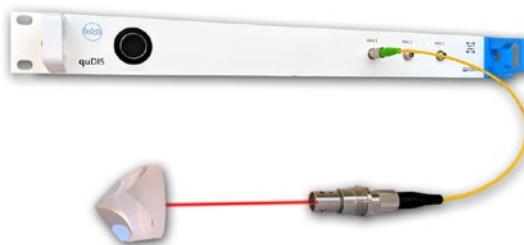


# quDIS

## Interferometric distance measurement



### Key Features

- Signal stability < 0.05 nm
- 20 ... 1400 mm working distance
- 25 kHz bandwidth
- 1 m/s target speed
- 3 sensor axes, multiple devices

### Applications

- Interferometric distance measurement
- Beam interrupt compensation
- Vibration analysis
- Angular measurement
- Environment analysis

### quDIS Specifications

#### Sensor

Sensor axes	3
Working distance *1	20 ... 1400 mm
Resolution	1 pm
Signal stability *2	< 0.05 nm
Bandwidth	25 kHz
Max. target velocity	1 m/s
Fiber input connectors	FC/APC Mating Sleeves

#### Interferometer

Laser source	DFB laser (class 1)
Laser power	< 400 µW
Wavelength (IR)	1 535 nm
Laser linewidth	<5 MHz

#### Alignment Laser \*3

Laser source	Fiber-coupled diode
Laser power	< 1 mW
Wavelength	650 nm

#### Interfaces \*3

PC interface	USB 3.0
Digital out	AquadB & HSSL
Connector	HDMI
Signal levels AquadB / HSSL	LVTTL / LVDS

#### Operation

Operating systems	Windows, Linux
Supplied software	GUI, DLL, LabView, Python, Command line
Alignment support	Numerical, graphical

#### Hardware

Dimensions	440 x 350 x 50 mm
Weight	4 kg
Power consumption	< 30 W, at 90 to 264 VAC

#### AMU - Ambient measurement unit \*3

Dimensions	38 mm x Ø58 mm
Connector	RJ45
Cable length	4 m
Weight	75 g
Sampling rate	10 Hz
Temperature	±0.1°C (-5 ... 50°C)
Pressure	±1 hPa (300 ... 1100 hPa, 0 ... 65°C)
Relative humidity	± 2 % (10... 90% RH, 5... 55°C)
AMU accuracy	±1 ppm

\*1: sensor head dependend    \*2: RMS@ 100Hz, 2s, 200mm    \*3: optional available

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