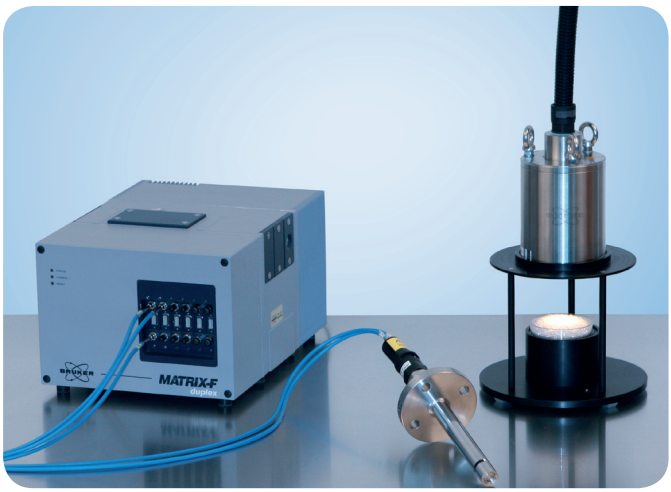
Bruker Optics

Product Note N39-10/07

Q412/A
NIR sensor head for non-contact analysis



The fiberoptic NIR sensor head contains 2 tungsten sources which illuminate the sample. The scattered light is collected and guided via a fiber optic cable to the spectrometer. This way, a contactless measurement can be performed remotely, opening a whole array of new applications. The measurement head can either be installed above a conveyor belt, or flanged to a reactor/bypass using a customized adaptation.

Specifications
- Protection: NEMA4, IP66
- Illumination: 2 air cooled NIR light sources (12V, 5W) operation and diagnosis via OPUS
- Measurement area: 10mm
- Working distance: 100mm
- Distance to spectrometer: 5m, extendable
- Housing: Stainless steel (1.4301), Sapphire; Sealing: EPDM
- Diameter: 125mm; Height: 155mm (plus space for the optical fiber)
- Weight: 4.2kg
- Power requirements: 100-240 VAC, 50/60 Hz, 120 W
- Environmental conditions: Head: 5-40°C; Power supply: 5-35°C

As with normal fiber coupled probes, up to six heads can be connected to one MATRIX-F spectrometer (emission/duplex). The computer controlled background measurement allows validation measurements (PQ) during the running process.

One control cable for lamp switching, diagnosis and power supply connects the sensor head with the spectrometer (external box).

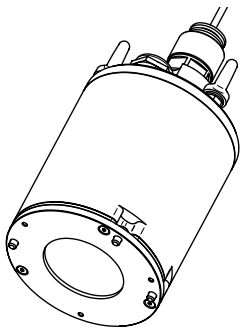


Fig. 1 Isometric drawing of the measurement head

Recommended accessories:
- Protection conduit (I28745)
- Laboratory mount S422 for performing calibration measurements with Q412/A in experimental setups in the laboratory
- A customized process adaptation (IXN412-A), if Q412/A is flanged to a reactor/bypass, is available on request.

Option: Extended distance to the spectrometer
- Control cable extension with coupling box (Q412-Lz)
- Fiber optic cable IN227-X
- Protection conduit (I28746-I28751)

For more information, visit : www. brukeroptics.com