



## • TANGO FT-NIR Spectrometers

Faster, simpler, more secure - with TANGO your NIR analysis speeds up. TANGO has exactly what users require of an FT-NIR spectrometer suitable for industrial use: Robustness, high precision and straightforward operator guidance.

- Proven FT-NIR technology by Bruker
- Easy-to-use touch screen operation
- Automated background management
- Small footprint
- Robust and precise optics
- Direct calibration transfer to and from all existing Bruker Optics NIR spectrometers
- Data exchange via network
- Complies with 21 CFR Part 11 requirements

Forget tedious training courses or specialized knowledge. TANGO makes it simple for you: with its intuitive user interface it guides the operators quickly and securely through the work flow. Also untrained staff can operate the spectrometer securely and error free. Good to know: the user interface is available in 17 languages.

### **Logical: Sample handling the easy way**

When it comes to sample handling, TANGO saves time and prevents operating errors. No sample preparation is necessary, no chemicals, no additional reagents. The sample is simply filled into the measuring cup or vial with the measurement being done through glass.

### **Automatic: Background measurements**

Contributing to the high precision of FT-NIR spectrometers is the exact alignment with the background. TANGO goes one step further: The background measurements are performed automatically without user intervention. This alignment can even take place if a sample is located in the sampling position. The perfect prerequisite for optimal and secure measurements at any time – without (human) errors.



Highest standards in production assure precision and reliability.



The results can be easily read from the clearly structured graphical interface.



Personal consultation and customer service guarantee a sustainable and efficient solution.

**Ergonomic:  
User comfort in all ways.**

Nowadays, with laboratory space being at a premium, it is difficult to locate a the new analyzer in the lab. This isn't an issue with TANGO due to its small footprint and ability to be positioned in any orientation - it can be operated from all three sides. The monitor swivels in all directions and can even be tilted in various positions to enable an optimum view. Alternatively, it can be placed flat on top of the spectrometer for a perfect viewing from above.

**Practical:  
Efficiency in every detail.**

TANGO demonstrates how easy NIR analysis can be, not just during measurements. The housing and touch-screen monitor are rugged and easy to clean – ideal for lab and at-line environments. The exchange of the light source, if required, can be done in a few seconds. Also the desiccant cartridge, which keeps the inside low on humidity can be changed easily.

**Transmission measurements:  
highest precision for liquids.**

TANGO for measuring liquids comes equipped with an active sample heater/cooler as standard. The temperature of the sample can be selected between +20°C and +80°C. A sensor is permanently checking the temperature of the sample vial. This allows for a fast temperature control of the sample and therefore quick and reliable results.

**Reflection measurements:  
analyze solids efficiently.**

TANGO for measuring solids contains a gold coated integrating sphere for analysis by diffuse reflection. This sphere ensures highly reproducible measurements of inhomogeneous samples. The diameter of the measurement spot is around 10 mm; the measured sample surface can be enlarged by using sample rotators.

**TANGO for all applications**

The TANGO offers an efficient and cost-effective analysis for material identification and quantification of constituents in a wide variety of application fields.

The most important areas of application cover:



Food and Beverage Industry



Feed Manufacturing



Pharma and Biotechnology



Chemical and Petrochemical



Polymer Industry

Covered by one or more of the following patents: DE102004025448; DE19940981. Additional patents pending.

**Bruker Optics**  
is ISO 9001 certified.

Laser class 1 product.

[www.bruker.com/optics](http://www.bruker.com/optics)

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