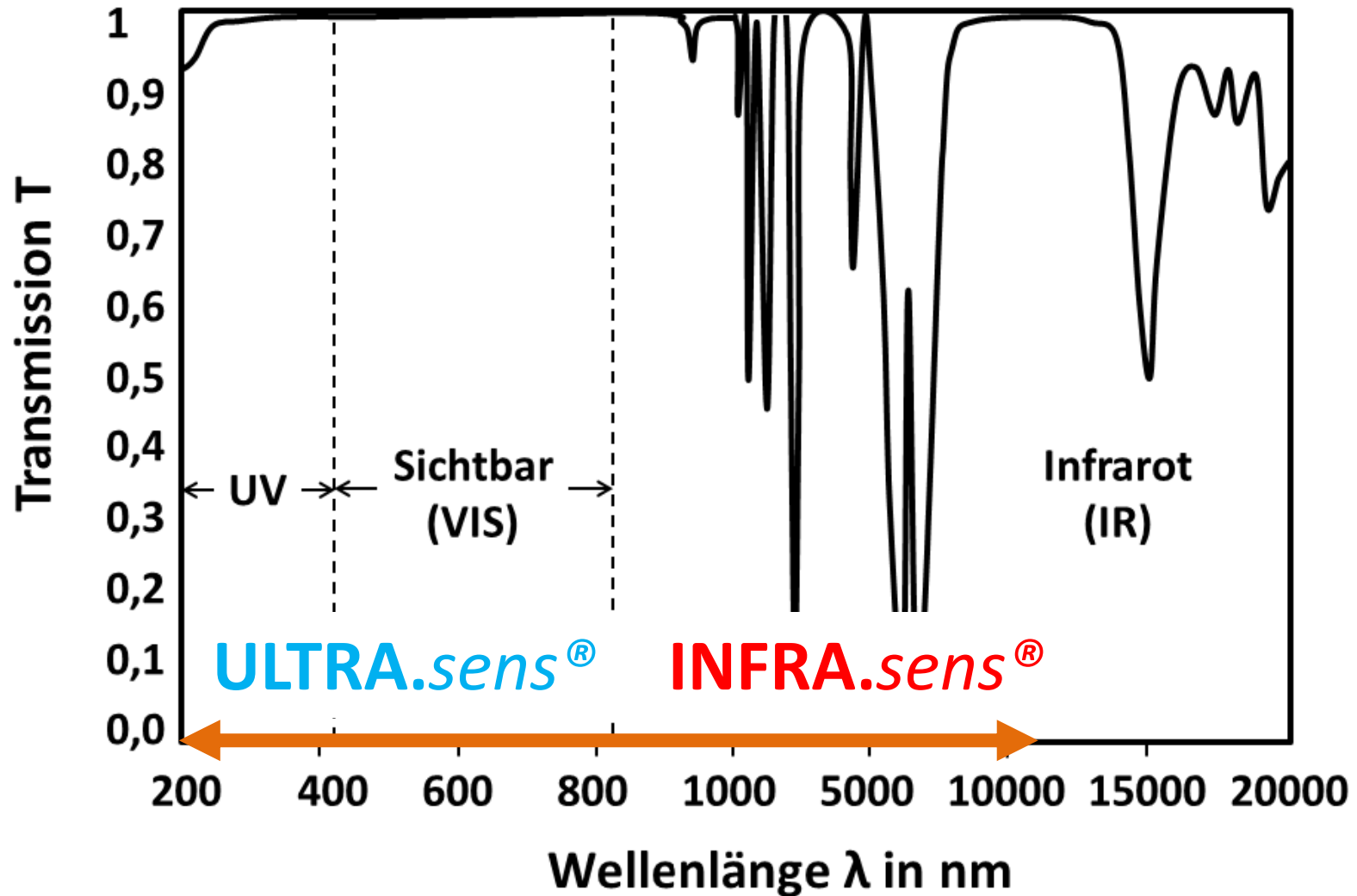
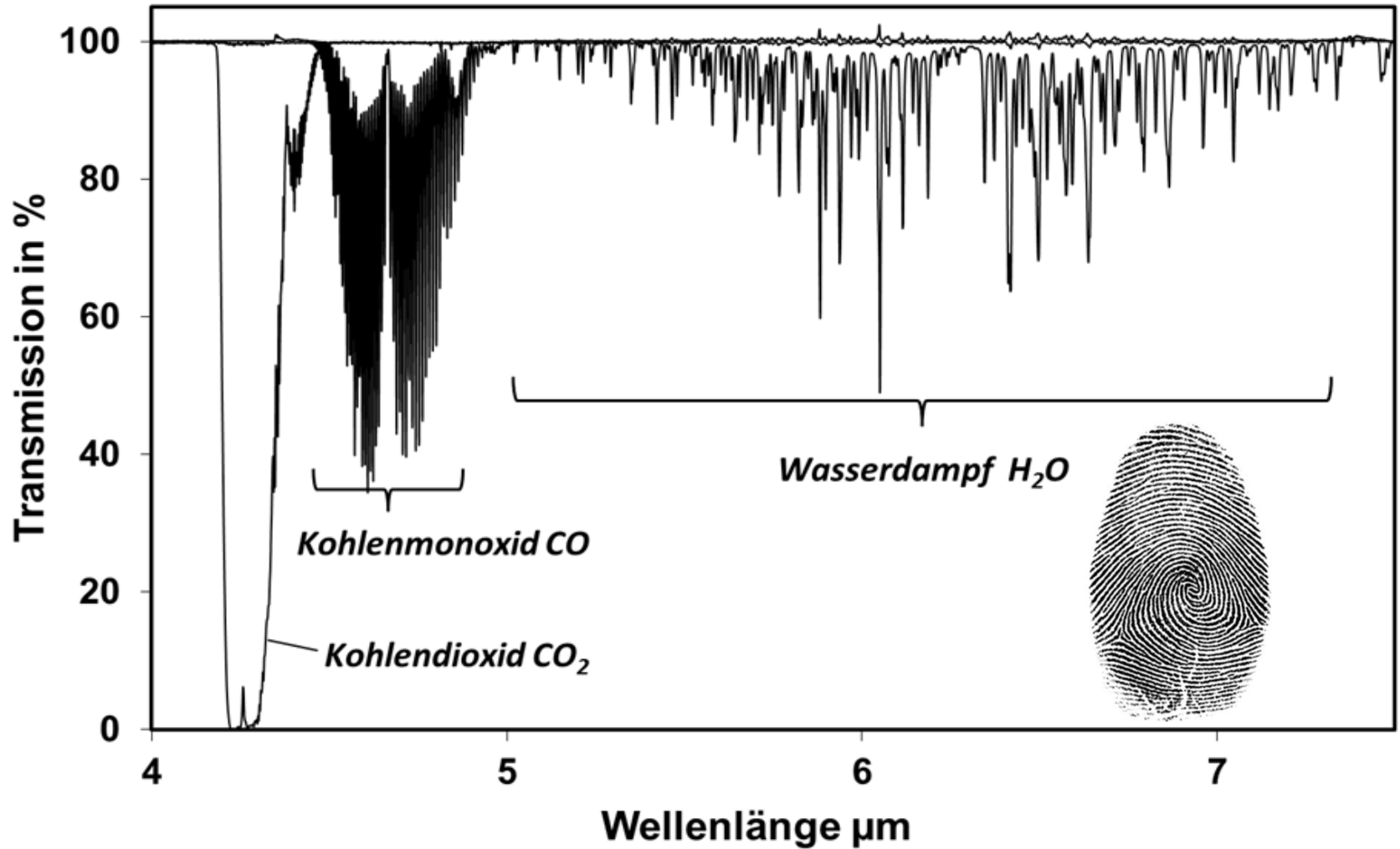


