

1095E Series Acid Aerosol Chiller System



The Universal Analyzer Model 1095E utilizes our proven multi-stage cooling technique to provide a minus 30°C dew point conditioned sample that is free of corrosive Acid Aerosol Mists. The Model 1095E was designed to protect your analyzer from Acid Aerosol Mists, have user friendly operation with a menu driven touchscreen, and to decrease maintenance time. The model 1095E features a modular design for the heatsink and electronics enclosure. This allows for simple replacement of both assemblies in the case of a failure. The electrical interconnections for the modules are now terminated in pluggable connectors, eliminating the inconvenience of removing wires from terminal blocks to replace either module.

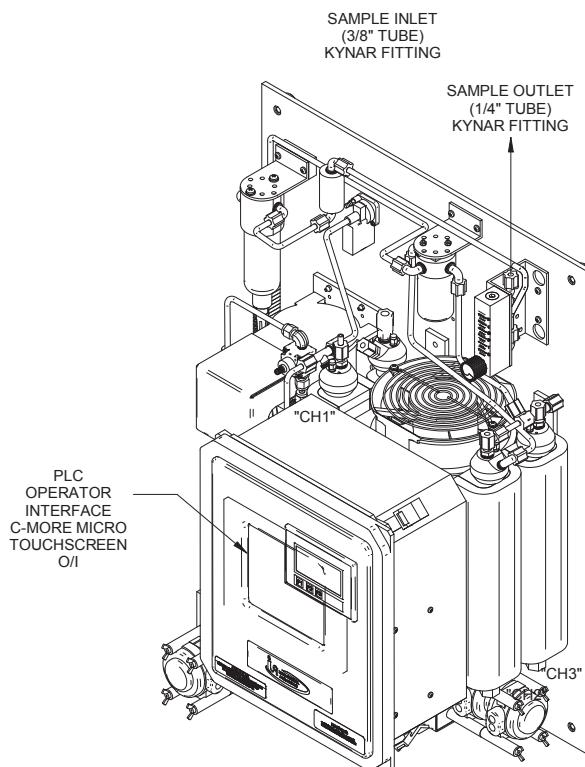
Active heat exchanger cooling is accomplished utilizing thermoelectric Peltier devices to cool the heat exchanger walls to low temperature creating water condensation. The water separation occurs within our unique heat exchangers whose cylindrical surface is cooled to ambient 4°C or minus 30°C depending on the cooling stage. In the 4°C impinger, condensate flows down the cold surface as a sheet, thus minimizing the surface area in contact with the gas sample allowing minimal loss of the water soluble gases. Water is removed from gas sample contact using a peristaltic pump. Wetted heat exchanger materials are Glass/Kynar and Kynar/Kynar.

