat BASIS 2, MEMS thermal mass-flow sensing		
UNIT OF MEASURE	SCCM		
INLET PRESSURE RANGE	10 psig to 60 psig (designed to run at 30 psi)		
INLET / OUTLET FITTINGS	3 separate inlet / 3 separate outlet, S.S. 1/4" push-to-connect, Viton o-ring		
INLET FILTRATION	In-line PVDF (Kynar), 0.1-micron, borosilicate microfiber filter per inlet		
HMI TOUCHSCREEN	4.3" color touchscreen, web enabled for remote operation through a standard web browser		
OPERATING MODES	Group Flow, Individual Flow, % of Total Flow, Batch Flow, Calculator		
CHANNEL FUNCTIONS	Zero / Tare, Autotare, Open / Close All, Reset Volume, gas selection with K factor		
COMMUNICATIONS	Ethernet LAN (TCP/IP) web enabled / RS-485 (MFCs)		
COMMUNICATION PORTS	RJ45 Ethernet / RS-485 wired connector / USB A		
DIGITAL COMMUNICATION	MODBUS over TCP/IP		
EXTERNAL CONTROL	Ethernet web enabled / MODBUS TCP/IP		
ANALOG OUTPUTS	4-20 mA per channel (optional)		
DATA LOGGING AND STORAGE	All channels logged separately. 8 GB on-board storage, expandable to 32 GB		
DATA LOGGING PARAMETERS	Date / Time	Flow	Total Flow
	Volume	Total Volume	MFC Temperature
FILE TRANSFER	USB A flash drive port, or FTP over Ethernet using third-party software		
GAS REQUIREMENT	Clean, dry, calibration gas standards only		