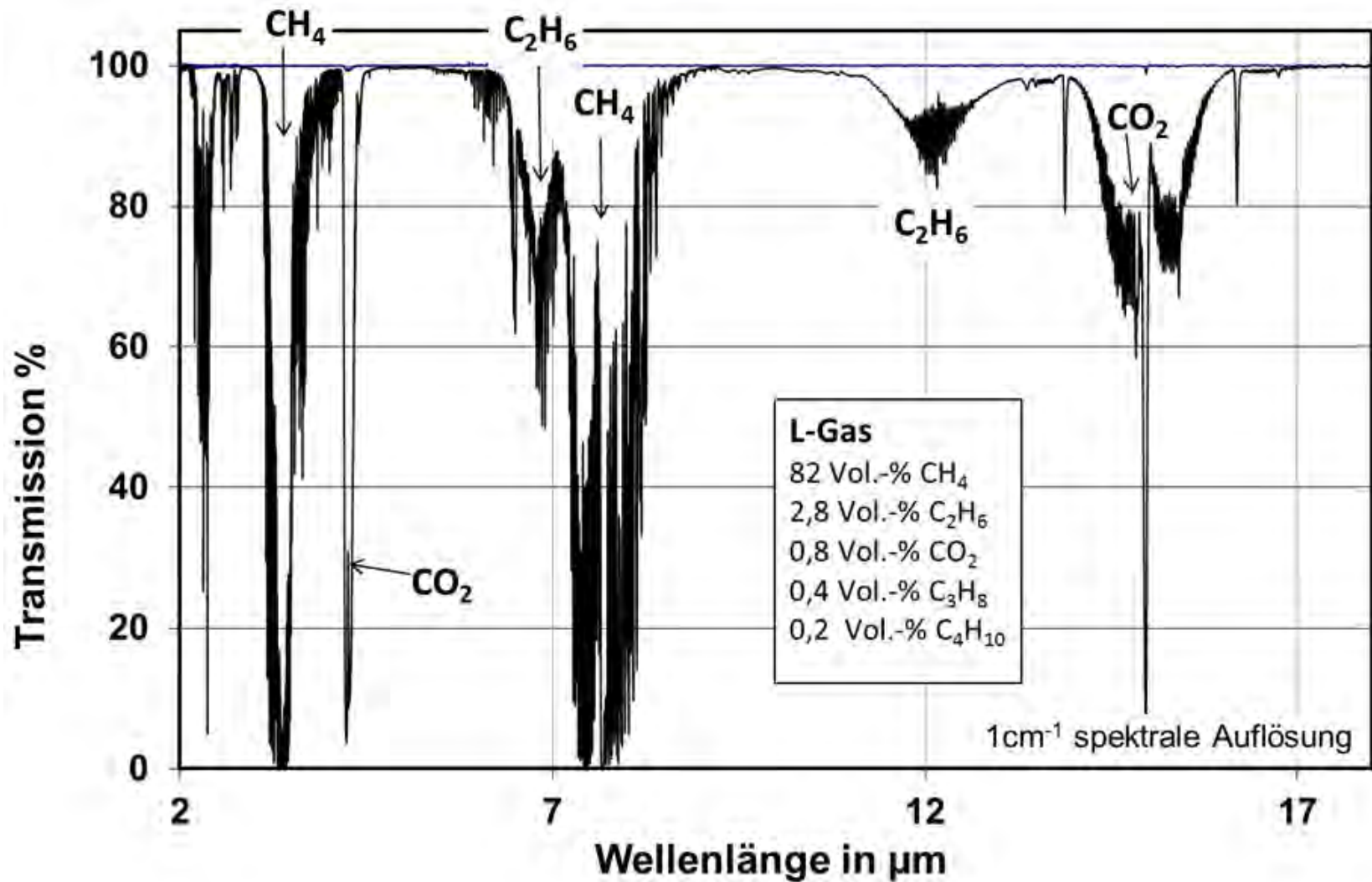
ULTRA.sens[®] + INFRA.sens[®]

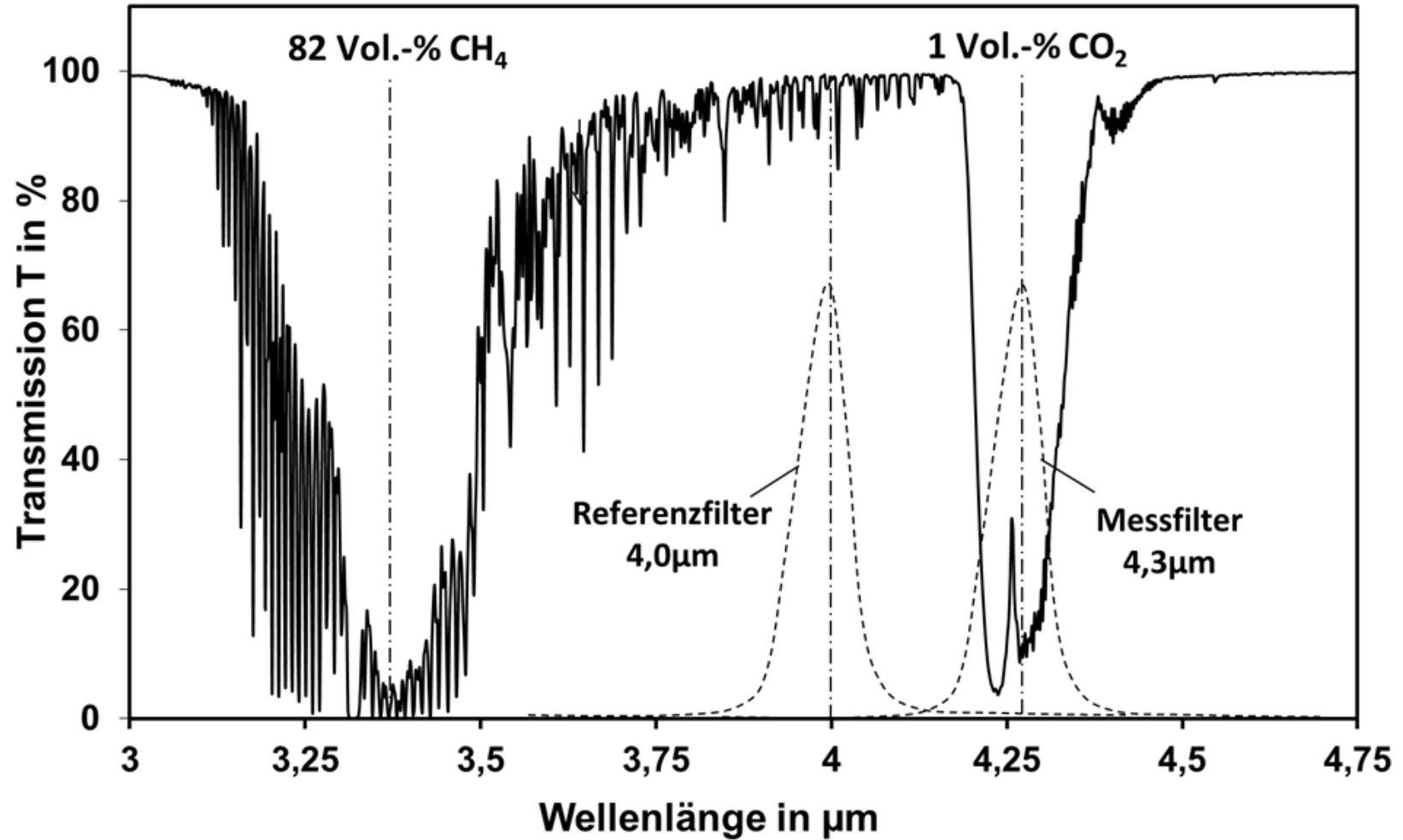
Ein neuartiges Gasmesssystem auf der Basis der

