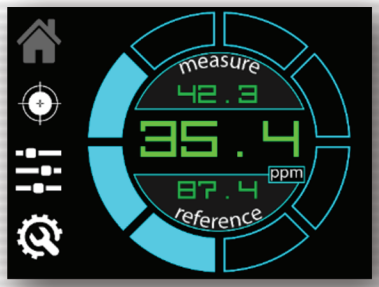
MODEL UVA 5000

UV Absorbance Process Photometer

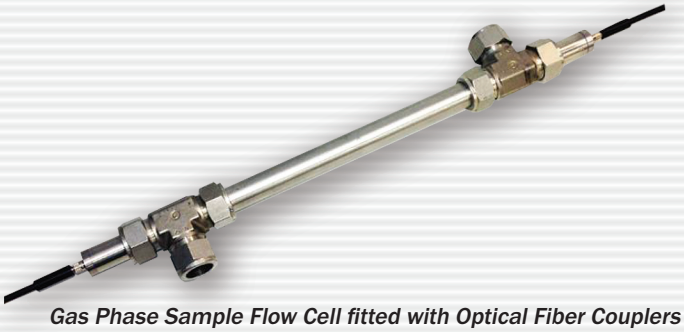


Features

- Compact, space-saving configuration with no moving parts that is available for use in either hazardous or non-hazardous rated areas
- 316SS High-Pressure rated Sample Cell that is isolated from the analyzer electronics
- Optical design approach that compensates for source and detector aging
- Long-Life, Pulsed UV Xenon Flash Lamp
- Photomultiplier Tube (PMT) detector which provides a highly sensitive and stable measurement of the gas of interest
- Touch-Screen User Interface with intuitive mode buttons & menus that also provides visual diagnostic information by an automatic change in concentration display color

Description

The CAI Model UVA-5000 utilizes the field-proven UV Absorbance method to continuously detect gas-phase compounds that are capable of absorbing UV light energy. It utilizes Beer's Law, the attenuation of light as it passes through a flowing sample gas, to monitor for changes in concentration of the desired analyte. The CAI UVA 5000 consists of a pulsed, UV Xenon lamp, 2 x fiber optic cables, a flow-through, temperature-controlled sample cell and a PMT (Measure) & PbSe photodiode (Reference) detector. Light energy from the pulsed Xenon lamp is fed via a fiber optic cable to a cross-flow sample cell. The light passing through the flowing sample is collected by the receiving fiber and conveyed to the photo-multiplier tube (PMT) measurement detector to provide a continuous analysis of the compound of interest. A beam splitter is employed to direct the attenuated light to both the measurement and reference detectors. CAI selects and incorporates specific measure & reference wavelength optical filters into the light path based upon the given application.



Gas Phase Sample Flow Cell fitted with Optical Fiber Couplers

Typical Applications

- Trace H2S in Natural Gas / Amine Scrubbers
- Trace SO2 in Flue Gas Desulfurization (FGD)
- Trace CL2 in Stack Gas & Process Scrubbers
- Trace CLO2 Analysis in the Pulp & Paper Ind.
- % F2 in UF6 Analysis / Nuclear Fuel Processing

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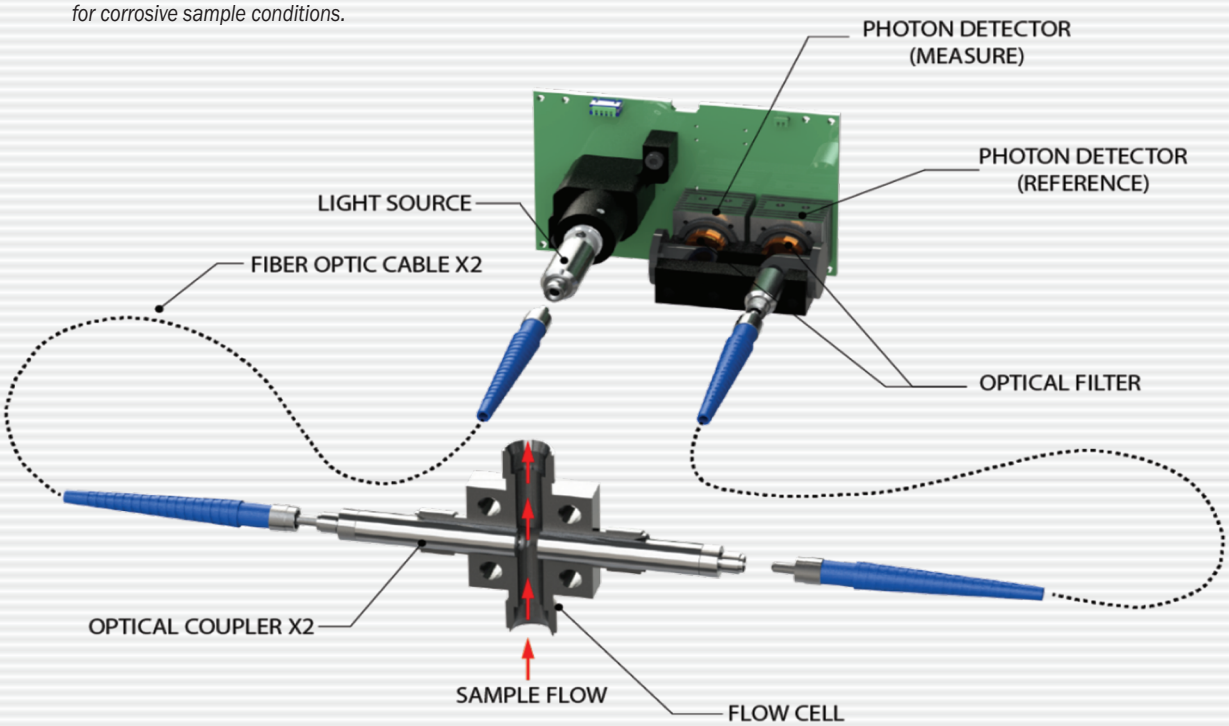
Specifications

Measurement Principle – UV Absorbance
Light Source – Pulsed UV Xenon Flash Lamp
Detector – Photomultiplier Tube (PMT) Detector
Fiber Optic Cables – (2) x 1 meter, 600 micron core cables
Sample Flow Cell – 316 Stainless Steel Cross Flow Cell (*)
Range – Application Dependent- Contact Factory
Response Time – Electronic Response is T90 in 2 seconds
Accuracy – Typically +/-1% of F.S. - (Appl Dependent)
Power Requirement – 24VDC Nominal (12 to 48VDC), 8.5 Watts
Enclosure – NEMA4X or EXD Configurations Available
Process Temperature – 200 Deg C (max)
Process Pressure – Up to 2,000 psig (max)
Minimum Flow Rate – 100 ml/min
Operating Temperature – 0 to 50 Deg C
Storage Temperature – 0 to 50 Deg C
Outputs – 4-20mA, RS485 (MODBUS) or USB
Alarms – Contact Closure (60VDC, 0.75A Max)
Display – 3.2" Capacitive Touch Screen LCD

(*) = CAI can provide the sample cell in other exotic alloys for corrosive sample conditions.



Specifications subject to change without notice.

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