OptiForce™

Accurate representation of the Triazine lifecycle

Sensitivity

100-1000 times more sensitive than absorption spectroscopy
Unaffected by solids, slurries, bubbles or solution re-absorption

Ideal fluorescence molecule:

- High excitation coefficient (Absorbs light well)
- High quantum yield
- Large Stoke's Shift
- High wavelength of emission

Transmitter

24 VDC power requirement (120 VAC available, requires AC/DC power supply)
Maximum power consumption: 1.0A at 24 VDC
Typical power consumption: 500 mA at 24 VDC
Analog output: 4-20 mA isolated (sourcing)
41-104°F operating temperature

Xenon Flash Lamp

±5 years lifespan
<30 seconds to equilibrate to 95% step charge
Voltage input: 11-28 VDC
Typical input DC current: 0.2 amps RMS
Peak input current: 1.0 amps

Proudly made in the USA

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imc@integrity-measure.com | www.integrity-measure.com

OptiForce™

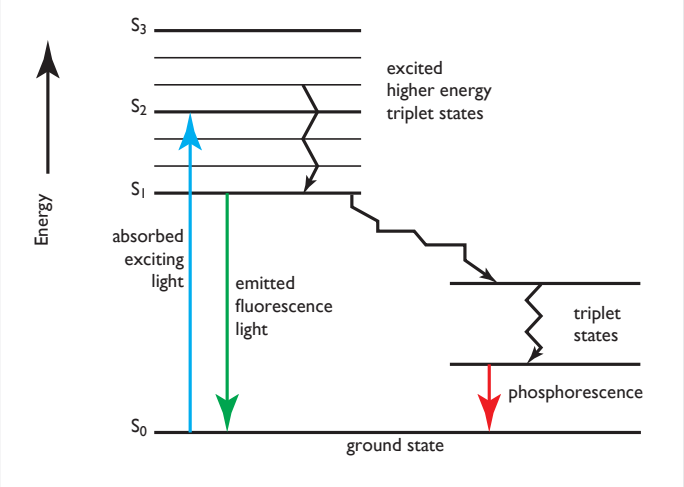
Triazine Life Cycle Sensor

Front Surface Probe

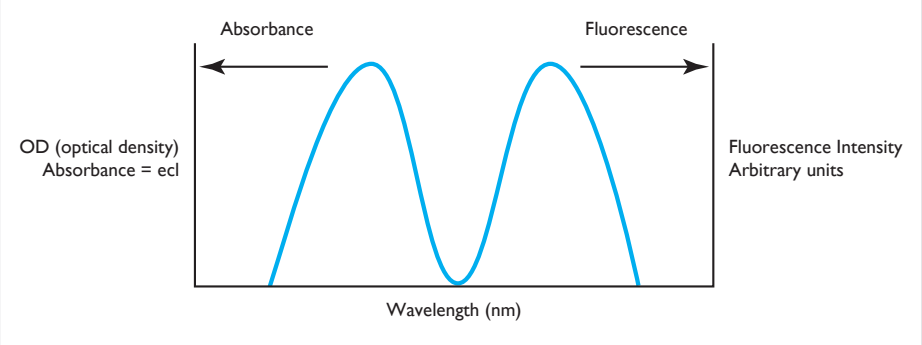
316 L Stainless Steel
Viton window sealing material
Installs in PG-13.5 fitting or 1/2" tube fitting complete with fiber optic cable
Temperature up to 572°F
Pressure rating at 3000psig at 100°F

Fluorescence theory

Jablonski Diagram



Fluorescence Intensity Measurements



Fluorescence intensity is measured in 'arbitrary units'
Signal strength depends on Fluorescence efficiency of compound, amount of energy on target, avoidance of inner filter effect and type of detector

In order to calibrate, measure relative to some convenient standard solution (fresh Triazine)