Absorptionsfotometrie für die Umwelt- und Prozessmesstechnik

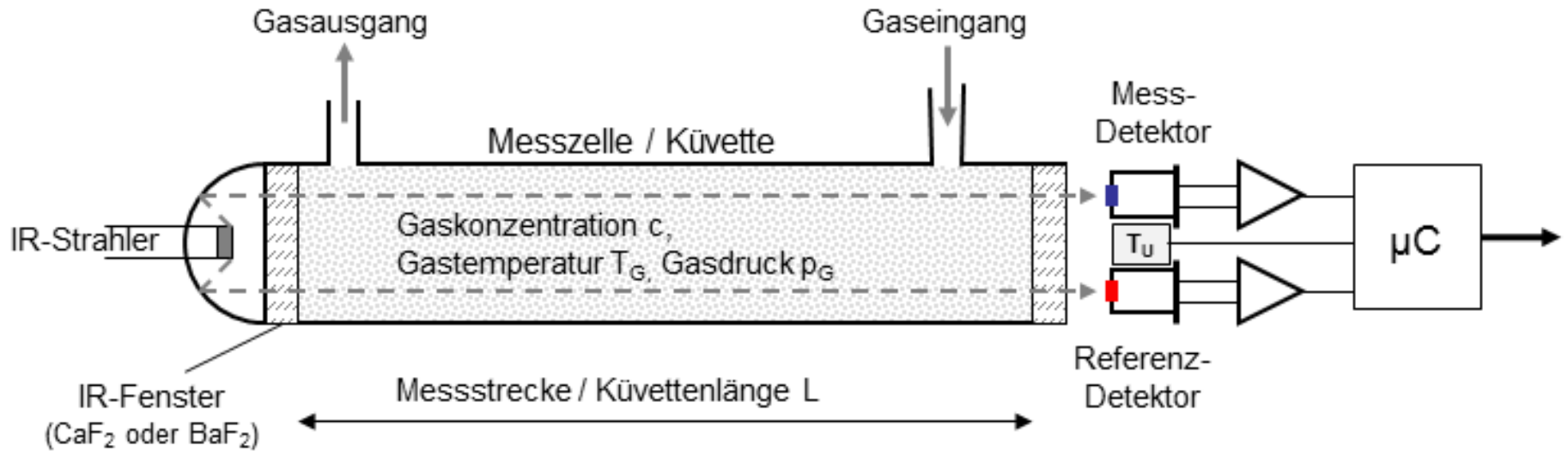




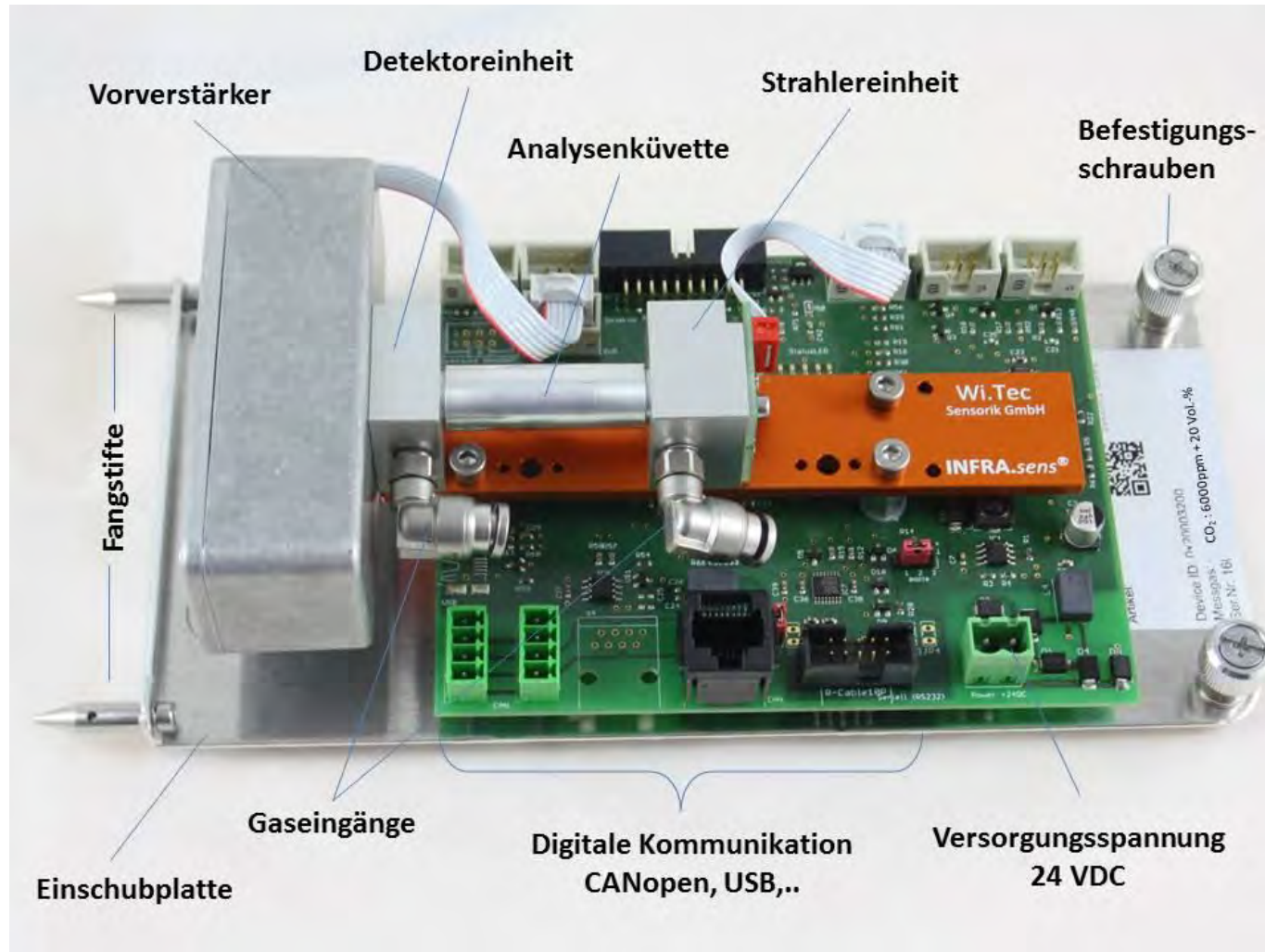




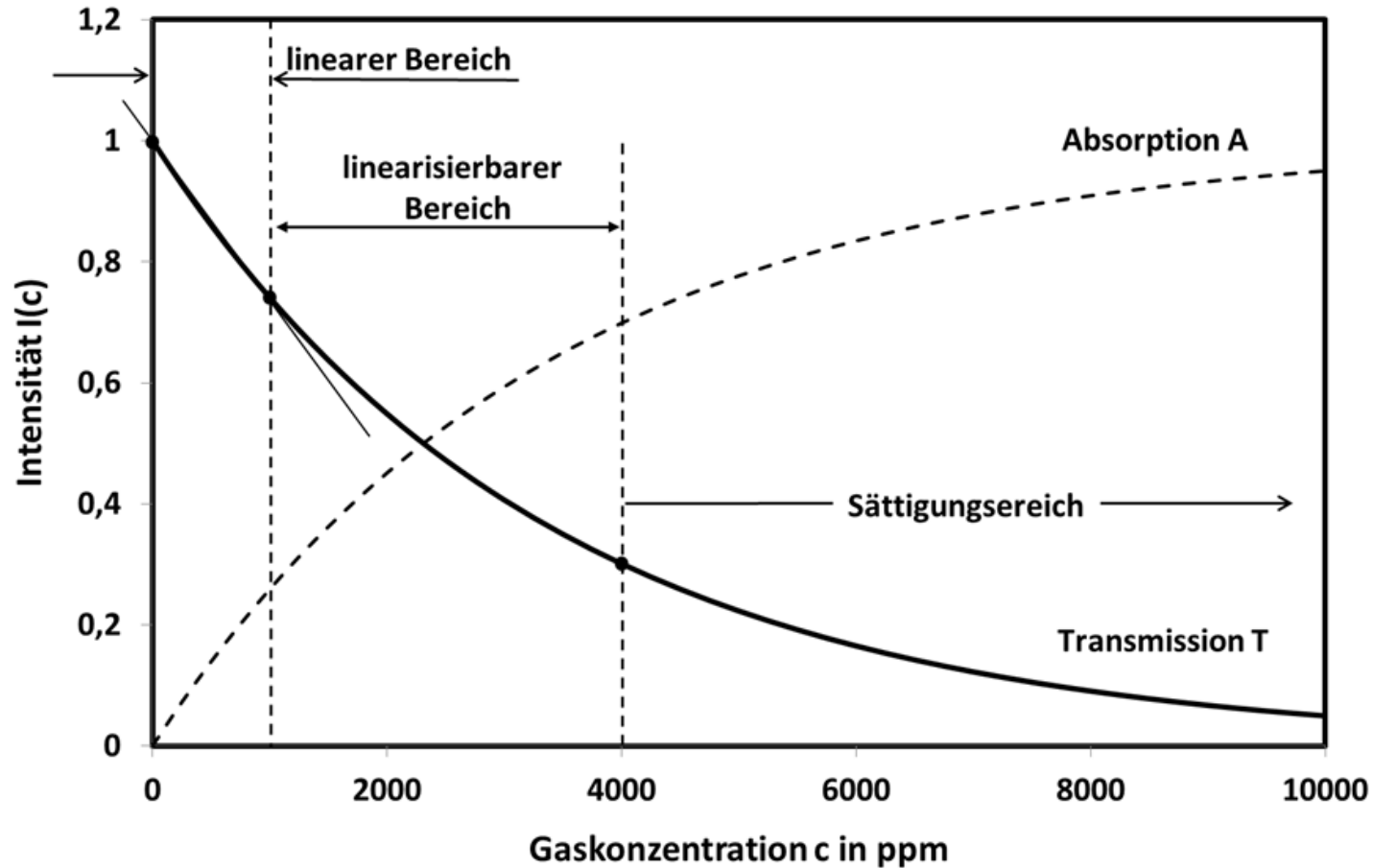
