



JFID-ES | JFID-PT

THC Total Hydrocarbon Analyzer



JFID-ES

JFID-PT

APPLICATION

- Continuous real-time analysis of Total Hydrocarbon THC or Methane CH₄ as an option

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)
- Display in ppm or mg/m³
- Automatic start-up and flame ignition
- Automatic calibration and span check
- Electronic flow control
- Built-in combustion air and zero air
- Complete diagnostics of all utilities



TECHNICAL DATA

MODEL	JFID-ES THC	JFID-PT THC
Description	19" rack mounting	portable

OPERATION

Vacuum system	eductor or membrane pump (option)	membrane pump
Number of channels	1	
Measurement range	free selectable, user defineable	
THC	0 – 1 mg org. C/m ³ up to 100,000 mg org. C/m ³	
Detection limit	±5 % of measurement range	
Linearity	< 1 % of measured value	
Zero noise	max. 2 % from measuring range	
Span noise	max. 2 % from measuring range	
Selectable units	ppm, mg/m ³	
Signal output	0/4 to 20 mA	
Ambient temperature	with eductor: -5° to 40 °C with membrane pump: 5° to 40 °C	5° to 40 °C
Response time (T90)	< 1 s	
Sample gas flow	with eductor: 25 NI/h or 90 NI/h with membrane pump: 25 NI/h	25 NI/h
Sample gas pressure	with eductor: 800 to 1.600 mbara with membrane pump: 800 to 1,200 mbara	800 to 1,200 mbara
Air humidity	< 90 % rel. humidity, 20 °C; < 50 % rel. humidity, 40 °C	
Geographical altitude	0 to 1,500 m above sea level	

CONSTRUCTIONS

Dimensions over all (W x H x D) [mm]	with eductor: 483 x 135 x 401 with membrane pump: 445 x 135 x 401	380 x 155 x 380 with bottle holder: 483 x 290 x 510
Weight	with eductor: approx. 10 kg with membrane pump: approx. 11 kg	approx. 11 kg with bottle holder: approx. 15 kg
Detector temperature	adjustable up to 200 °C	adjustable up to 170 °C
Catalyst temperature	400 °C for combustion air and zero air	

UTILITIES

Instrument air	with eductor: 3 to 3.9 barg / < 2 Nm ³ /h, quality to ISO 8573-1, 1.2.1 with membrane pump: air not needed	air not needed
Fuel gas	hydrogen 0.7 to 1 barg / < 80 ml/min, quality 5.0	
Combustion air	with internal catalyst or optional synthetic air 1 to 1,5 barg < 30 NI/h	with internal catalyst
Calibration gas	2 to 2,5 barg / < 130 NI/h during calibration concentration 60 % to 80 % of the measurement range	
Zero gas	with internal catalyst or optional nitrogen 2 to 2.5 barg < 130 NI/h quality 5.0	with internal catalyst
Protection class	IP20	
Approvals / Signs	CE	

ELECTRICS

Power supply	115 V ± 10 % or 230 V ± 10 %; 48 Hz to 62 Hz	
Power consumption	< 500 W	

Note: For more detailed specification please contact factory

ORDER CODES

Part No.	Description
207.000000	JFID-ES 19" plug-in module
207.030000	JFID-PT/LT portable
207.030001	JFID-PT/LT portable 84TE
207.030002	JFID-PT portable with gas bottle holder
207.030003	JFID-PT portable 84TE with gas bottle holder

Options

207.900000	Data storage for measurement values and status report 250 A4 pages
407.010076	Gas connection fitting set SS
407.010077	Gas connection fitting set SS and aluminum
407.020047	Conversion kit zero gas external
407.020048	Conversion kit for external zero air and synthetic air for combustion air
407.020049	Retrofit kit active carbon
407.040182	Gas cylinder pressure regulator for hydrogen
407.040183	Gas cylinder pressure regulator for calibration gas
407.040184	Gas cylinder pressure regulator for nitrogen
407.040190	Air pressure regulator with fine filter assembly
407.950033	Status & alarm board
407.990084	External membrane sample gas pump for JFID-ES
407.990085	Internal membrane sample gas pump for JFID-ES
DAS 2	Instrument air purifier