CONDITIONED AIR SUPPLY SYSTEM

ETC's Conditioned Air Supply (CAS) system provides intake air for test engines and dilution air for exhaust measurement systems. The system delivers air at a precisely controlled temperature, humidity, pressure and flow rate, and is free from pollutants.

ETC's CAS technology provides psychrometrically-controlled air for improving the accuracy and repeatability of performance and development testing. The adverse effects of variations in temperature, humidity, and barometric pressure are completely eliminated by utilizing a pressure controlled CAS unit.

The Conditioned Air Supply system is made up of three sub-assemblies. The CAS unit, which draws in ambient air and conditions it for temperature and humidity to the precise setpoint conditions. The Engine Pressure Control device is an integrated aerodynamic valve system, which modulates the airflow rate and controls the barometric pressure at which air is delivered to the engine inlet. The control box houses all operator interface and process parameters.

NEW!

Barometric Compensation Upgrade

Easily upgrade an existing test cell, small footprint, does not affect supply air Temp/RH performance

TESTING & SIMULATION SYSTEMS

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CAS SYSTEM **SPECIFICATIONS**

FEATURES

Barometric compensation
Altitude compensation
Low noise pressure control devise
Conditioned air supply for multiple cell configurations
Small foot print
Indoor/outdoor locations

APPLICATIONS

Combustion engine research and development testing
Diesel engine research and development testing
Aircraft engine research and development testing
Emissions certification testing
Fuels and lubrication development
Fuel Cell

OPTIONS

Custom designed systems to meet special requirements
Low dewpoint systems
Sub freezing temperature systems

CONTROL SYSTEM

	RANGE	CONTROL STABILITY
Drybulb Temperature (standard)	55 to 105°F(12 to 45°C)	±0.5°F(±0.25°C)
Drybulb Temperature (medium)	34 to 105°F(1.1 to 45°C)	±0.5°F(±0.25°C)
Drybulb Temperature (extended)	-30 to 105°F(-22 to 45°C)	±0.5°F(±0.25°C)
Dewpoint Temperature	40 to 80°F(4 to 27°C)	±0.5°F(±0.25°C)
Standard Airflow Rates (cfm):	200, 500, 750, 1200, 2500, 4000	
Pressure Control:	Ambient to 6” Hg boost	±0.04” Hg(1.0 mm Hg)

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