**Physikalisches Prinzip
NDIR**



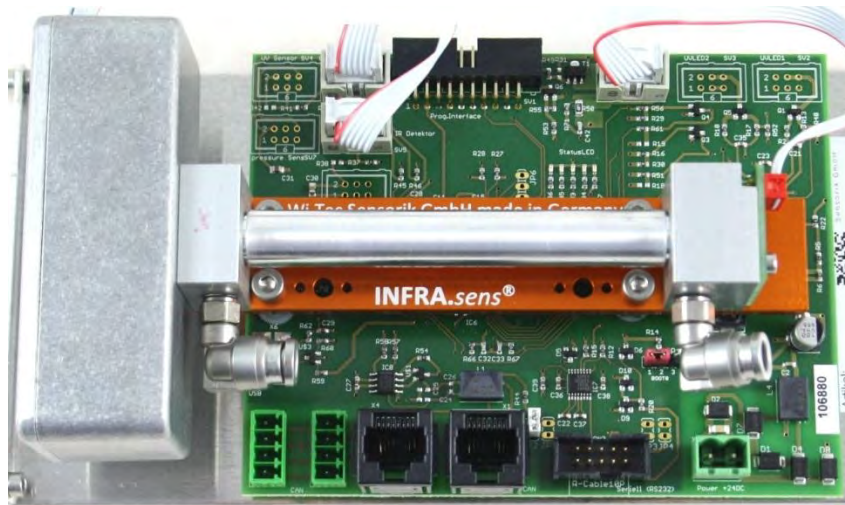
Modulaufbau



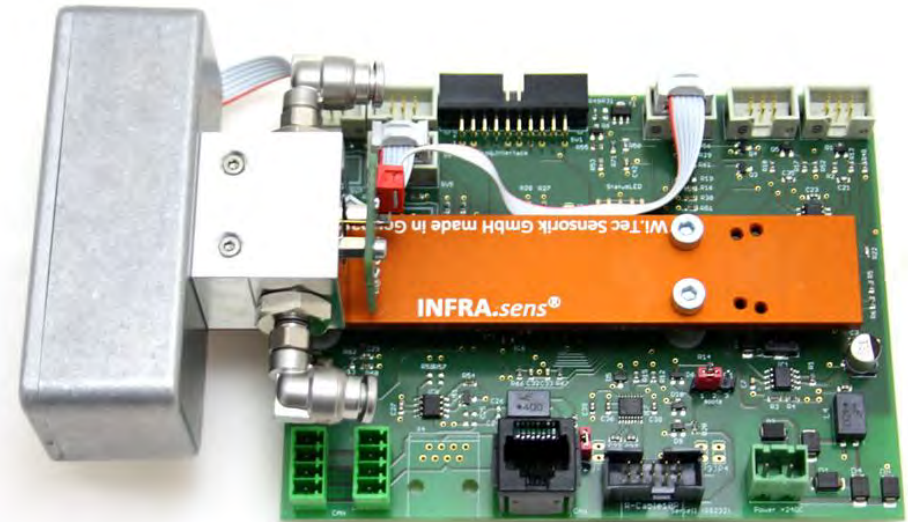
$$I(c) = I_0 \cdot \exp(-\alpha \cdot c \cdot L)$$

