

FT-NIR PROCESS SPECTROSCOPY

BEAM

Single-point FT-NIR Spectrometer for contactless measurements in process environments.

Innovation with Integrity

The BEAM is the first dedicated single-point NIR spectrometer unleashing the full power of FT-NIR spectroscopy, taking in-process control to the next level. It helps you to get the most out of your production by directly monitoring on the scene in real-time, improving your process variability. Optimized for solid and semi-solid material, it can be easily installed on pipelines, hoppers or over conveyor belts.

The solution for your industry

From inspecting incoming goods to process control and final product inspection, the BEAM can be applied at any level of the production chain across many industries, like the food, feed, polymer or pharmaceutical industry.

While improving control over the manufacturing process, process fluctuations can be reduced, and specifications more precisely met. This ultimately leads to cost savings by reducing waste and re-work and ultimately a fast ROI of the BEAM.

Broad spectral range & high resolution

Utilizing the full spectral NIR range only available to FT-NIR systems, the BEAM will master applications that were out of reach for most of the conventional single-point analyzers. Its high resolution gives you the best accuracy, time and again.

The BEAM at a glance:

- Full FT-power for all applications
- Maximum precision & long-term stability with RockSolid™ technology
- Dual-lamp operation mode for uninterrupted system availability
- Compact and lightweight for easy installation
- IP65 protected for harsh environments
- Future-proof connectivity

Precision & long-term stability

With its high-class optical components, the BEAM is immune to vibrations and other environmental influences. The rugged Rocksolid™ interferometer incorporating Cube Corner mirrors and a wear-free pivot mechanism ensures highest precision and long-term stability.

Fast & reliable in-process real-time analysis

The short measurement time of more than 250 scans/min delivers instant results, helping you to monitor and optimize your processes on the fly. Its dual source mode doubles the system availability by switching to the second source in case of blow out.

Install it where you need it

Connect the BEAM with Tri-Clamp flanges, a robust and safe connection to pipes and sight glasses. Due to its hygienic design, Tri-Clamp is the leading connection system in the food and pharmaceutical industries. To easily connect the BEAM to your process, various types of adapters are available.

Alternatively, install the BEAM in the required orientation directly into the process with a variety of mounting brackets.

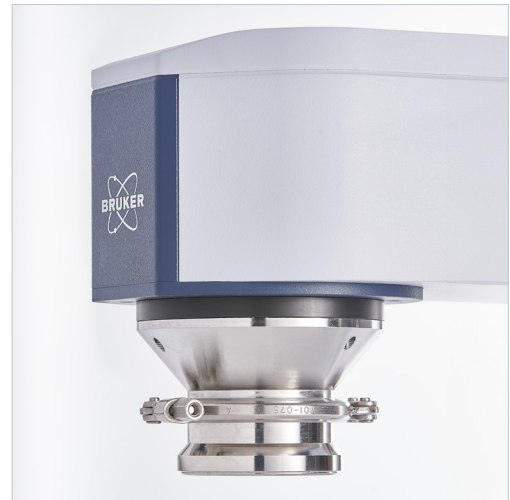
Laboratory Stand

Develop your methods in the lab for an easy transfer to the production line. The stand takes care of the proper distance when using either a Petri dish turntable or the supplied holder.

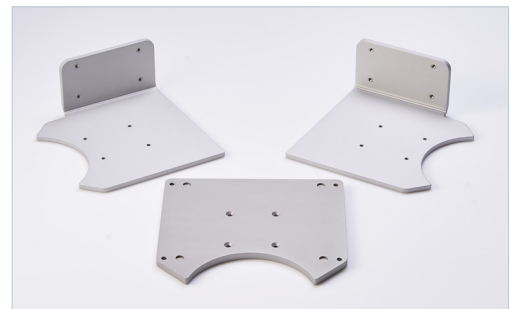
Future-proof connectivity

With the OPC industry-standard interface, the system can be integrated into any process control environment using a wide range of standard communication interfaces and protocols, including

- 4-20 mA
- Profibus DP
- Modbus
- Ethernet
- OPC DA
- OPC UA



Connect the BEAM with Tri-Clamp flanges to your system.



Different mounting brackets are available for easy installation.



Laboratory stand for easy method development in the lab.

Bruker Optics is continually improving its products and reserves the right to change specifications without notice.
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