

IMR 550P COMBUSTION GAS DRYER

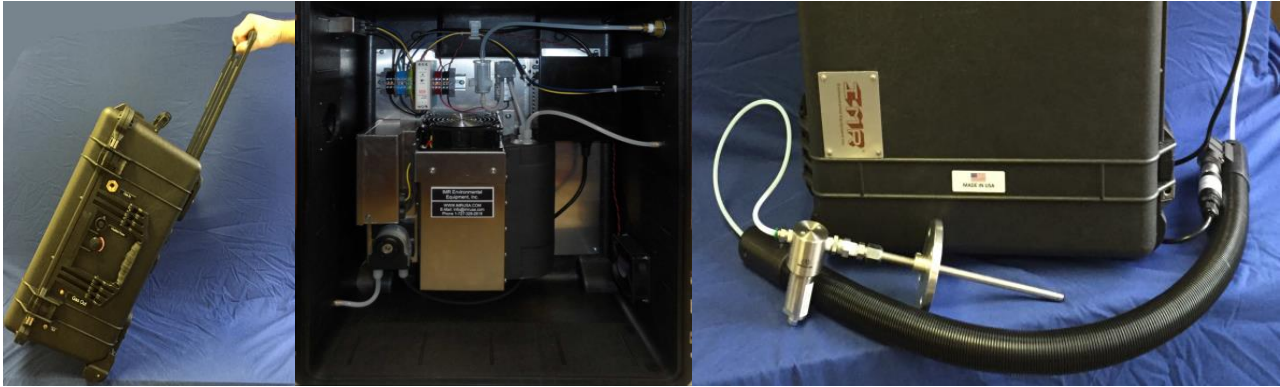
COMBUSTION GAS DRYER

The IMR 550P device is for the cleaning of gases and is suitable for use in conjunction with all gas measuring and analysis instruments. It is encased in a handy portable case. It is especially designed for use with the IMR 1400 and IMR 2800 series or any other type of combustion gas analyzer. The gas is filtered by the 3 micron filter and then heated by the sampling hose. The unique microprocessor controlled Peltier Cooler of the IMR 550P has been designed with a powerful dew point stabilizer. The dew point is set to 4°C. The condensate that is formed is removed by a peristaltic pump



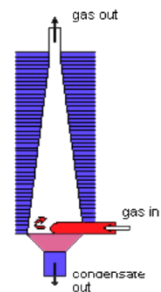
Specifications

Filter	Disposable element; 99.99% removal of 3 microns particles Optional: Stainless steel; 99.99% removal of 3 micron particles
Heated Hose	Length: 5 ft. (1.5 meters); other lengths are optional available Temperature controlled at approx. 140oC / 285oF Temperature element: PT100 or thermocouple Type K
Dryer Type	Peltier
Enclosure	Pelican Case
Dimensions and Weight	22.06"×17.93"×9.0"(L×W×H) 45~50lbs (Weight)
Operating Temperature	50oF to 122oF (10oC to 50oC)
Storage Temperature	-4oF to 122oF (-20oC to 50oC)
Operating Environment	90% RH non-condensing
Order/ Item No.:	05500-peltier



IMR 550P Drying Principle

The Peltier cooler is designed to reduce the dew-point of the flue-gas to about 5°C, this eliminates condensation. The hot flue-gas enters the heat exchanger and the flue-gas comes in contact with the cold wall of the heat exchanger. The immediate separation of the water vapor is the result. Again virtually all elements of the flue-gas sample are retained, except the water vapor. The condensed water exits through a tubing pump. The filtered and dried flue-gas can now be analyzed by the IMR 2800 or any other flue-gas analyzer.



IMR 550P Filtration

Before the flue-gas enters the 'heated hose' it is cleaned by a filter that is designed for hot gas analysis. The construction ensures a quick filter element exchange. The filter element is designed to remove 99.99% of 3 microns particles. Special filter housing is available for dirty gas analysis applications. The IMR 550P filtering system can be equipped with different grades of stainless steel elements. The filter can be used as a coalescing filter or as a particulate filter simply by switching the input and output.

