



Model 644SS Shown

The Series 600 Mini-Coolers are our least expensive and most compact thermoelectric coolers providing a self-regulated 4.0°C dew point sample gas ready for analysis. This device can be either plate or wall mounted and can contain one or two 5" impingers which are cooled passively (to ambient) and/or actively controlled using thermoelectric Peltier devices. The unit's heat sinks can be cooled using either ambient air or a continuous supply of water. The unit provides a 0-1VDC signal output proportional to the sample temperature between 0-50°C. If the optional condensate slip sensor is included, two relay outputs are provided to indicate condensate slip. An externally mounted 12, 15, or 24VDC power supply is required and is offered as an accessory by Universal Analyzers. Wetted materials are 316 Stainless Steel, Glass/Kynar, Teflon Coated Stainless, Welded 316 Stainless Steel or Hastelloy C-276.

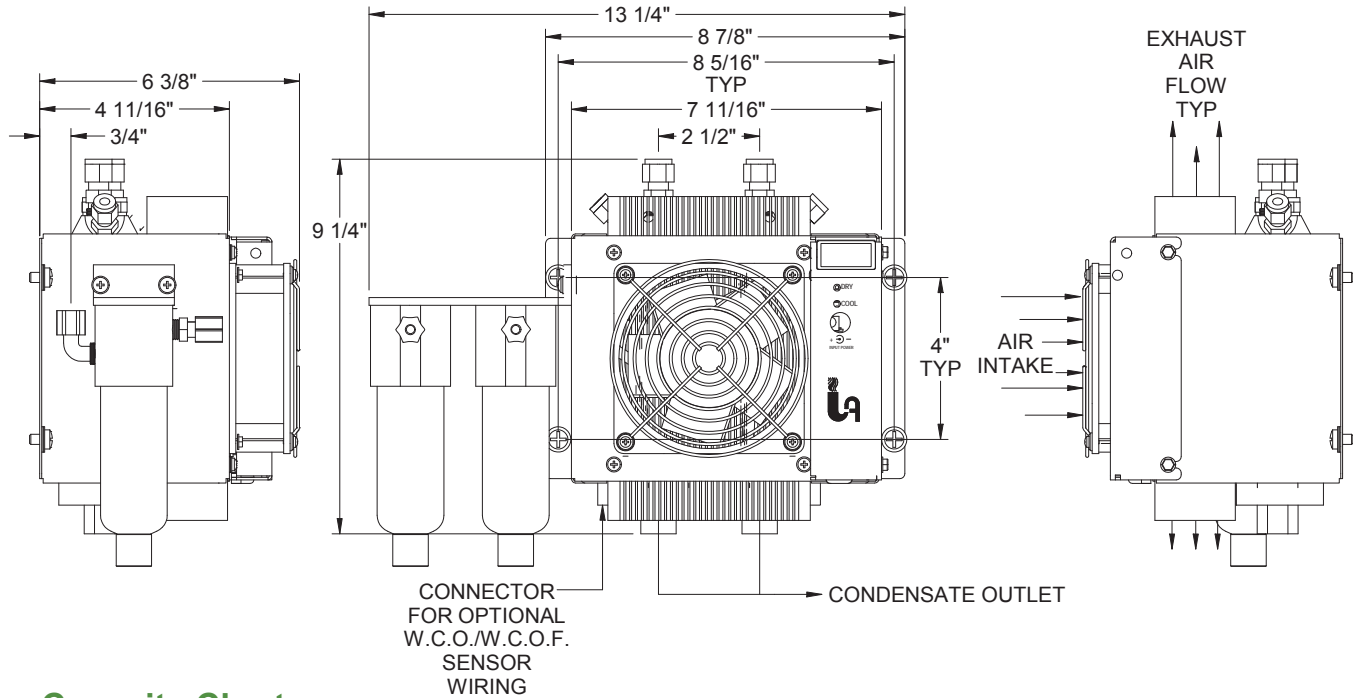
The 600 Series Cooler can be easily integrated with other Universal Analyzers' sample components including a condensate slip sensor with or without an integral condensate coalescing filter, peristaltic pump, sample pump, manual switches, external terminal strip, or PLC controlled sample handling systems, PLC controlled sample sequencers and a complete line of Stack Filter Probes. For high pressure applications, metal heat exchangers can be welded together as a single assembly. For special applications, stainless steel heat exchangers can be Silconert 2000 coated. Universal Analyzers has the ability to mount any and all the above on a plate, in a drawer, on a U-bracket, or provide a panel mount conversion kit. Additionally the 640 Series can be configured for dual stream.

Applications

- CEMS Integration
- Economical Chiller Requirements
- Portable Chiller Requirements

Features

- Compact and light weight
- Self-regulating with a very stable outlet dew point
- Passive-Active and Active-Active configurations
- Flow rates from 2.5 l/m to 5 l/m
- Digital temperature display with LED status lights and temperature alarm contacts
- Requires external power supply



Flow Capacity Chart:

Model	Ambient 77 °F/25 °C Water Vapor				Ambient 90 °F/35 °C Water Vapor				Ambient 105 °F/41 °C Water Vapor			
	12%	15%	30%	50%	12%	15%	30%	50%	12%	15%	30%	50%
620	2.5 l/m	2 l/m	1 l/m	0.6 l/m	2 l/m	1.8 l/m	0.9 l/m	0.5 l/m	1.5 l/m	1.2 l/m	0.6 l/m	0.3 l/m
630	4 l/m	4 l/m	4 l/m	4 l/m	3 l/m	3 l/m	3 l/m	3 l/m	2 l/m	2 l/m	2 l/m	2 l/m
640	5 l/m	4 l/m	2 l/m	1 l/m	4 l/m	3.5 l/m	1.8 l/m	0.9 l/m	3 l/m	2.5 l/m	1.3 l/m	0.7 l/m

Technical Information:

Sample Flow Rate:	(Specific to model; See Capacity Chart)
Maximum Inlet Sample Temperature:	
Stainless Steel Heat Exchanger:	700°F. (371°C.)
Kynar/Glass Heat Exchanger:	280°F. (138°C.)
Maximum Inlet Water Concentration:	50%*
Maximum Ambient Temperature:	105°F. (41°C.)*
Outlet Sample Dew Point:	39° F. (4°C.) adjustable
Voltage:	12VDC (Model 6X2) or 24VDC (Model 6X4)
Electrical Classification:	General Purpose/Safe Area
Weight:	18 LB (8 KG)
Soluble Gas Removal Rates:	NO 0% LOSS NO ₂ <10% LOSS SO ₂ < 2% LOSS CO 0% LOSS CO ₂ < 2% LOSS

*At reduced flow rates, see capacity chart.