



# JFID

## Total Hydrocarbon and Non-Methane Hydrocarbon Analyzer



JFID-ES



JFID-FE



JFID-MK



JFID-PT

### APPLICATION

- Continuous monitoring of Total Hydrocarbon THC or Non-Methane Hydrocarbon NMHC or Methane CH<sub>4</sub>
- Emission monitoring
- Process monitoring
- LEL monitoring

### BENEFITS

- Fast response time
- Low maintenance
- Relays for alarms, events and diagnostics
- Independent of pressure fluctuation
- Accurate and reliable
- Adjustable ranges

### FEATURES

- Proven, heated FID (Flame Ionization Detector)
- Simultaneous monitoring of NMHC and CH<sub>4</sub>
- Simultaneous display of NMHC and CH<sub>4</sub>
- Display in ppm or mg/m<sup>3</sup>
- Oxidation catalyst switchable
- Automatic start-up
- Automatic calibration and span check
- Automatic flame ignition
- Electronic flow control
- Built-in combustion air
- Built-in zero air
- Complete diagnostics of all utilities

## TECHNICAL DATA

Model	JFID-ES	JFID-PT	JFID-FE	JFID-MK
Description	19" rack mounting	portable	wall and panel mounting	measuring head
<b>Operation</b>				
Vacuum system	eductor	membrane pump	eductor	
Measurement range	free selectable, user definable for both channels			
THC	0 to 1 to 0 to 500 000 mg org. C/m <sup>3</sup>			
NMHC	0 to 10 to 0 to 1000 mg org. C/m <sup>3</sup>			
Detection limit	< 0.01 mg org. C/m <sup>3</sup>			
Linearity	< 4 % of measured value			
Selectable units	ppm, mg/m <sup>3</sup>			
Signal output	0/4 to 20 mA not galvanically isolated			
Ambient temperature	-5°C to 40°C	+5°C to 40°C	-5°C to 40°C	
Response time (T90)	< 0.5 s if measured value > 20 mg org. C/m <sup>3</sup> < 5.0 s if measured value < 20 mg org. C/m <sup>3</sup>			
Sample gas flow	25 NI/h or 90 NI/h	25 NI/h	25 NI/h or 90 NI/h	
Sample gas pressure	800 to 1600 mbara	800 to 1200 mbara	800 to 1600 mbara	
Air humidity	< 90 % rel. humidity, + 20°C < 50 % rel. humidity, + 40°C			
Geographical altitude	0 to 1500 m above NN			
<b>Construction</b>				
Dimensions over all (W x H x D) [mm]	483 x 135 x 310	483 x 155 x 380 with bottle holder: 483 x 290 x 380	470 x 505 x 410 model IP65: 500 x 505 x 410	470 x 520 x 465 model IP65: 500 x 520 x 465
Weight	9 kg	11 kg with bottle holder: 16 kg	28 kg model IP65: 33,5 kg	44 kg model IP65: 49 kg
Detector temperature	adjustable up to 200°C	adjustable up to 170°C	adjustable up to 200°C	
Catalyst temperature	400°C for combustion air and zero air			
Oxidizer for NMHC	230° to 250°C			
<b>Utilities</b>				
Instrument air	3.0 to 3.9 bar / < 2 Nm <sup>3</sup> /h, quality to ISO8573-1, 1.2.1	air not needed	3.0 to 3.9 bar / < 2 Nm <sup>3</sup> /h, quality to ISO8573-1 1.2.1	
Fuel gas	hydrogen 0.7 to 1.0 bar / < 80 ml/min, quality 5.0			
Combustion air	with internal catalyst or optional synthetic air 1.0 to 1.5 bar < 30NI/h	with internal catalyst	with internal catalyst or optional synthetic air 1.0 to 1.5 bar < 30NI/h	
Calibration gas	2.0 to 2.5 bar / < 130 NI/h during calibration concentration 60 % to 80 % of the measurement range			
Zero gas	with internal catalyst or optional nitrogen 2.0 bar / < 130 NI/h quality 5.0	with internal catalyst	with internal catalyst or optional nitrogen 2.0 bar / < 130 NI/h quality 5.0	
Protection class	IP20		IP54 / IP65	
Approvals / signs	CE			
<b>Electrics</b>				
Power supply	115 V ± 10 % or 230 V ± 10 %; 48 Hz to 62 Hz			
Power consumption	< 500 W			

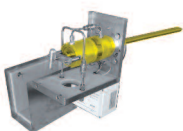
## ORDER CODE

Part number	Description
207.000000	JFID-ES, 19" rack
207.030001	JFID-PT, portable
207.030003	JFID-PT, portable with bottle holder
207.020000	JFID-FE, field housing
207.021000	JFID-FE, field housing IP65
207.040000	JFID-MK, measuring head
207.041000	JFID-MK, measuring head IP65
207.000800	JFID-ES NMHC, one channel
207.030801	JFID-PT NMHC, one channel
207.030803	JFID-PT NMHC with bottle holder, one channel

### Options

407.950033	Status- and alarmboard with 4x 0/4 to 20mA output, galvanically isolated
407.020048	Conversion kit for external zero air
407.020049	Retrofit kit active carbon
207.900000	Data storage for measurement values and status report 250 A4 pages
407.040190	Air pressure regulator with fine filter assembly
407.040182	Gas bottle pressure regulator for hydrogen
407.040183	Gas bottle pressure regulator for calibration gas
407.040184	Gas bottle pressure regulator for nitrogen
DAS 2	Instrument air purifier

Gas Sampling **Probes**



Heated Sample **Lines**



Sample Gas **Coolers**



**JCT**  
Analystechnik

Gas Conditioning **Systems**



NOx **Converter**



and **solutions** for