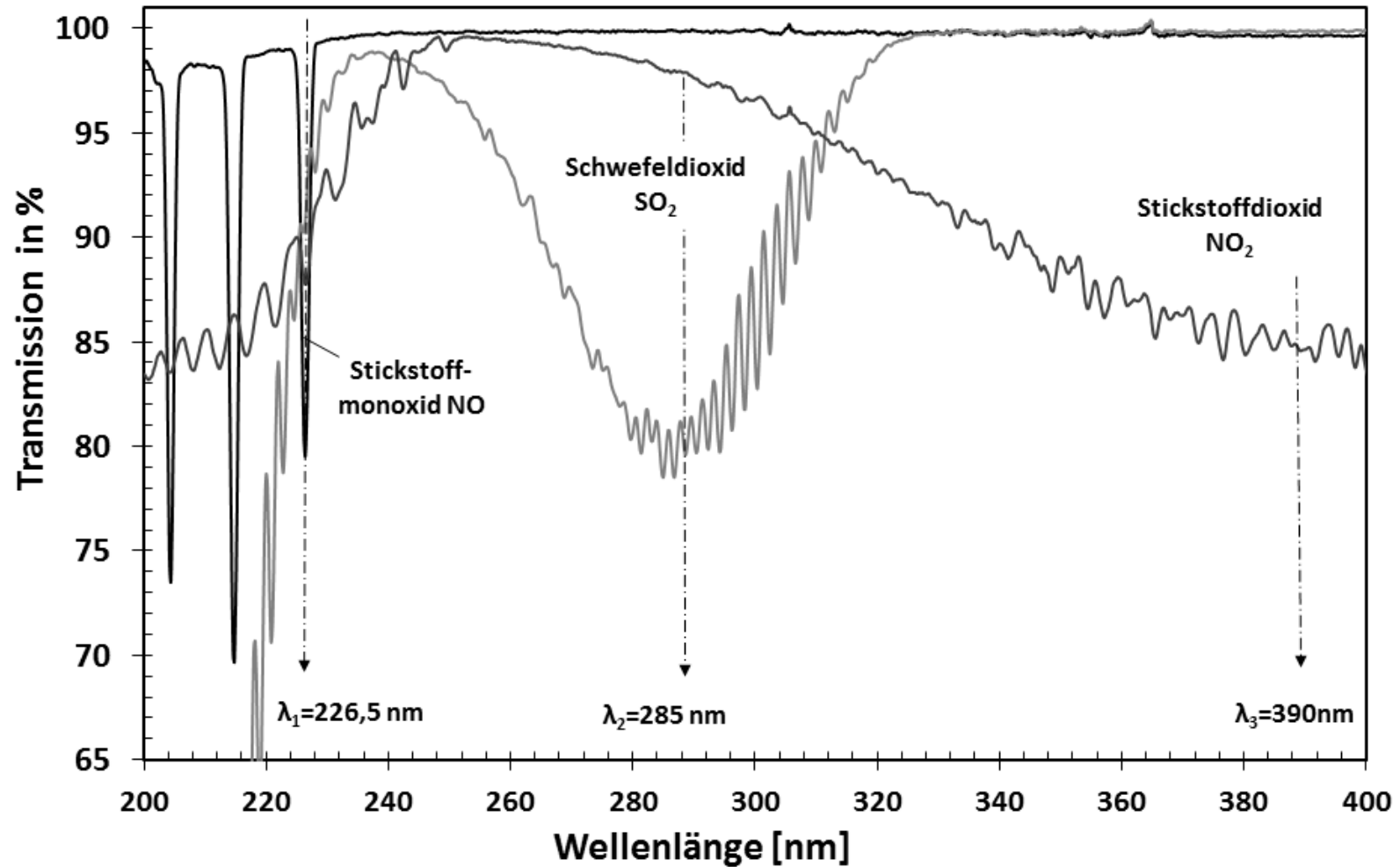


100 mm Küvette für den ppm-Bereich

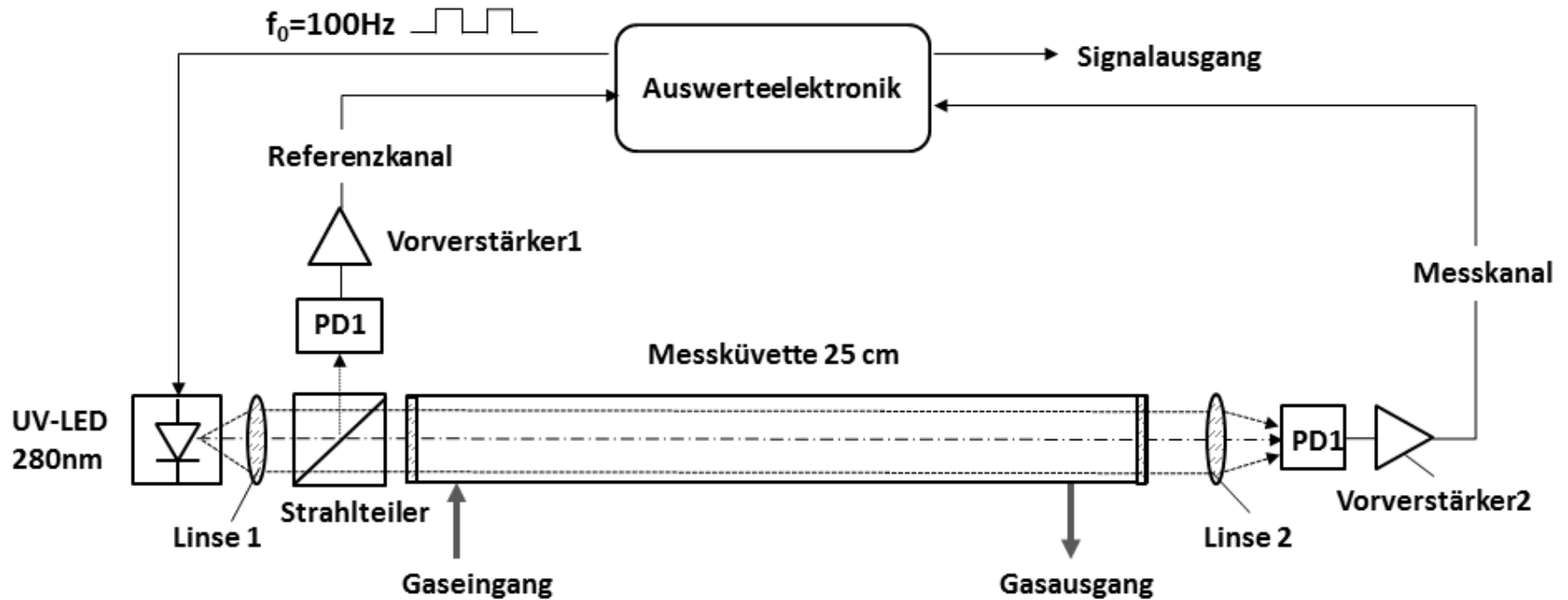


1 mm Küvette für den Vol.-%-Bereich



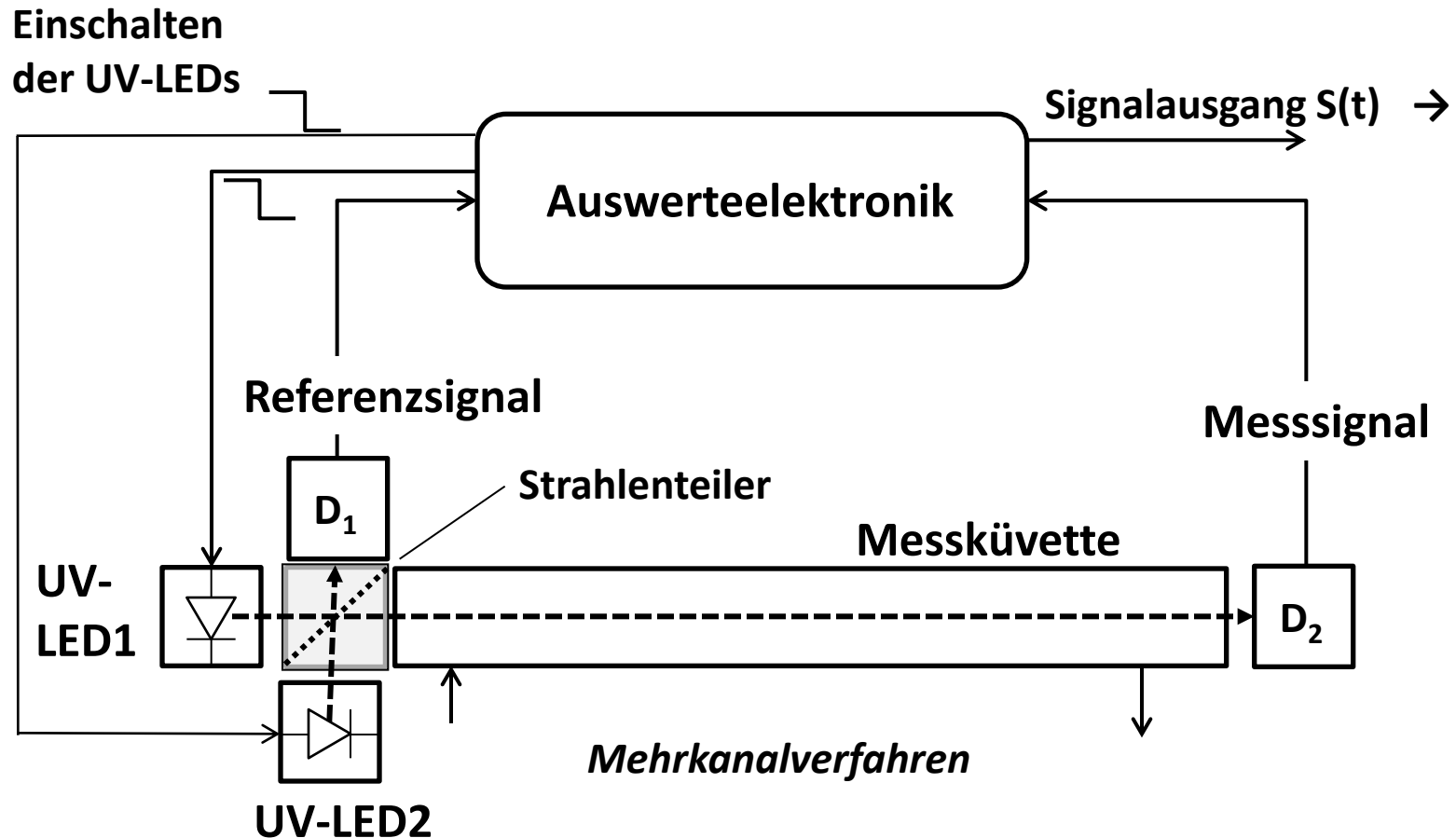


