



## Total Hydrocarbon Analyser FID

Portable *Flame-Ionisation-Detector* **iFiD Mobile** for continuous monitoring

Certification according **EN 15267-4**  
**QAL 1 and MCerts**



### Description

The **iFiD Mobile** Flame-Ionisation-Detector (FID) measures the Total Hydrocarbon concentration in industrial and laboratory environment. Because of its light weight and compact dimensions, it is especially made for daily changing measuring points or short-time measurements.

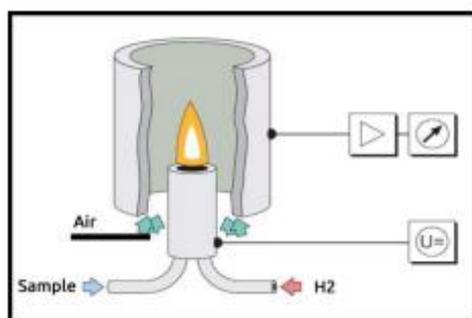
### Special Advantages

- User-friendly Touchpanel 7" TFT
- Graphic Display of HC-concentration
- Single Range – no switch between ranges
- Heated integrated Samplegasfilter 300°C
- Internal Datalogging by USB Stick
- Built in Zero gas generator (option)
- Internal Response factor correction

### Applications

- Emission monitoring
- Indoor VOC control
- Waste plants and process control
- Automotive applications

### Operation principle



## iFiD Mobile

### System Performance

Measuring component:	C <sub>x</sub> H <sub>y</sub>
Operation:	7" TFT – Touch
Display: ppmC <sub>3</sub> or ppm C <sub>1</sub>	mgC/m <sup>3</sup>
Measuring range:	0 - 30.000 ppmC <sup>1</sup>
Repeatability:	± 1 % of Range
Zero drift:	± 1 % in 24 h
Response time:	1 Sec. (T <sub>90</sub> )
Warm-up time:	15 minutes
Analogue Output:	0-20mA ; 0-10V
Digital Output:	Ethernet - RS232
Datastorage:	USB Stick
Remote control:	VNC; over tablet
<b>Gas Requirements:</b>	
• Fuel	H <sub>2</sub> 5.0 or He/H <sub>2</sub>
• Span gas:	C <sub>3</sub> H <sub>8</sub>
• Zero gas:	N <sub>2</sub> or synthetic air
• Combustion air:	over built in cat
Fuel consumption:	30 ml/min
Zero / Spangas:	1 l/min
Flowcontrol:	integrated
Pressure Compensation:	-150hPa +500hPa
Power supply:	100 V ... 240 V
Frequency:	50 Hz... 60 Hz
Power consumption:	350 W
Ambient temperature:	0°C ... +45°C
Protection class:	IP42
Dimensions (H x W x D):	178x370x420mm
Weight:	12 kg



L'iFiD Mobile è un analizzatore di idrocarburi **certificato in conformità alla EN 15267-4 QAL1 TUV e MCerts**, studiato per l'utilizzo sul campo grazie al suo design compatto e robusto. Viene utilizzato per il monitoraggio in continuo della concentrazione di idrocarburi nei gas provenienti da impianti industriali (emissioni) o ambienti (immissioni). Il display ampio e ben strutturato facilita l'uso e fornisce una presentazione ideale dei valori misurati.

L'iFiD Mobile funziona in modo estrattivo, ovvero il gas campione viene estratto per mezzo di una sonda di campionamento tramite un prefiltro riscaldato (opzionale) e trasportato al sistema di analisi tramite una linea riscaldata.

L'iFiD Mobile misura la **somma di tutti gli idrocarburi (TOC)** nel campione prelevato. Pertanto, la misurazione non è selettiva o specifica per i singoli idrocarburi.

