**Description**

The CAI Model UVF-5560L utilizes the field-proven UV Fluorescence (UVF) method to continuously detect the undesirable presence of oil in water. Light energy from a Xenon UV flash lamp is fed via a fiber optic cable to the tip of a Front Surface UVF Probe. CAI incorporates optical filters into both the excitation and emission light paths. Filter selection is based upon the fluorescence signature of the end-user’s oil. The excitation light energy is collimated through a ball lens and then passed through the sapphire probe window where it is introduced to the flowing sample. If any oil is present, it will absorb the light energy and, in the process, fluoresce by giving off photon-light emission energy. The photon emitted light is collected by an inner-core receiving fiber and conveyed to the photo-multiplier tube (PMT) detector to provide a continuous analysis of the oil present.

**Features**

- Compact, space-saving configuration with no moving parts which is configured for use in either hazardous or non-hazardous rated areas
- Front Surface Fluorescence Probe suitable for either in-situ or extractive analysis. Available in 316SS or other corrosion resistant alloys
  - Long-Life, Pulsed UV Xenon Flash Lamp
  - Photomultiplier Tube (PMT) detector which provides a highly sensitive and stable measurement
  - Fiber Optic Cable supplied in flex-conduit to protect the fibers from accidental mishandling

**Typical Applications**

- Oil in Boiler Return Steam Condensate
- Sump Pit / Refinery Run-Off
- Gas – Oil Separators (GOSP)/Gathering Centers
- Offshore Rig & FPSO – Produced H2O Discharge
- Waste Water Treatment Plants (WWTP)
Specifications

Measurement Principle – UV Fluorescence (UVF)
Light Source – Pulsed Xenon UV Flash Lamp
Detector – Photomultiplier Tube (PMT) Detector
Fiber Optic Cables – 2) x 1 meter cables; longer lengths available
FS UVF Probe Material – 316 Stainless Steel Probe - Std (*)
Range – ppm to %; Appl Dependent- Contact Factory
Response Time – Electronic Response is T90 in 2 seconds
Accuracy – Typically +/-1% of Full-Scale - Appl Dependent
Power Requirement – 24VDC Nominal (12 to 48VDC), 8.5 Watts
Enclosure – NEMA4X or EXD Configurations Available
Process Temperature – 400 Deg C (max)
Process Pressure – Up to 2,000 psig (max)
Probe Insertion Length – 8.66” (220mm); other lengths available
Operating 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 FS UVF Probe in other exotic alloys for corrosive sample conditions.

Specifications subject to change without notice.