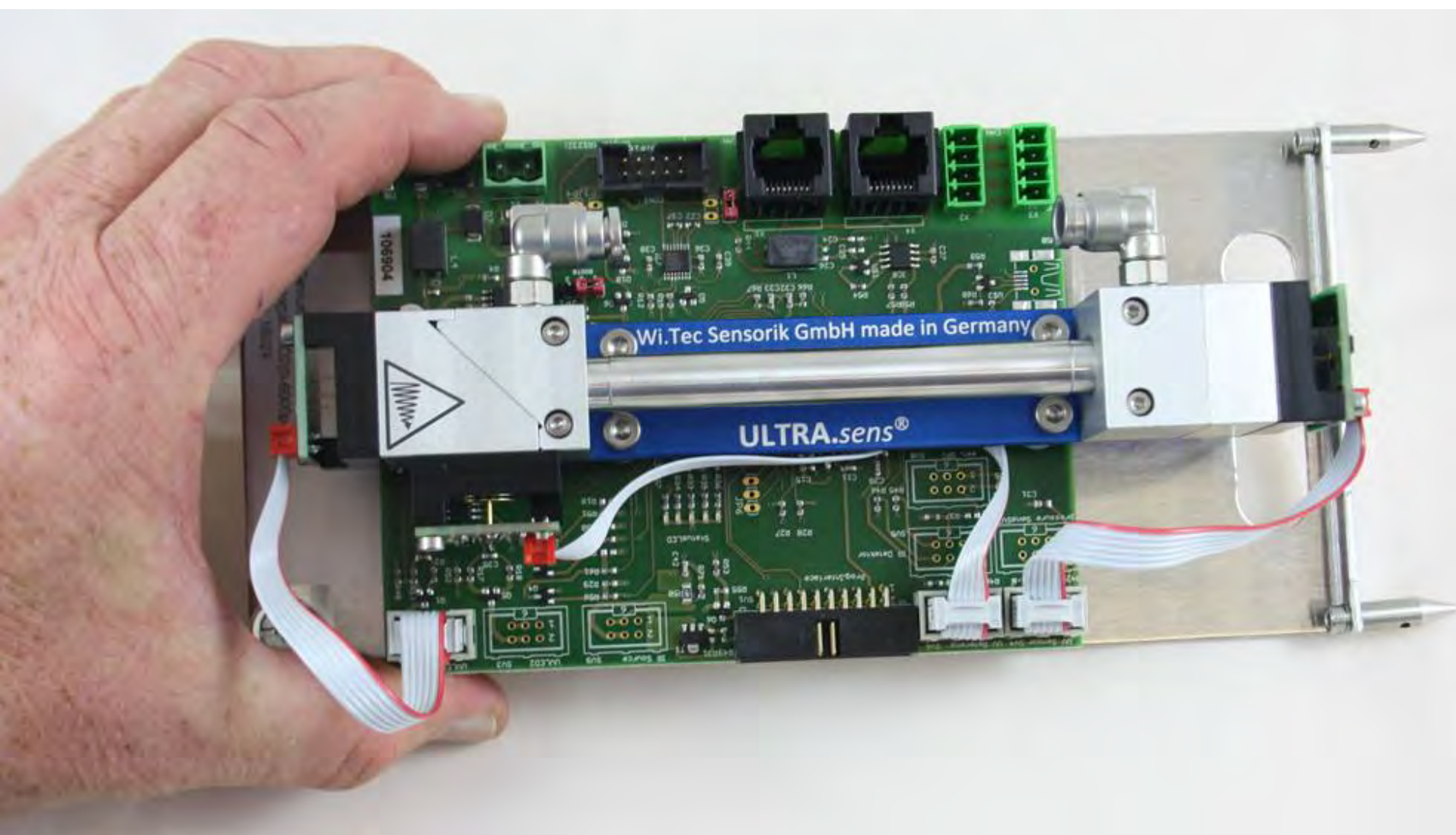
Physikalisches Prinzip NDUV

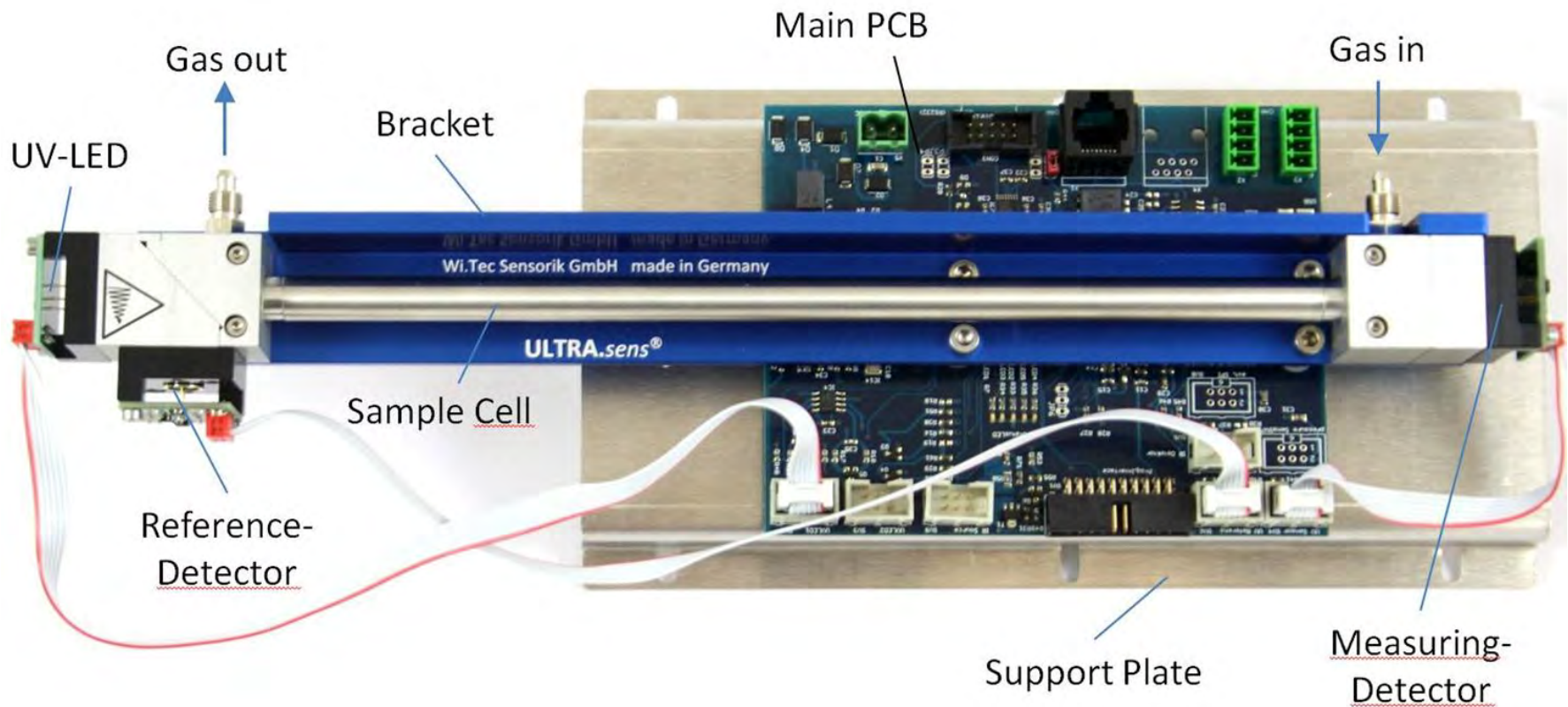


Einkanalverfahren

*Physikalisches Prinzip
NDUV*





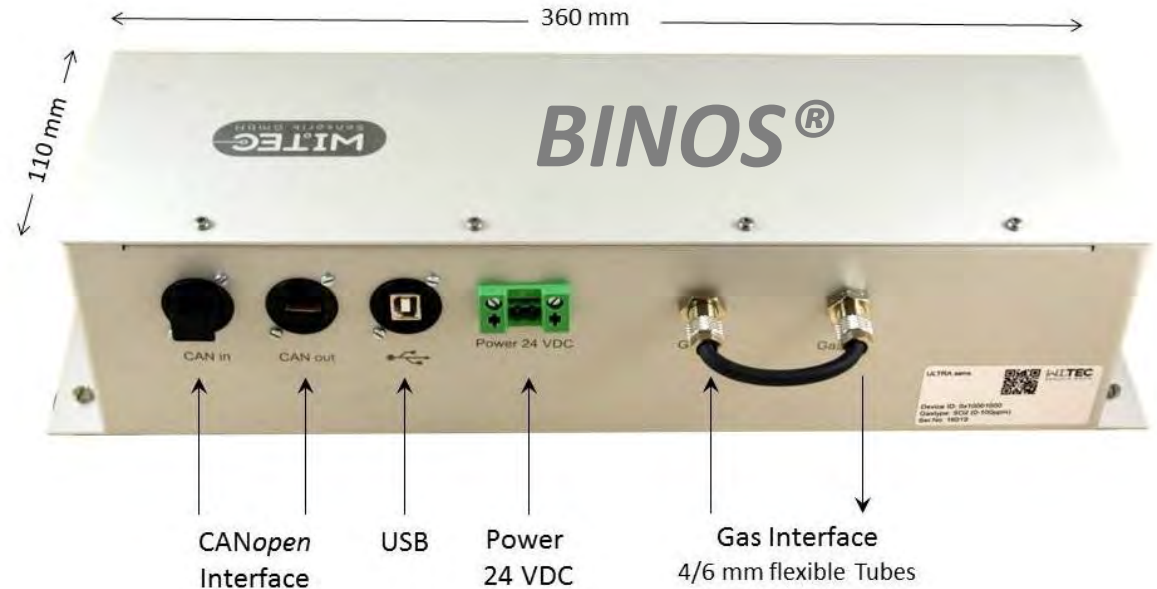


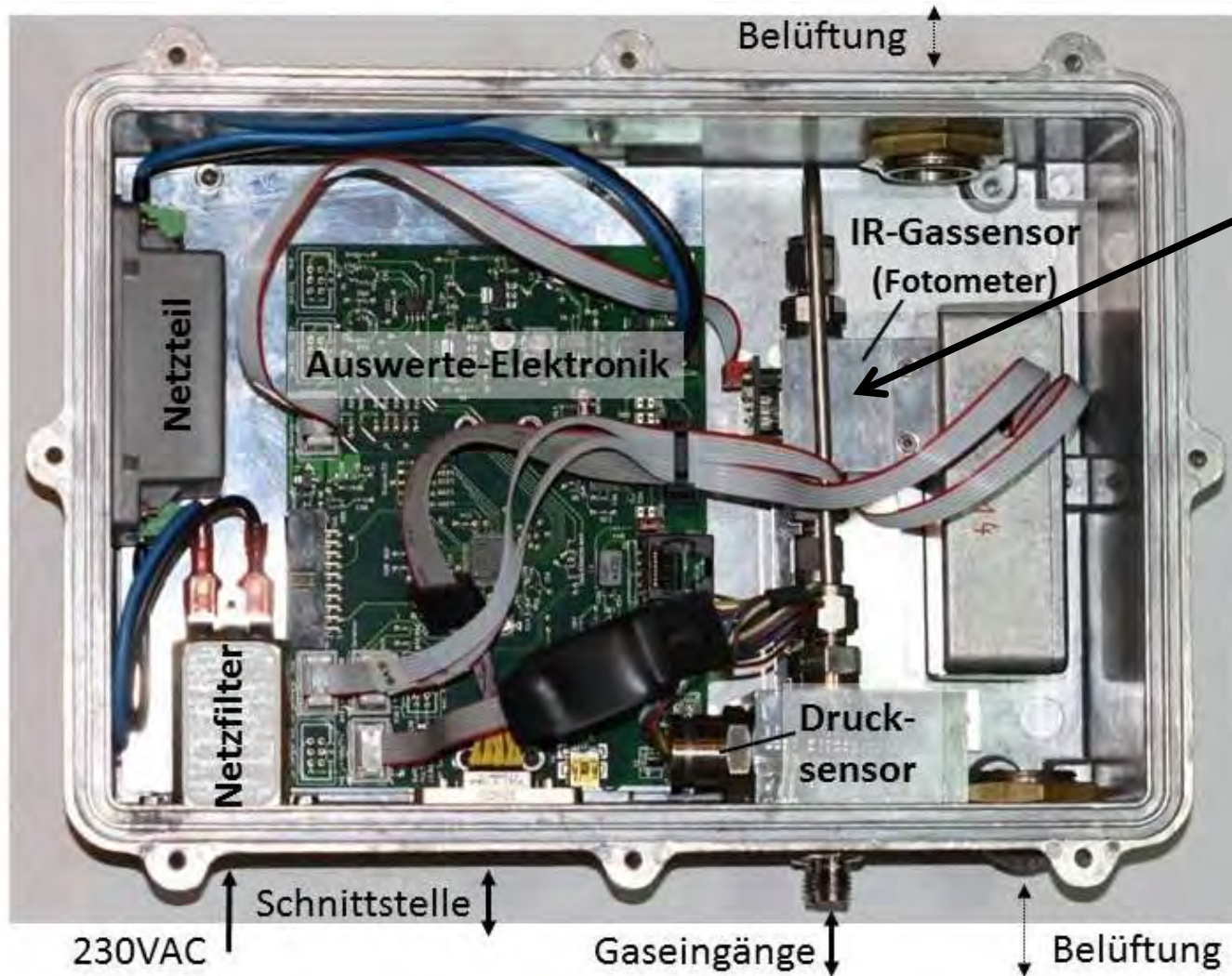