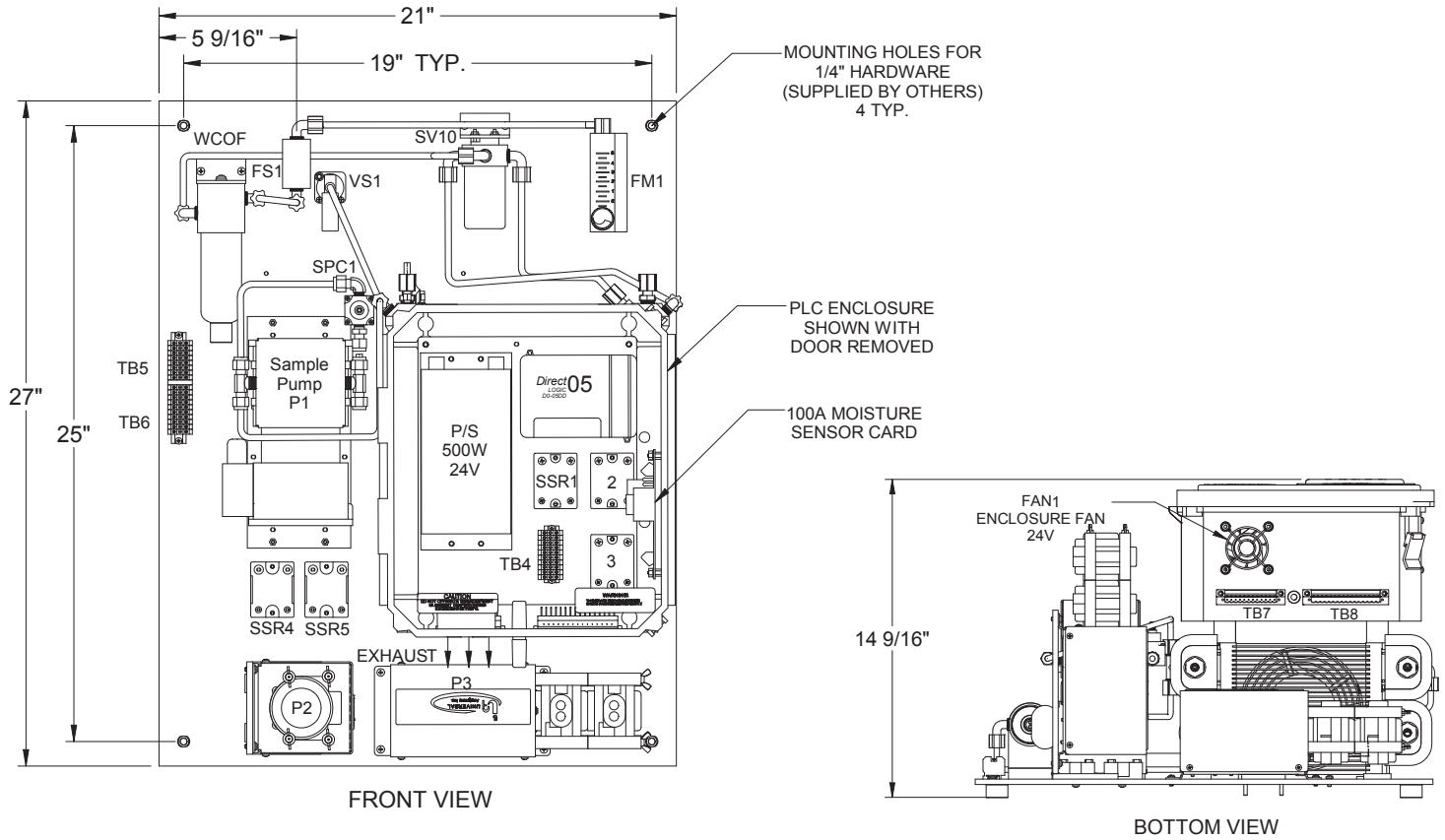
The Operator Interface is an intuitive Menu Driven Touch-Screen system. The operation of the Freezer System is automatically controlled by the PLC in the Freezer System based on timing parameters entered through the Touch Screen located on the front of the unit. Chiller status and alarm conditions are also displayed on this Operator Interface.

To ensure a clean & dry sample is provided to the gas analyzer, our Freezer Systems include an oil-less heated head diaphragm sample pump with sample pressure control, and a sacrificial steel fiber filter with integrated water slip sensor to indicate chiller overload/failure. The filter provides a final protection and gives a visual view of acid attack.

Vacuum/flow switches indicate system status and sample blockages (both automatically and visually) and are integrated into the system.

Our engineering team can work with you on specific control schemes.





Technical Information:

Maximum Inlet Sample Temperature: Kynar/Glass Heat Exchanger:	280°F. (138°C.)
Maximum Inlet Water Concentration:	50%*
Minimum Ambient Temperature	34°F (1°C)
Maximum Ambient Temperature:	90°F (32°C)*
Outlet Sample Dew Point:	-22° F (-30°C.)
Gas Sample Inlet Fittings	3/8" Tubing Compression Fittings
Gas Sample Outlet Fittings	1/4" Tubing Compression Fittings
Voltage:	115/230VAC, 50/60 Hz
Electrical Classification:	General Purpose/Safe Area, NEMA 1
Soluble Gas Removal Rates:	NO 0% LOSS NO2 <10% LOSS SO2 < 2% LOSS CO 0% LOSS CO2 < 2% LOSS
*At reduced flow rates, see capacity chart.	