

Measuring devices



FTC400



Online analysis of complex gas mixtures

The analysis of the thermal conductivity is combined with an integrated multi-channel infrared measurement

H2 %	0.5728
CH4 %	13.8936
CO2 %	0.0503
N2 %	85.4868

Technology used:

Thermal conductivity for
H₂, N₂, He, Ar, Ne, Kr, Xe...

Infrared for
CO₂, CO, CH₄, H₂O, NO, SO₂, SF₆, HC...

- Up to 3 infrared active gases are to be measured and indicated
- Cross-sensitivity compensation for up to 2 IR-active gases
- IR measuring ranges on request

Measurement components and ranges

Measurement components and ranges for FTC400, FTC300, FTC160 and FTC130

Note: All measuring ranges are given in Vol.%

Measurement Component	Carrier Gas	Basic Range	Smallest Range	Smallest Range with suppressed Zero Point	Multi Gas Mode MGM
H ₂	N ₂ or air	0% - 100%	0% - 0.5%	98% - 100%	Yes
O ₂	N ₂	0% - 100%	0% - 15%	85% - 100%	Yes
He	N ₂ or air	0% - 100%	0% - 0.8%	97% - 100%	Yes
CO ₂	N ₂ or air	0% - 100%	0% - 3%	96% - 100%	Yes
N ₂	Ar	0% - 100%	0% - 3%	97% - 100%	Yes
O ₂	Ar	0% - 100%	0% - 2%	97% - 100%	Yes
H ₂	Ar	0% - 100%	0% - 0.4%	99% - 100%	Yes
He	Ar	0% - 100%	0% - 0.5%	98% - 100%	Yes
CO ₂	Ar	0% - 60%	0% - 10%	-	Yes
Ar	CO ₂	40% - 100%	-	80% - 100%	Yes
CH ₄	N ₂ or air	0% - 100%	0% - 2%	96% - 100%	Yes
CH ₄	Ar	0% - 100%	0% - 1.5%	97% - 100%	Yes
Ar	O ₂	0% - 100%	0% - 3%	96% - 100%	Yes
N ₂	H ₂	0% - 100%	0% - 2%	99.5% - 100%	Yes
O ₂	CO ₂	0% - 100%	0% - 3%	96% - 100%	Yes
H ₂	He	20% - 100%	20% - 40%	85% - 100%	
H ₂	CH ₄	0% - 100%	0% - 0.5%	98% - 100%	
H ₂	CO ₂	0% - 100%	0% - 0.5%	98% - 100%	
SF ₆	N ₂ or air	0% - 100%	0% - 2%	96% - 100%	
NO ₂	N ₂ or air	0% - 100%	0% - 5%	96% - 100%	
H ₂	O ₂	0% - 100%	0% - 4%	97% - 100%	
Ar	Xe	0% - 100%	0% - 3%	99% - 100%	
Ne	Ar	0% - 100%	0% - 1.5%	99% - 100%	
Kr	Ar	0% - 100%	0% - 2%	96% - 100%	
R125	N ₂ or air	0% - 100%	0% - 4%	98% - 100%	

Table 1

Measurement components and measuring ranges for FTC300HT (High Temperature)

Measurement Component	Carrier Gas	Basic Range	Smallest Range	Smallest Range with suppressed Zero Point	Multi Gas Mode MGM
CO ₂	Ar	0% - 100%	0% - 8%	70% - 100%	Yes
NH ₃	N ₂	0% - 70%	0% - 3%	55% - 70%	Yes
C ₂ H ₄	N ₂	0% - 100%	0% - 10%	60% - 100%	Yes
H ₂ O	N ₂	0% - 20%	0% - 4%	16% - 20%	

Table 2

In addition all measurement and carrier gases given in table 1 are also available