

MATRIX-F FT-NIR Spectrometer

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The MATRIX-F can be operated not only with conventional fiber optic probes and flow cells, but also with contactless measurement heads.

Depending on your individual needs the MATRIX-F can be equipped as follows:

MATRIX-F: classical FT-NIR spectrometer with fiber optic coupling for the use of flow cells and conventional probes (for solids and liquids).



MATRIX-F emission: special version of the MATRIX-F spectrometer for the use of fiber-coupled measurements heads for the contact-less measurements only.



MATRIX-F duplex: extension of the classical MATRIX-F FT-NIR spectrometers for the simultaneous use of fiber optic probes and fiber-coupled measurement heads.



Advanced Technology

The MATRIX-F is a dedicated FT-NIR process spectrometer that can directly withstand harsh environments.

This instrument uses state-of-the-art optics for outstanding sensitivity and stability in a compact module. Its innovative design provides consistent high quality results, less downtime, direct methods transfer and the possibility of new applications that less sensitive and precise instruments are incapable of. Full support of industry standard communication protocols guarantee an easy integration.

The MATRIX-F can also be installed in the laboratory as a stand-alone system for method development and then move directly into your process application. It is available as a free-standing unit with NEMA 4/IP66 (splashproof) housing, but can also be mounted in a standard 19 inch rack in a temperature controlled cabinet. The MATRIX-F can be equipped with a 6 port fiber optic multiplexer.

MATRIX-F ex-proof

The MATRIX-F is also available as an ex-proof, ATEX rated version, complying to the following standards:

- II 2G Ex px II T6 Gb
- II (1) G [Ex op is T4 Ga] II C

Maintenance

The MATRIX-F was designed for reliability and easy maintenance. Consumable components on pre-aligned mounts are user-exchangeable without any realignment of the optics. The instrument can be serviced quickly for minimal disruption of the manufacturing process.

Instrument Performance Validation

The MATRIX-F is equipped with an automated filter wheel which houses standard materials and filters for testing instrument performance. The OVP (OPUS Validation Program) software executes a series of performance tests, evaluating the instrument performance and ensuring that the instrument is operating within specifications - the precondition for applications in the pharmaceutical industry.

Connectivity

The CMET software offers an industry standard interface (OPC) which allows OPUS to be integrated in any process control environment, using a wide range of standard communication interfaces and protocols, including 4-20mA, Modbus, Profibus DP and OPC.

Technologies used are protected by one or more of the following patents: US 7034944





MATRIX-MF
FT-IR On-line Reaction Monitoring



TANDEM
Fully automated On-line Tablet Analysis

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