#### Luminar 7030

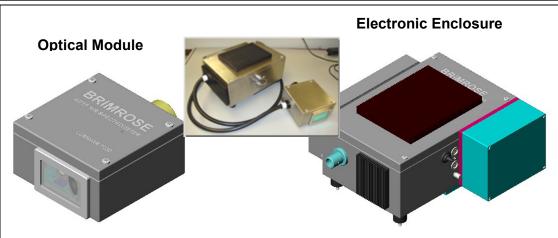
# IP55 Miniature Stainless Steel Free Space<sup>TM</sup> Process Analyzer



The Luminar 7030-IP55 Miniature Stainless Steel FreeSpace™ Process AOTF-NIR Analyzer is built to be placed directly into the production line. Its rugged design and solid-state technology allows an installation right into the production environment, and its miniature size allows implementation where space is tight, such as small vacuum dryers, pipes, fluid beds, etc. This high-speed NIR Analyzer is based on diffuse reflectance optics and can be integrated in a vast variety of housings to match your process area needs. Electronic Controller Unit is in a stainless steel box, with IP55 water tight - dust tight enclosure. Optical module is in a stainless steel box, water tight, dust tight.

**BRIMROSE** offers this rugged solid-state analyzer in a variety of different configurations to meet the high demand of different industries and applications.

The **Stainless Steel FreeSpace™** meets all requirements and standards for online applications in the pharmaceutical industry and is built to work reliably even in the toughest environmental conditions. The integrated **AOTF-NIR** technology offers outstanding S/N ratio combined with ultra high speed scanning rates and makes it possible to analyze in real time, on-line and with laboratory accuracy.



#### **Typical Applications:**

- Blender Control: Real-time homogeneity monitoring and blending control process
- Pharmaceutical: 100% inspection of solids, gels, liquids and powders
- Agricultural/Food: On-line food analysis for fat, protein, moisture, starch, etc.
- Polymer: In-site measurement of pellets, films, and coatings
- Textile: Cotton/polyester ratio directly in the web
- Drying Process: Direct placement on spray or fluid-bed dryers
- Pulp & Paper: Thickness and coating analysis on-line
- Tobacco: Measurement of nicotine, sugars, potassium, etc.

And much, much more.....

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| <b>Specifications</b>   |   |
|---|---|
| Luminar 7030  | IP55 Miniature Stainless Steel  |
|   | FreeSpace <sup>TM</sup> Process Spectrometer  |
| Spectral Range Options  | 850-1700 nm, 900-1800 nm, 1100-2300 nm  |
| Measurement Modes   | Diffuse Reflection  |
| Spectral Resolution   | 2-10 nm   |
| Wavelength Accuracy   | ± 0.5 nm  |
| Wavelength Repeatability  | ± 0.01 nm over more than 5 years service  |
| Wavelength Increment  | Software Selectable 1-10 nm   |
| Ambient Light Rejection   | > 10 <sup>6</sup>   |
| Vibration immunity  | Blenders, production machinery, conveyor belts                                      |
| S/N at 70% range  | < 30µabs in reflectance and transmission, for <5 seconds integration time           |
| Wavelength access time  | < 66 µsec   |
| Photometric Range   | 3.5 AU  |
| Linearity   | Better than 0.15%   |
| Signal Digitalization   | 16-bit A/D (1 part in 65,536)   |
| Sampling Speed  | 16,000 wavelength/sec   |
| Sample Area   | Ø6 mm   |
| Sampling Distance   | 55 mm   |
| Diagnostic  | 10 Built-in monitoring sensors  |
| Power Requirements  | 12VDC, (24 VDC special order), 90Watts, 110VAC 60Hz, 220VAC 50 Hz                   |
| Enclosure   | 300mm x 256mm x 145mm Stainless Steel<br>NEMA 4X; Explosion-proof options available |
| Outputs   | PC Interface via Ethernet connection  |
| Software  | Windows-based analytical software for acquisition and analysis                      |
| Options:  | Accessories:  |
| <ul> <li>Input/Output (I/O) Capability</li> <li>"SEALED" Battery operation</li> <li>Vortex Cooler with Heat Exchanger</li> <li>Wireless Communication</li> <li>Proximity sensor / Gravity Switch</li> </ul> | 731-S: Stand with Rotating cup  |

## **BRIMROSE**

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