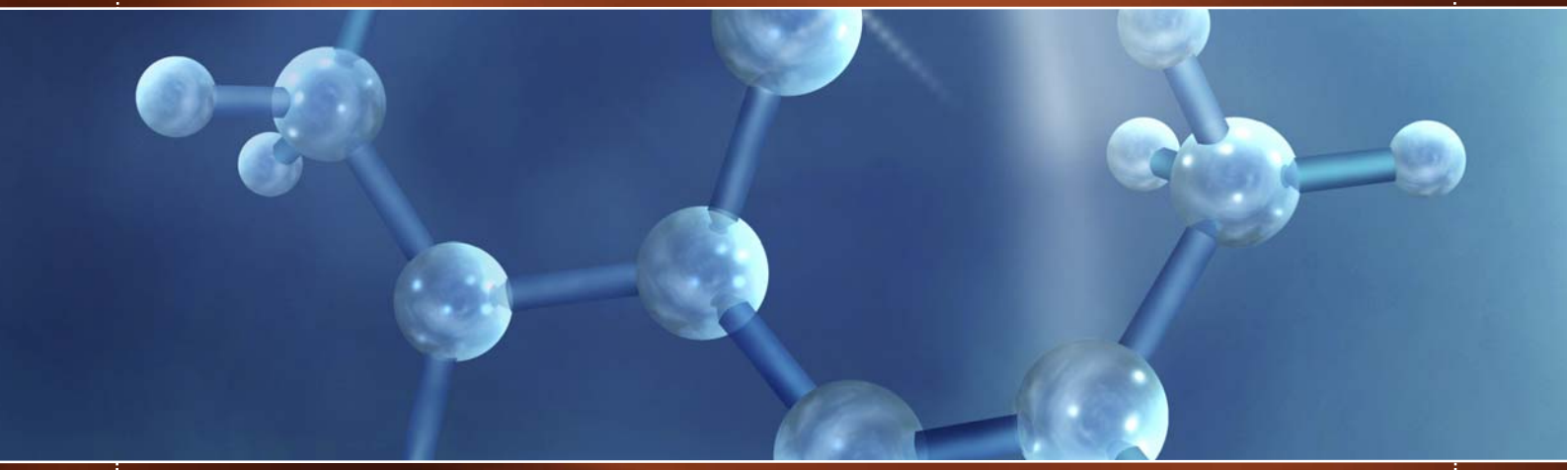
CASCADE TECHNOLOGIES

TRACE



Ppb detection
Accurate and precise
High selectivity

TRACE GAS DETECTION

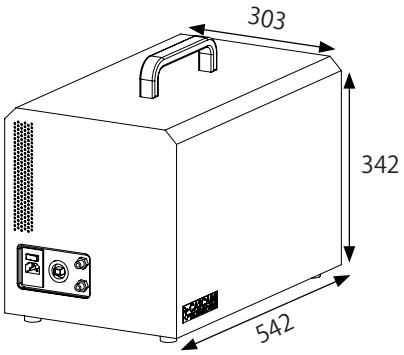
Cascades Trace product range is targeted at trace gas detection applications where accurate and precise measurement down to single ppb levels is critical. Exploiting the latest developments in Quantum Cascade Lasers (QCL's), the products proven capabilities in terms of detection sensitivity, measurement drift and high selectivity will provide a step change in performance for trace applications. Fully configurable in terms of target gases and measurement range it is set to become the new industry standard.

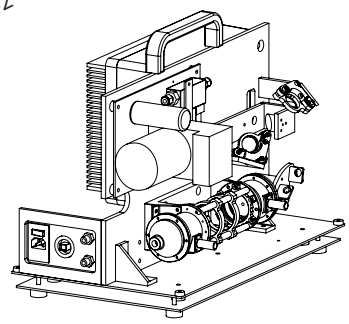
Technique & Performance

Measurement Technique	MidIR Absorption Spectroscopy
Mid IR Source	Quantum Cascade Laser
Number of gases	Up to 8 depending on setup
Response Time	Sub Second
Linearity	< 2% of full range
Accuracy	<2%
Ambient air temperature dependance over T range	0.095% per C of full range
Stability	0.01% of full range / 24 Hrs
Zero Drift	0.003% of full range / 24Hrs

Dimensions

Dimensions in mm: 542x303x342





Operating Environment

Operating temperature range	
for sensor unit	-20...+70°C
Laser Safety	Class 1

Inputs and Outputs

Power Supply	
Input Range	90-264 VAC
Sensor Power Consumption	
Max	150W
Typical	Dependant upon stack temperature

Mechanics

Housing Material	Powder coated aluminium Al 5:12
Weight	20kgs unit
Gas Cell Volume	0.3l.
Gas Cell path length	36m.
Pump flow rate	30l./m.

Main Gases*

NO	Nitric Oxide
NO2	Nitrogen Dioxide
SO2	Sulphur Dioxide

Other Gases*

NH3	Ammonia
H2O	Water
Other gases on request	

*Please note that the measuring range and resolution varies depending upon applications and setup.

CASCADE TECHNOLOGIES

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