Gehäuseintegration

BINOS = 2x ULTRA.sens®

BINOS = 2 x INFRA.sens®

**BINOS = 1 x INFRA.sens®
1 x ULTRA.sens®**





Gehäuseintegration

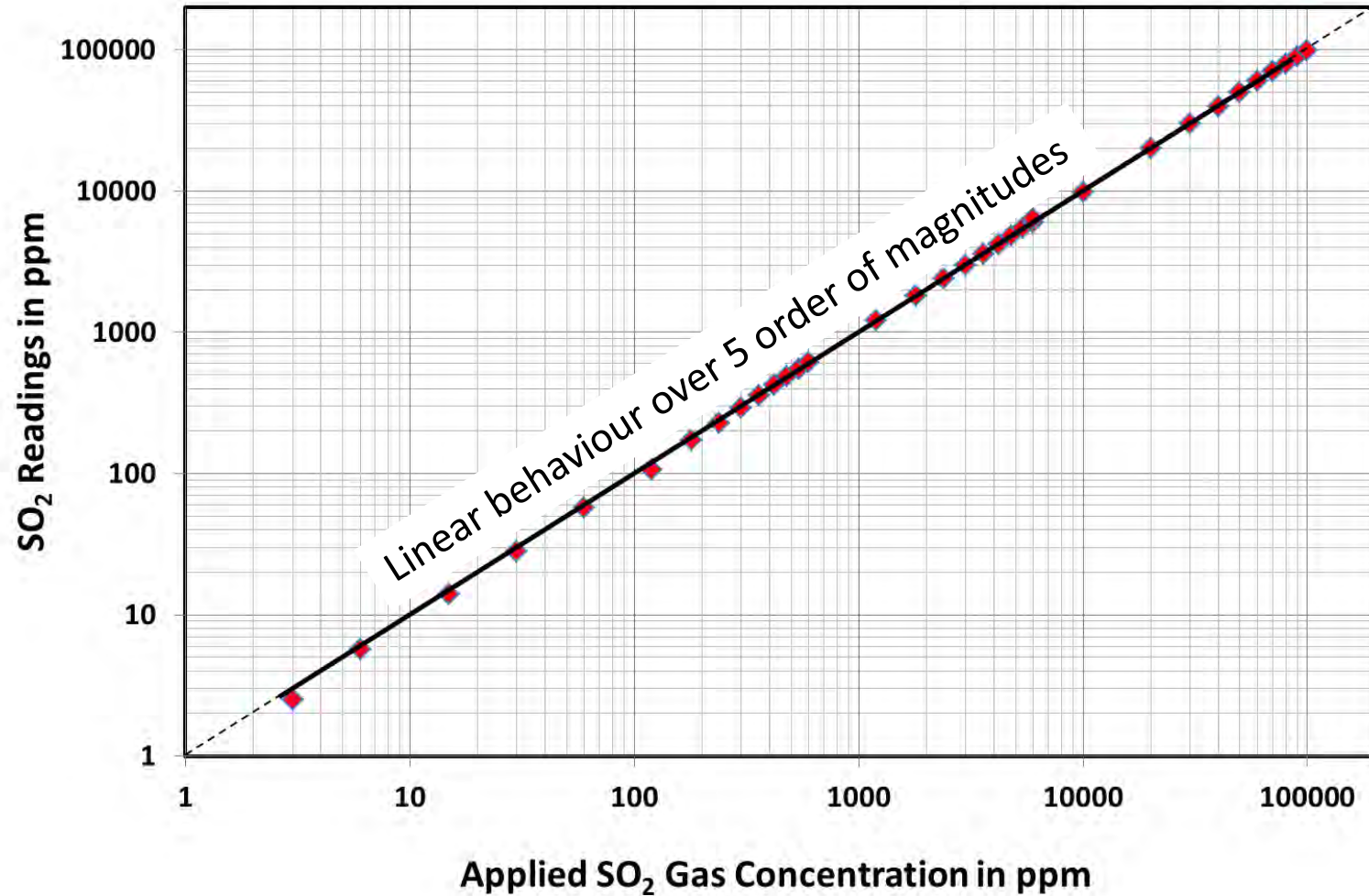
16 bar Gasdruck

Projektpartner:

