Robust . Reliable . Accurate

Process NIR Analyzer with Built-in Multiplexer



Flow Cell - Solvent Recovery Monitoring

- Analyzing and Controlling up to 16 Sample Streams
- Brimrose Analytical Software Snap32!
- Process Interfaces Including Fiber-Optic Probes and Flow Cells



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Creating Solutions through Technology

■ 16 Sample Stream AOTF-NIR Multiplexer Solutions for Plant Monitoring and Control

Brimrose solid-state AOTF-NIR Process Analyzers with Built-in Multiplexer have proven to be the leading process spectroscopy technology for industrial plant monitoring and control. Up to 16 sample streams can be analyzed, monitored, and controlled with the speed of light to ensure real-time, in process quality control 24 hours a day, 365 days a year.

Brimrose's patented multiplexer 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.

A wide variety of process interfaces including fiber-optic probes and flow cells allow Bimrose to implement successful solutions in many different industries.





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Key Features

- Dual Beam, Pre-aligned Lamp Assembly, InGaAs Detectors
- Fast Scanning Speed 16,000 wavelengths/sec
- SNAP32! Brimrose Analytical Software with Brimrose MACRO Language
- Hoffman Stainless Steel Enclosure

Real-time Applications

- > Hydrocarbon: gasoline, diesel, and kerosene blending
- Polymer: chemical, physical and mechanical properties
- of polyolefin and resins, polymerization monitoring, NCO values, catalyst identification on-line
- Pharmaceutical/Chemical: reaction monitoring, solvent recovery, distillations, and 100% inspection
- > Dairy: fat, protein, pH, lactose, moisture
- Pulp & Paper: green, white, black liquor process control and monitoring

■ Technical Data Specifications

Spectrometer Name	Luminar 3060 AOTF-NIR Multiplexer
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	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	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
Channel Number	Up to 16
Switching Time	< 0.25sec for any channels
Power Requirements	24 VDC, 110Watts, 110VAC 60Hz, 220VAC 50 Hz
Software Package	Windows-based analytical software for data acquisition



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