



### Technical Specifications DynamiQ-X NG2210 and NG2220 Natural Gas Analyzers

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"
Number of GC units	2 (NG2210), 3 (NG2220)
Column temperature range	70 °C to 150 °C
Column temperature stability	± 0.1 °C
Carrier gas	He (NG2210), He and Ar (NG2220)
Gas purity	≥ 99.999%
Required filtration	5 µm filter size
Carrier gas consumption	2-5 ml/min per GC channel
Carrier gas input pressure	450 ± 5% kPa
Gas ports	1/16" VICI
Sample inlets	4 (optional more)
Sampling	Pressurized sample
Gas ports	1/16" VICI
Sample conditions	Non-condensing gas of 0 °C to 50 °C
Sample pressure	10 kPa to 100 kPa
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	
Calorific value calculation	ISO 6976-2016, GPA 2172, ASTM D3588	
Component ranges for OIML R140 accuracy class A	Methane	60 - 100%
	Ethane	0.1 - 12%
	Propane	0.1 - 7%
	i-Butane	0.01 - 1.5%
	n-Butane	0.01 - 1.5%
	neo-Pentane	0.005 - 0.1%
	i-Pentane	0.005 - 0.35%
	n-Pentane	0.005 - 0.35%
	Hexane+	0.005 - 0.35%
	Carbon dioxide	0.1 - 12%
	Nitrogen	0.1 - 20%
Hydrogen (NG2220 only)	0.1 - 20%	
Oxygen (NG2220 only)	0.1 - 3%	
Calorific value ranges for OIML R140 accuracy class A	26-49 MJ/m <sup>3</sup>	
Detection limit (for pentane in natural gas)	< 500 ppb	
Repeatability (for concentrations > 0.1%)	0.05% RSD	
Cycle time	45 s	
Communications supported	Ethernet, RS-232, RS-485, Digital I/O	
Protocols supported	Modbus (over ethernet and serial)	
In accordance with	OIML R 140; Welmec 8.8; Welmec 7.2; MID Accuracy class A Certificate: NMI Certin TC12537	
Protection against explosion	 0344  II 2G Ex db IIB+H <sub>2</sub> T4 Gb  ATEX certificate: DEKRA 16ATEX0111 IECEx certificate: IECEx DEK 16.0065	