

JFID Non-Methane NMHC and Total Hydrocarbon THC Analyzer



JFID-ES

JFID-PT

APPLICATION

- Continuous real-time analysis of Non-Methane Hydrocarbons NMHC Total Hydrocarbon THC or Methane CH₄

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 CH₄
- Simultaneous display of NMHC and CH₄
- Display in ppm or mg/m³
- 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 NMHC	JFID-PT NMHC	JFID-ES NMHC Dual
Description	19" rack mounting	portable	19" rack mounting
Operation			
Vacuum system	eductor or membrane pump	membrane pump	eductor
Number of channels	1	1	2 (simultaneous monitoring)
Measurement range	free selectable, user defineable for both channels		
THC	0 to 1 to 0 to 500 000 mg org. C/m ³		
NMHC	0 to 10 to 0 to 1000 mg org. C/m ³		
Detection limit	±5 % of measurement range		
Linearity	< 1 % of measured value		
Selectable units	ppm, mg/m ³		
Signal output (simultaneous)	2 x 0/4 to 20mA for channel THC or NMHC / 2 x 0/4 to 20mA for channel CH ₄		
Ambient temperature	with eductor: -5°C to 40°C with membrane pump: +5°C to 40°C	+5°C to 40°C	-5°C to 40°C
Response time (T90)	THC < 15 s CH ₄ < 30 s		THC, CH ₄ < 5 s
Sample gas flow	with eductor: 25 NI/h or 90 NI/h with membrane pump: 25 NI/h	25 NI/h	25 NI/h or 90 NI/h
Sample gas pressure	with eductor: 800 to 1600 mbara with membrane pump: 800 to 1200 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		
Construction			
Dimensions over all (W x H x D) [mm]	with eductor: 483 x 135 x 401 with membrane pump: 445 x 135 x 401	483 x 155 x 510 with bottle holder: 483 x 290 x 510	483 x 135 x 310
Weight	with eductor: approx. 10 kg with membrane pump: approx. 11 kg	approx. 12 kg with bottle holder: approx. 17 kg	approx. 12 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°C to 250°C		
Utilities			
Instrument air	with eductor: 3.0 to 3.9 bar / < 2 Nm ³ /h, quality to ISO8573-1, 1.2.1 with membrane pump: air not needed	air not needed	3.0 to 3.9 bar / < 2 Nm ³ /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 < 30 NI/h	with internal catalyst	with internal catalyst or optional Synthetic air 1.0 to 1.5 bar < 30 NI/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 to 2.5 bar/ < 130 NI/h quality 5.0	with internal catalyst	with internal catalyst or optional Nitrogen 2.0 to 2.5 bar/ < 130 NI/h quality 5.0
Protection class	IP20		
Approvals / signs	CE	CE	CE
Electrics			
Power supply	115 V ± 10 % or 230 V ± 10 %; 48 Hz to 62 Hz		
Power consumption	< 500 W		

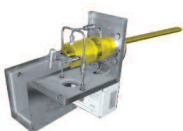
ORDER CODE

Part number	Description
207.000800	JFID-ES NMHC, one channel
207.000880	JFID-ES NMHC, dual channel
207.030801	JFID-PT NMHC, one channel
207.030881	JFID-PT NMHC, dual channel
207.030803	JFID-PT NMHC with bottle holder, one channel
207.030883	JFID-PT NMHC with bottle holder, dual channel

Options

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
Analysentechnik

Gas Conditioning **Systems**



NOx **Converter**



and solutions for

