

Luminar 3010

Process AOTF-NIR Analyzer

BRIMROSE

The **Luminar 3010 AOTF-NIR Process NIR Analyzer** has proven to be the leading process spectroscopy technology for industrial plant monitoring and control.

Our patented state-of-the-art technology couples unmatched repeatability with minimized insertion loss to produce a system performance of outstanding quality while achieving signal-to-noise ratios which only full light transmission analyzers can perform.

The analyzer is designed for measuring of Chemical and Physical properties of Liquids, Solids, powders, gels, etc. in Real Production Environment, in any classified area by using a wide variety of process interfaces including fiber-optic probes and flow cells, attachments, etc allow **BRIMROSE** to implement successful solutions in many different industries.



Typical Applications

- Hydrocarbon: Gasoline, Diesel, and Kerosene blending
- Polymer: Analysis for chemical, physical, and mechanical properties of polyolefin and resins, polymerization monitoring, NCO values, catalyst identification on-line
- Pharmaceutical/Chemical: Reaction monitoring, pareutezal product inspection, solvent recovery, distillations, and 100% inspection
- Dairy: Fat, protein, pH, lactose, moisture, and more.
- Pulp & Paper: Green, white, and black liquor process control and monitoring

And much, much more.....

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Leadership through Technology

Specifications	
Luminar 3010	Process AOTF-NIR Analyzer
Spectral Range Options	850-1700 nm, 900-1800 nm, 1100-2300 nm
Measurement Modes	Transmission, Reflectance and Transflectance
Spectral Resolution	2-10 nm
Wavelength Accuracy	± 0.5 nm
Wavelength Repeatability	± 0.01 nm
Ambient Light Rejection	> 10 ⁶
Signal Digitalization	16-bit A/D (1 part in 65,536)
Non-Linearity	0.1%
Sampling Speed	Up to 16,000 wavelength/sec
S/N at 70% range (closed loop)	< 10µabs in transmission, and < 40µabs in reflectance
Process Control	16 A/D Channels, D/A Channels and 16 digital I/O Channels fully accessed via Macro, Modbus Interface
Enclosure	Hoffman stainless steel enclosure, NEMA 4X, 12X; Explosion-proof options available
Diagnostic	10 Built-in monitoring sensors
Optical Fiber Cables	Low OH silica fiber for Near-IR/fluoride fiber for extended Near-IR
Switching Time	< 0.25sec for any channels
Power Requirements	24 VDC, 110Watts, 110VAC 60Hz, 220VAC 50 Hz
Software	Windows based analytical software for data acquisition
Options	
<ul style="list-style-type: none"> • 601: Fan-cooled NEMA 12 enclosure • 602:TE-cooled NEMA 12 enclosure • 609:Vortex-cooled with Heat Exchanger NEMA 4X enclosure • Single fiber or fiber bundle • SMA or TNC connectors 	

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