



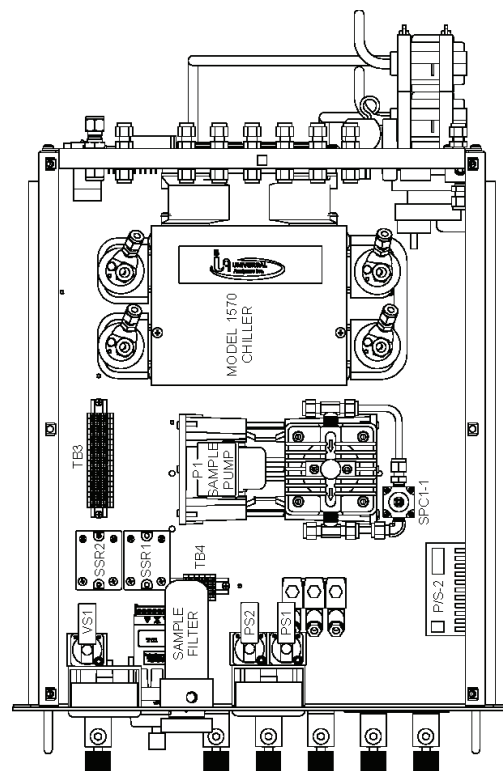
Universal Analyzers offers a 6U rack mountable sample system for most applications. The sample conditioning drawer (SCD) cooler uses Peltier elements to Thermo Electrically reduce the dew point of a gas sample which rapidly condenses and removes the water, providing a dry sample for the gas analyzers. The SCD is configurable to be integrated with an external PLC/ Data Logger and/or toggle switch panel to be stand-alone controlled.

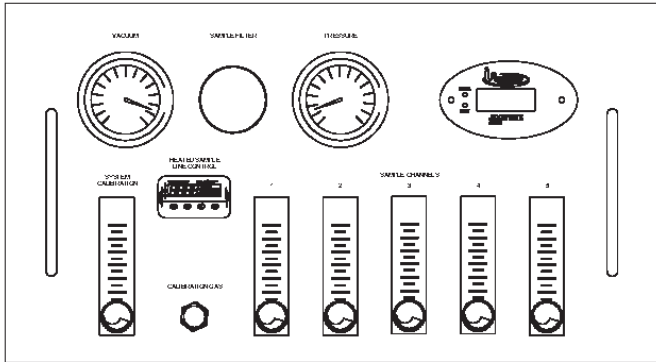
The SCD 1570 coolers have a moderate capacity thermoelectric cooler. The SCD provides a self-regulated 4.0°C dew point gas sample. The coolers condense the water from a wet gas sample with minimal loss of the water soluble gas fraction. This results from the unique design of the heat exchangers. The separation occurs in the heat exchangers which have a highly polished cylindrical surface cooled by thermoelectric Peltier devices to the desired dew point temperature. These heat exchangers are available in a variety of materials including Stainless Steel, Kynar/Glass, and Hastelloy. For special applications, stainless steel heat exchangers can be Silconert 2000\* coated.

The Sample Conditioning Drawer is 10.5" H by 19" W and 27" L. The system comes standard with the following: Sample Pump, Peristaltic Pump, Inline Filter with Water Carry Over Sensor, Pressure Gauge, Vacuum Gauge, Alarm, Switches, Calibration Gas Regulator, Solenoid Valves and Analyzer/Bypass/Calibration Gas Flow Meters.

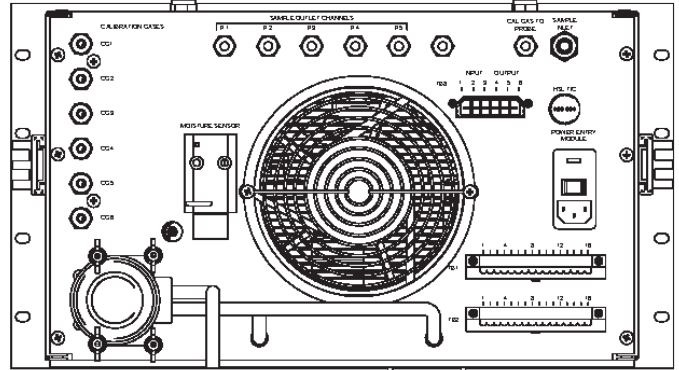
## Features

- Four channel sample conditioner system (Maximum)
- Six calibration gases (Maximum) direct or system calibrations
- Designed to be remotely controlled by a data logger or toggle switches
- 19" Rack mount chassis with drawer slides
- Chiller 3050 or 1050 equivalent thermoelectric gas sample chiller
- 316SS Heat exchanger/impingers  
Kynar/glass and other materials and coatings are available
- Chiller capacity: 2 to 8 LPM @ 20% liquid  
77°F Ambient - dewpoint controlled at 4°C
- CCS – Condensater carry over sensor accessible on rear of rack
- 2 Micron filter accessible on front panel
- Maximum of 6 calibration gas selection solenoids
- Internal calibration gas regulator – Set @ 10 Psig
- System or direct calibration selection w/ block & bleed design
- Vacuum gauge, SS, liquid filled (0 – 30" Hg)
- Pressure gauge, SS, liquid filled (0 – 15 Psig)
- Sample vacuum switch (adjustable – Set @ 7"HG)
- Sample pressure switch (adjustable – Set @ 5 Psig)
- Loss of calibration gas pressure switch (adjustable-Set @ 5 Psig)
- Single head mini dia-vac sample pump w/ integral B/P regulator
- Dual head peristaltic liquid pump
- ¼" SS compression fittings for analyzers gas outputs
- Alarm contacts:
  - High inlet sample vacuum
  - Low sample pressure
  - Low calibration gas pressure
  - Condensater carry-over/high chiller temperature





FRONT VIEW



REAR VIEW

## Technical Information:

<b>OPERATING SPECIFICATIONS</b>	
<b>Dilution Air Flow Rate Range</b>	5 to 15 l/m
<b>Dilution Air Pressure Range</b>	20 to 80 psig
<b>Dilution Air Dew Point</b>	-30°C maximum (Lower is better)
<b>Dimensions</b>	5 1/4" H x 19" W x 13" D
<b>Weight</b>	15 lbs (6.8kg)
<b>Operating Connections Provided</b>	Dilution air inlet Dilution air to sample probe Diluted sample from sample probe Cal gas inlet (6 maximum) Sample/Cal gas outlet to analyzer bank Vacuum gauge line inlet to monitor Condition of eductor
<b>MATERIAL SPECIFICATIONS</b>	
<b>Chassis</b>	Aluminum
<b>Block and Bleed Manifold</b>	316SS
<b>Cal Gas Regulator</b>	316SS
<b>Solenoid Valve Wetted Parts</b>	316SS with Viton O-Rings
<b>Internal Tubing</b>	TFE Teflon