



## Technical Specifications DynamiQ-X micro-GC analyzer

Ambient operating temperature	-20 °C to 55 °C / -4 °F to 131 °F
Ambient storage temperature	-25 °C to 70 °C / -13 °F to 158 °F
Ambient relative humidity	5% to 95% non-condensing
Dust/water protection	IP65 (only valid with receptacle cap/mating connector and gas port mating connections)
Mechanical environmental classification	M2
Power supply	20 VDC to 28 VDC
Maximum power consumption	75 W
Electromagnetic environmental classification	E2
Dimensions	289 x 258 x 122 mm / 11.4 x 10.2 x 4.8" (without mating connector, without mounting brackets)
Weight	<15 kg / 33 lb. (without mounting brackets)
Minimal distance from wall/ceiling	50 mm / 2"
Columns type	Variety of silica (WCOT/PLOT) columns
Number/type of GC units	1 to 4 columns/temperature-ramping possible (isothermal recommended)
Column temperature range	70 °C to 150 °C
Column temperature stability	± 0.1 °C
Carrier gas	He, Ar, N <sub>2</sub> , H <sub>2</sub>
Gas purity	≥ 99.999%
Required filtration	5 µm filter size
Carrier gas consumption	2-5 ml/min per GC channel (application dependent)
Carrier gas input pressure	450 ± 5% kPa
Gas ports	1/16" VICI
Sample inlets	Maximum 4
Sampling	Pressurized sample or sample pumping
Gas ports	1/16" VICI
Sample conditions	Non-condensing gas of 0 °C to 50 °C
Sample pressure	10 kPa to 200 kPa (application dependent)
Injector type	Foreflush and backflush-to-detector
Heated injector	Up to 120 °C
Injection volume	0.1-17 µL uncompressed, time based

Detector type	On chip dual channel foreflush and backflush TCD
Internal flow path TCD	15 nl
Chemical protection	Inert coated sensors
Thermal/electrical protection	Intrinsically safe against heater burnout
Detection range	500 ppb to 100% (application dependent)
Detection limit (for pentane in natural gas)	< 500 ppb
Repeatability (for concentrations > 0.1%)	0.05% RSD
Cycle time	Typical 15 s to 60 s (application dependent)
Communications supported	Ethernet, RS-232, RS-485, Digital I/O
Protocols supported	Modbus (over ethernet and serial)
Protection against explosion	<div>  0344  II 2G Ex db IIB+H<sub>2</sub> T4 Gb </div> <p>ATEX certificate: DEKRA 16ATEX0111 IECEx certificate: IECEx DEK 16.0065</p>