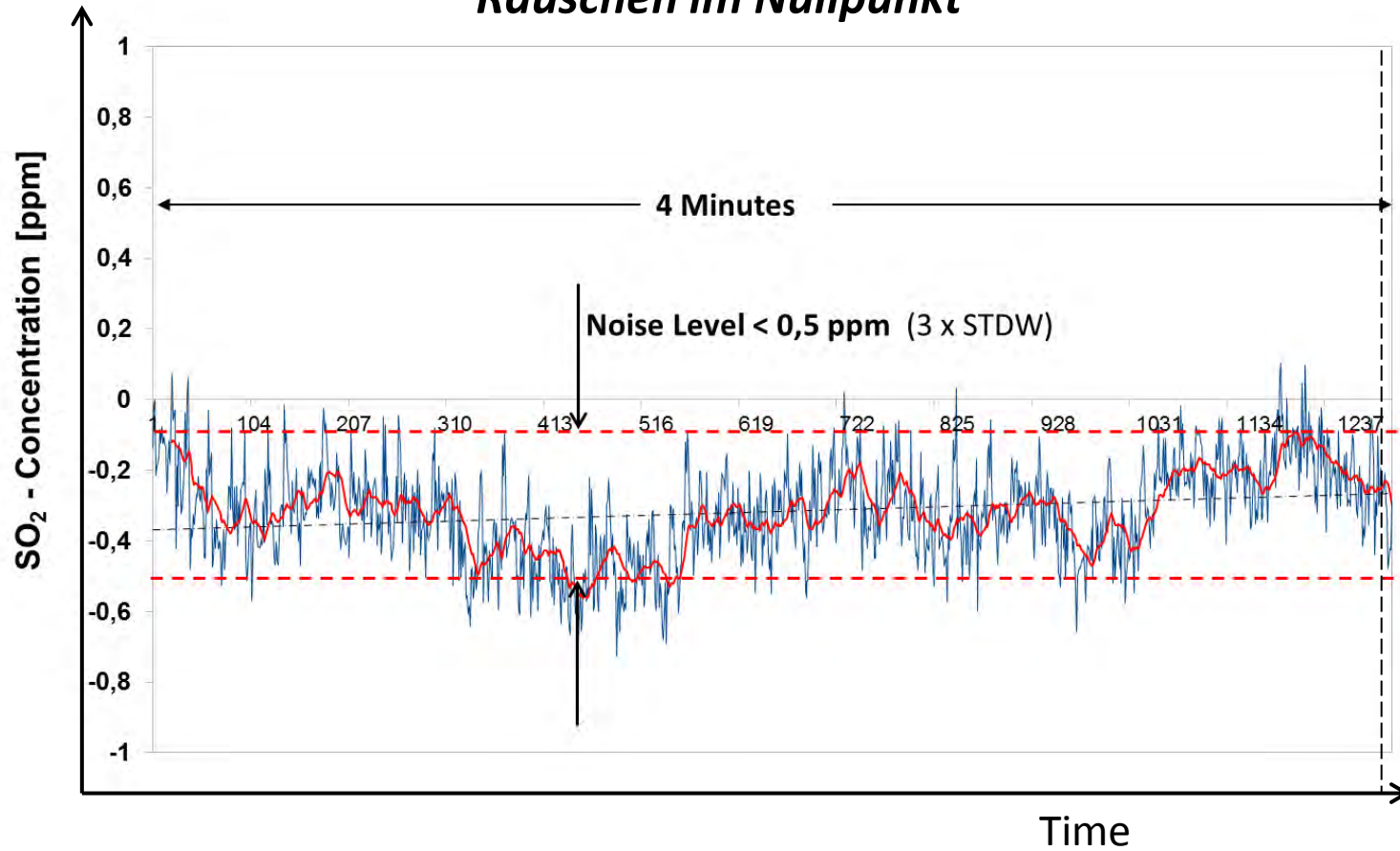


e.on

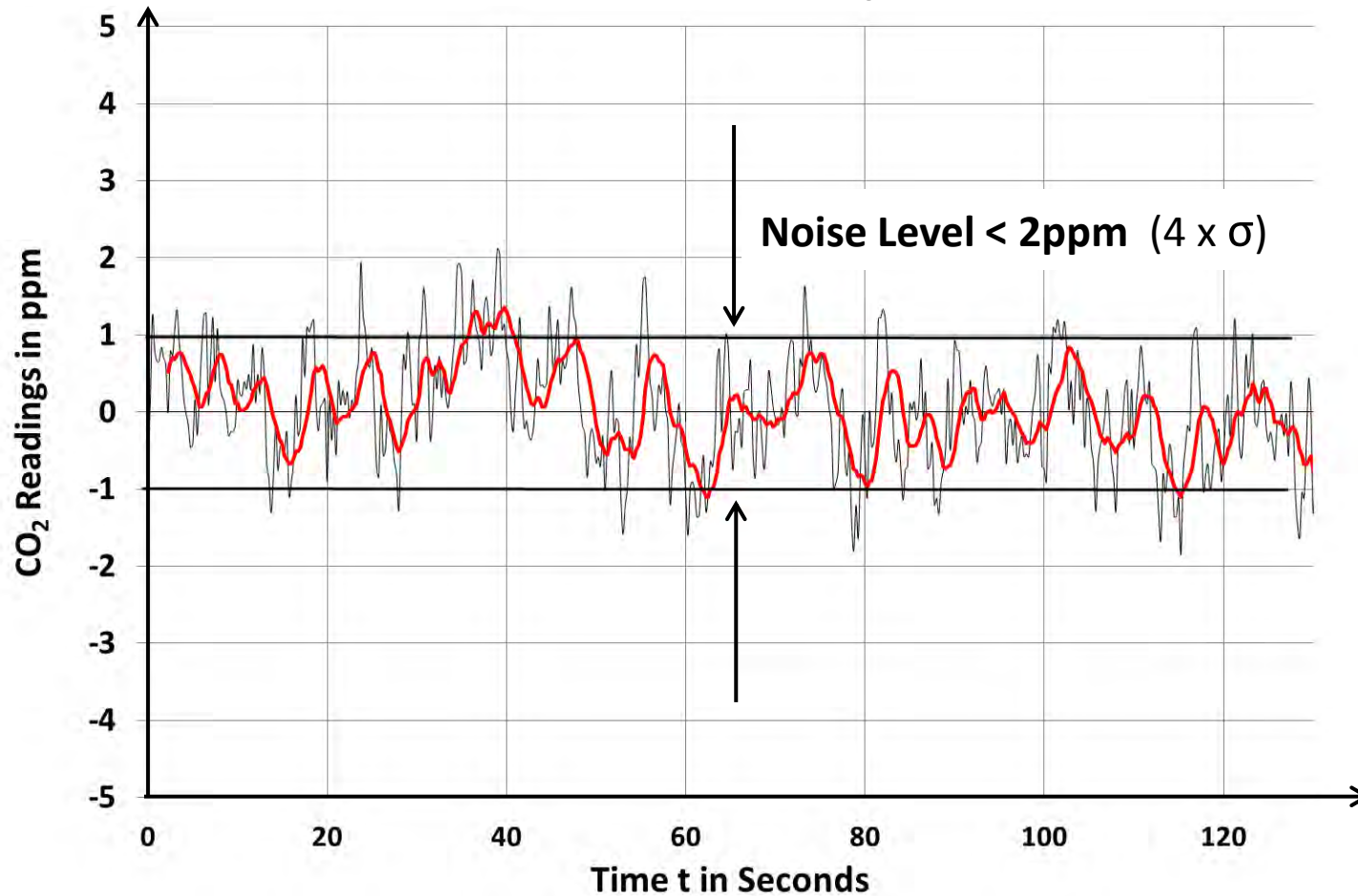
Linearisierte Kennlinie



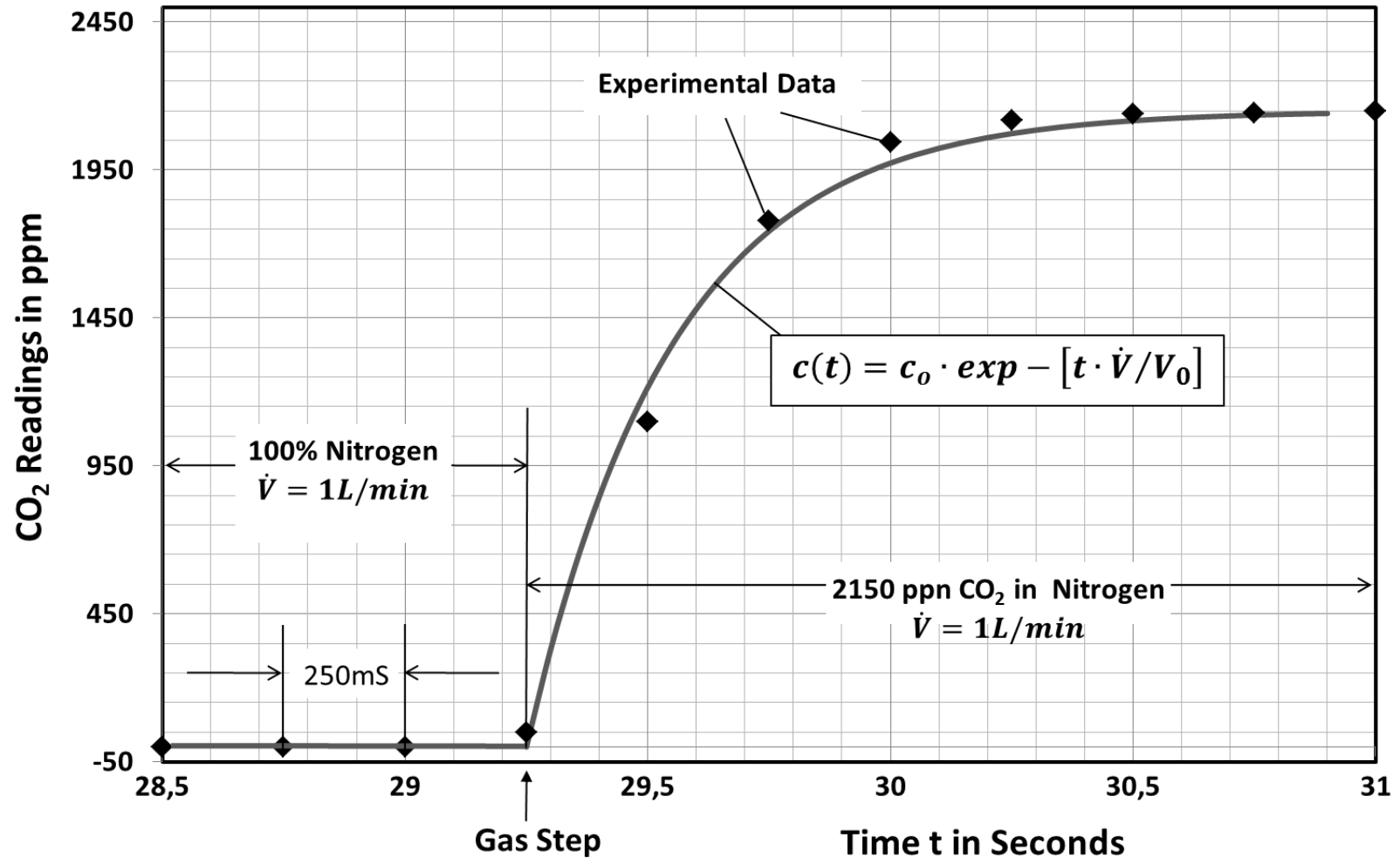
Rauschen im Nullpunkt



Rauschen im Nullpunkt



Zeitverhalten



Spezifikation

	SO ₂ -Module	CO ₂ -Module
Dynamic Range 10 ⁵	1ppm-100 000ppm	2ppm-200 000ppm
Detection Limit	0.5ppm	2.0ppm
Physical Response Time Purge Time	650ms @ 1L/min 160ms @4L/min	650ms @ 1L/min 160ms @4L/min
Electronic Response Time	< 100 ms	<200ms
Power Consumption	<1 W	<1 W
Cross Talk	Neglegible < 10ppm	Negligible < 1ppm
Interface	CAN, RS 232	CAN, RS 232