

GLADIUS BEAM

Spectroscopic Reflection Probe

Ideal for reflection measurements in the process without sample contact



The Hellma [Gladius Beam](#) is ideal for reflectance measurements in applications that require a distance between the probe and the measurement object. The reflectance probe enables non-contact measurement of solid or opaque media from a distance of several centimeters. Thanks to the innovative probe design, both the distance and the diameter of the measuring range can be adjusted, while stray light is efficiently reduced.

AREA OF APPLICATION

Possible areas of application for this probe are, for example:

- Non-invasive determination of residual moisture after a drying process
- Analysis of the product composition on a conveyor belt
- Checking the solvent content at the outlet of a spray dryer

HIGH FLEXIBILITY

The probe can be used with almost any standard spectrometer type in the visible or near infrared range. The sample distance is variably adjustable from 25 mm to 100 mm.

REDUCTION OF DIRECT REFLECTION

Thanks to an optimized beam path, directly reflected light and scattered light are reduced as far as possible.

BENEFITS

- Flexible use
- Compact design
- Minimal stray light values

PRODUCT CONFIGURATION

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| Model | Gladius Beam |
| Measurement Principle | Reflection |
| Outer Diameter | 31.75 mm |
| Optical Path / Focus | Variable, sample distance adjustable from 25 mm to 100 mm, diameter of illumination area: 5 mm at 50 mm distance |
| Optical Material | SF-5 glass |
| Probe Barrel Material | Aluminium |
| Sealing Technology | Epoxy-glued |
| Spectral Range | NIR fiber bundle with 78 fibers |
| Optical Connection | 2 m glass fiber with stainless steel and 2x F-SMA connector |
| Fiber Optics | Standard glass fiber 2x 39 fiber bundle, active area 1.7 mm diameter |
| Maximum Immersion Depth | Contactless measurement |
| Process Connection | Without flange |
| Maximum Pressure | Atmospheric pressure |
| Temperature | 5 °C to 100 °C |
| Scope of Delivery | Optical immersion probe, manual, customer information drawing, transmission test protocol, transport packaging |