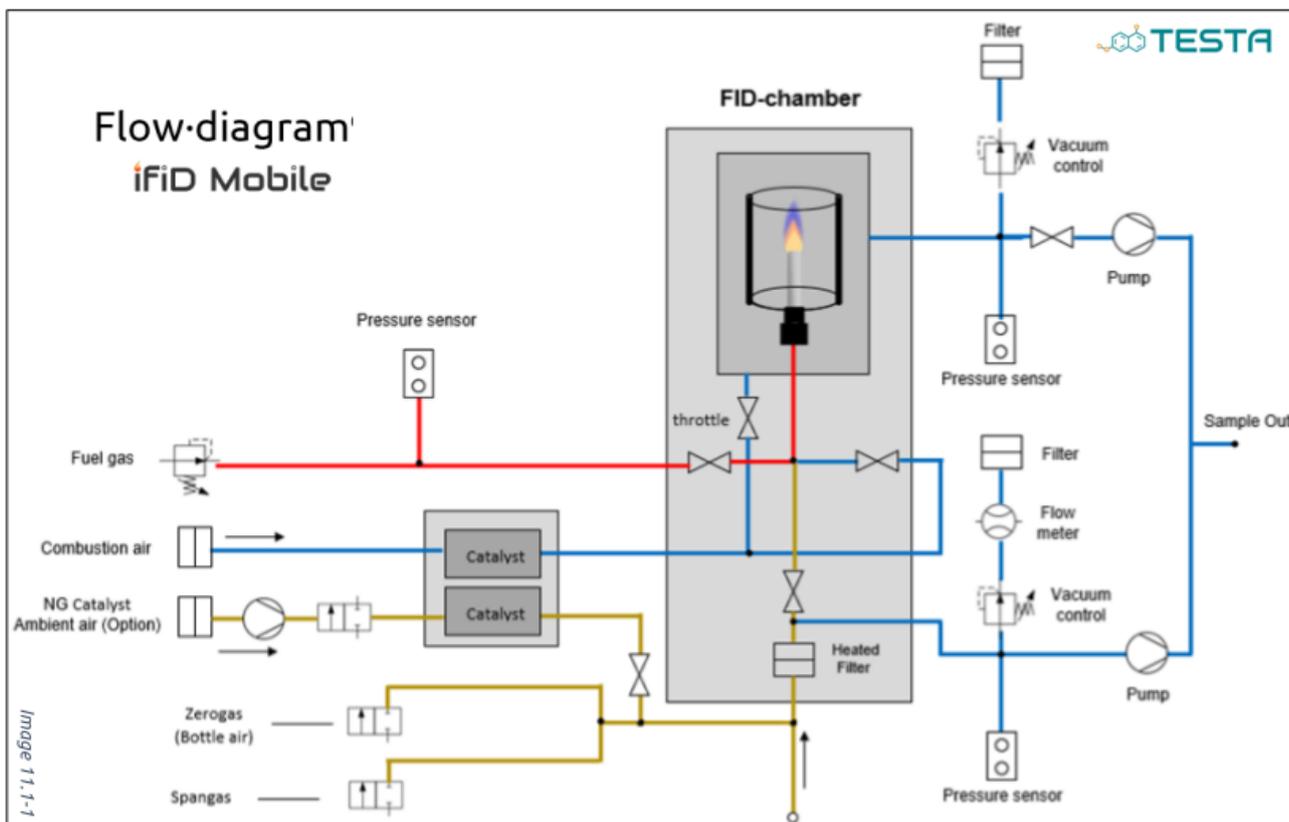


Image 11.1-1

## Technical specifications

Adjusted measuring range and supplied system documentation

Measured values	
Measuring principle	Flame ionization
Measuring component	Total hydrocarbon C <sub>x</sub> H <sub>y</sub> )
Concentration unit	mgC/m <sup>3</sup> , ppm C <sub>1</sub> , ppm C <sub>3</sub>
Smallest measuring range	0 ... 1 mgC/m <sup>3</sup>
Largest measuring range	0 ... 10.000 mgC/m <sup>3</sup>
Certified measuring range according to DIN EN 15267-3	0 ... 15 mgC/m <sup>3</sup>

Time response	
Warm-up time (depending on settings)	15-60 min (at room temperature)
Response time (device rear panel)	approx.3,0 s

[1]At sample gas inlet

Measurement behavior	
Zero point drift[1]	< 2 % rel. at maintenance interval [2]
Sensitivity drift[1]	< 2 % rel. at maintenance interval [2]
Reproduction	< 1 % from measuring range end value
Repeatability	< 1 % from measuring range end value
Detection limit	0.05 mg/m <sup>3</sup> orgC
Linearity	< 2 % from measuring range end value

[1] With daily zero and reference point adjustment

[2] Maintenance interval = 4 weeks according to DIN EN 15267

Analogue output	
Analogue output (2x)	0-20mA with living zero point at 4mA
Burden	300Ohm

