

SAMPLE DEFENDER™

A Sample Conditioning System Providing A Constant Clean & Dry Sample to Analyzers/GCs/Detectors



Product Features

- Provides ultra-pure & ideal gas phase sample to GC/Analyzer for radically reduced maintenance
- Separates volatile hydrocarbons from liquid sample such as water or steam/condensate for analysis in the gas phase by a detector/GC
- No moving parts reduces down-time
- Ability to concentrate or dilute sample
- Maintains a representative sample

Applications

- Cooling tower / heat exchanger water • Produced water • Waste water • Storm runoff water • Boiler condensate
- Monitoring at desalination plants • Effluent water • Bilge water discharge • Municipal water treatment plants

Product Description

The **Sample Defender™**, utilizing the Sample Transfer Stripper™ (STS), continuously strips hydrocarbons and other components of interest from a liquid sample stream for analysis by detector/GC of choice (user provided). The liquid sample containing hydrocarbons flows into the heated STS. Based in part on Henry's Law, the hydrocarbons in the liquid sample continuously permeate through membrane and separates from the liquid to a gas phase and maintains representation of the original liquid sample.

A precision flow meter provides clean & dry carrier air/gas which sweeps the gaseous hydrocarbons on the other side of the membrane and out the vent where a detector of choice is utilized, such as a Gas Chromatograph for speciation of hydrocarbon components. The **Sample Defender™** provides an ultra-pure, clean and dry sample to the detector or GC for analysis. The system radically reduces maintenance requirements of the user provided detector / GC while enhancing analytical reliability.

The **Sample Defender™** includes a robust secondary filter with fast sweep valve (fast loop), high precision flow meter, pressure regulator, pressure gauge and temperature controlled heated enclosure for the STS. The **Sample Defender™** is tubed, wired, mounted in 316SS NEMA 4X (IP 65) cabinet, and ready to connect the detector/GC provided by the user.



Phone (281) 516-3950 or (281) 664-2890
Sales@asikeco.com | service@asikeco.com

Typical Specifications

AMBIENT TEMPERATURE RANGES

- 1°C to 55°C (operating) without ext. cooling/heating
- 0°C to 70°C (storage)
- PPB range may require temp. controlled building

SAMPLING SYSTEM

- Sample Pressure Regulator (400 or 1,500 psig max)
- Sample Needle Valve
- Sample Flow Meter
- Carrier Air/Gas Flow Meter
- Secondary filter or optional AutoClean primary filter

AREA CLASSIFICATIONS OPTIONS

- Class 1 Division 1
- Class 1 Division 2
- Zone 1 or Zone 2

WEIGHT

- ~100 lbs (single stream system)
- ~250 lbs (dual stream system)

DIMENSIONS

- 2 ft X 2 ft X 1 ft (single stream system)
- 3 ft X 4 ft X 1 ft (dual stream system)

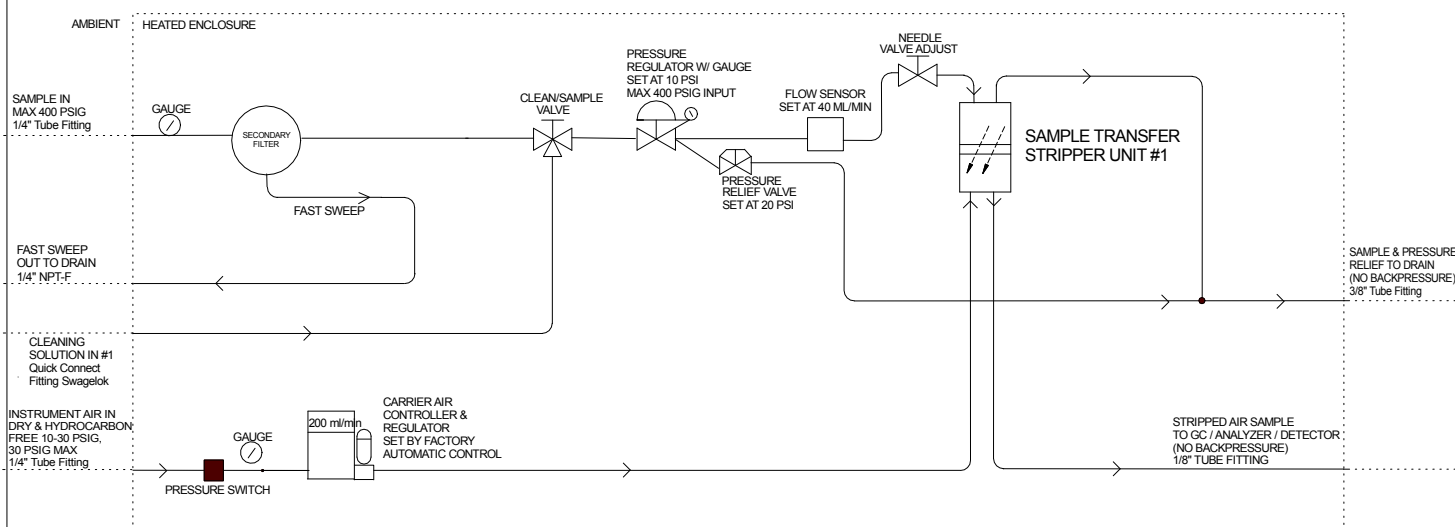
UTILITIES/SETTINGS

- 110VAC or 220VAC
- 100 Watts normal, 700 Watts max
- Carrier Air/Gas: 200 ml/min (15 psig max/min)
- Sample flow: 60 ml/min (app. dependent)
- Sample pressure: 30 psig (400 or 1,000 psi max)

AVAILABLE OPTIONS

- Diagnostic/fault alarms
- Low carrier, sample flow relay alarms
- AutoClean Primary Filter

Flow Diagram (typical only)



Analytical Systems Keco provides design and application engineering assistance for the User's analyzer requirements. For a quotation, please complete Analyzer Quote Request Form at www.LiquidGasAnalyzers.com/quote