

MATRIX-MF FTIR Process Reaction Monitoring

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Robust Design

The MATRIX series' award winning design protects the optics in a dedicated sealed compartment. The permanently aligned RockSolid™ interferometer and Digtect™ detector electronics ensure high quality spectra, even in the harshest environments. Although the instrument is designed for a process environment, its small footprint can also make it an ideal instrument for laboratory-based applications.

Bruker Quick Connect

The MATRIX-MF offers Bruker's proprietary quick connector design (BQC) ensuring easy and reproducible fiber optic probe exchange, providing reproducible results. Utilizing the automated built-in multiplexer up to 6 reactions can be monitored by a single instrument.



Fiber Optic Probes

measurements, which helps fully utilize the benefits of the information rich mid-IR spectroscopy. A wide range of probe adaptations, including the patented IN350T diamond ATR probe, can be attached to the unit for in-situ analysis.



The fiber probes combine a two reflection ATR probe head with the excellent performance of MIR-silver halide fibers.

[IN350-T](#): Diamond ATR fiber probe
(Ø 6 mm), also for use in ATEX areas

[IN351](#): Diamond Micro ATR fiber probe
(Ø 3.17 mm)

[IN355](#): Diamond ATR fiber probe
(Ø 6.3 mm)

[IN356-EX](#): Diamond ATR fiber probe
(Ø 12 mm), also for use in ATEX areas

Other ATR crystals like Silicone are also available.

Easy Process Integration

The MATRIX-MF can be used as a standalone system in your lab. Its small footprint allows it to fit into standard 19 inch racks in process enclosures. The system can be controlled by wide range of industry standard communication protocols and interfaces (such as 4-20 mA, OPC, Modbus, Profibus DP etc.) which makes integration into a process system simple.

Maintenance and Validation

The OPUS Validation Program (OVP) can execute a series of performance tests utilizing the built-in automated filter wheel. The hardware performance and the consumables are monitored to determine the operation within desired specifications. The MATRIX series is designed for reliability and easy maintenance; individual consumable components are on pre-aligned mounts and can be quickly exchanged by the user without any realignment of the optics.

MATRIX-MF ex-proof

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

II 2G Ex px II T4 (T6)

II (1) G [Ex op is T6] IIC





MATRIX-F
On-line FT-NIR for Process Control

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