Device properties	
Type	Mobile
Height units	3 U (plus 1 U for thermal compensation)
measures	12 kg (26 lbs)
Heating temperature	
- Detector	190 °C (374 °F)
- External heating (optional)	60 ... 250 °C (140 ... 480 °F) (adjustable)
Sample gas flow	Approx. 50 l/h
Input pressure absolute measuring gas	90 ... 110 kPa (0.9 ... 1.1 bar)
Environmental conditions	
Ambient temperature	+5 ... +40 °C (40 ... 104 °F)
Storage temperature	-20 ... +70 °C (0 ... 160 °F)
Relative air humidity	Max. 95 % (without condensate formation)
Ambient air pressure	900 ... 1100 hPa (mbar)[1]
Protection class	IP 42, for use in rooms
Permissible contamination	Pollution degree 2

[1] If the pressure is different: If necessary, adjust the pressure after consultation with Testa service.

Energy supply				
Mains voltage:	230 VAC (multipower Range)			
- - Electronics & Heating				
Mains frequency	50 Hz			
Power consumption:				
- Electronics	Max. 50 VA			
- Detector heating	Max. 350 VA			
- External heating system	Max. 1000 VA			
Mains fuse device plug	230 V: 6,3 A, low			
Gas supply				
Gas	Quality	Flow rate	Inlet pressure	Connection [1]
Fuel gas	H <sub>2</sub> ≥ 5.0	35 ml/min	300 ± 20 kPa (3 ± 0.2 bar)	
Combustion air	Internal catalyst (standard) External combustion air generator (option)	30 l/h		
Zero gas	Catalyst external	75 l/h		
Span gas	- Propane in synthetic air - concentration: approx. 80 % of the CRE	75 l/h		



CERTIFICATE ◆ CERTIFICADO ◆ CERTIFIKAT ◆ 認証証書 ◆ CERTIFICATE ◆ CERTIFIKAT



Certificate number: 3299856-ts



Industrie Service

# CERTIFICATE

of product conformity (QAL 1)

Certificate number: 3299856-ts

<b>Certified AMS</b>	iFiD Mobile for TOC
<b>Manufacturer</b>	Testa GmbH Kathi-Kobus-Straße 15 80797 Munich Germany
<b>Test institute</b>	TÜV SÜD Industrie Service GmbH

This is to certify that the AMS has been tested and found to comply with standards DIN EN 15267-1 (2009), DIN EN 15267-2 (2009), DIN EN 15267-4 (2017) and DIN EN 14181 (2015).

Certification applies to the conditions listed in this certificate (the certificate consists of 10 pages).



Certificate No.: 3299856-ts

Publication in the German Federal Gazette (BAnz) of 03 May 2021

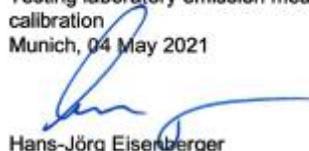
This certificate will expire on: 02 May 2026

Umweltbundesamt  
Dessau, 05 May 2021

TÜV SÜD Industrie Service GmbH  
Testing laboratory emission measurement/  
calibration  
Munich, 04 May 2021



Dr. Marcel Langner  
Head of Section II 4.1



Hans-Jörg Eisenberger



## PRODUCT CONFORMITY CERTIFICATE

This is to certify that the

**iFiD Mobile**

manufactured by:

**Testa GmbH**

Kathi-Kobus-Str. 15  
80797 Munich  
Germany

has been assessed by Sira Certification Service  
and for the conditions stated on this certificate complies with:

**Environment Agency Guidance**  
"MCERTS for stack emissions monitoring equipment at industrial installations"  
- Transportable Continuous Emissions Monitoring Systems(T-CEMS)

Published 20 October 2020  
EN 15267-1, EN15267-2, EN 15267-4  
& QAL 1 as defined in EN 14181: 2014

	Certification range:	Supplementary ranges:
Total organic carbon(TOC)	0 - 15mg/m <sup>3</sup>	0 - 30mg/m <sup>3</sup> 0 - 150mg/m <sup>3</sup> 0 - 500 mg/m <sup>3</sup>

Project number: 80057472  
Certificate number: Sira MC200364/00  
Initial certification: 20 November 2020  
This certificate issued: 20 November 2020  
Renewal date: 19 November 2025

Andrew Young  
Environmental Team Manager

MCERTS is operated on behalf of the Environment Agency by

### Sira Certification Service

Unit 6, Hawarden Industrial Park  
Hawarden, Deeside, CH5 3US  
Tel: +44 (0)1244 670 900



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