ANTARES
MULTI-GAS ANALYZER

ISATEC ANTARES is a state-of-art multi-gas analyser, fully configured for single, dual, triple and four gases simultaneous measurement: it allows the purity measurement to be combined with trace measurements for the pure gas, including moisture, and an optional IR bench to be added.

Up to 4 gases can be measured on a single platform, providing display and reporting for analogue outputs with an RS232 data port.

Fully automated calibration is possible with integrated zero and span gas solenoid valves and can be supplied with or without a pump.

The instrument may be specified with a wide range of sensor options, and sampling options:

- GFC infrared— down to low ppm trace levels
- SB infrared – mid performance over a wide range of gases
- Oxygen—using a high performance paramagnetic cell for 0-100%/98-100% purity
- Electrochemical cells and Zirconia sensor for trace oxygen analysis
- Ceramic impedance and P_2O_5 moisture sensors

Integral pressure and temperature compensation.

ANTARES MULTI-GAS ANALYZER

TECHNICAL SPECIFICATIONS

GAS	MIN DETECTION
CO_2	0.1 ppm
CO	0.1 ppm
SO2	1 ppm
SF6	0.1ppm
NO	1 ppm
NH3	1 ppm
CH4	1 ppm
CnHn	1 ppm
HCL	1 ppm
H2	1 ppm
H2S	1 ppm
NO2	1 ppm
N2O	1 ppm
H2O	1 ppb
O2	100 ppb

All dependent upon the technology used.

CRITERIA	Gas Filter Correlation (GFC)	Single Beam (SB)	Oxygen Paramagnetic (PM)	Oxygen Zirconia	Oxygen Chemical Cell (ECC)	Moisture
Gases Measured	CO2, CO, CH4, N2O, NO	CO2, CO, CH4, N2O +	O2 purity	O2 trace	O2 trace	H2O
Technology	NDIR gas filled wheel	NDIR single wavelength absorptiometer	Paramagnetic cell	Zirconia cell	Chemical cell	Ceramic impedance or P_2O_5
Ranges	From ppm to 100%	From ppm to 100%	From 0-100% 98-100%	From ppb to 21% for trace gas	From ppm to 10% for gases	From 0-100ppm to 0- 1000ppm
Resolution	0.1 % of scale	0.5 % of scale	0.1% of scale and 0.01%	1% of reading	0.1% of scale	0.1% of scale
Detection Limit	0.1 % of scale	0.5 % of scale	0.01% O2	100 ppb O2	1% of scale	1% of scale
Accuracy	1% of reading	1% of scale	0.1% O2	1% of reading	1% of scale	1% of scale
Noise	<0.1% of scale	<0.5% of scale	<0.01% O2	0.1% of reading	0.1% of scale	0.1% of scale
Zero stability	1% per week	1% per day	Absolute zero	n/a	Absolute zero	TBA
Span Stability	0.5% per week	1% per week	0.1% per week	0.5% of reading per week	0.5% per week	TBA
Temperature effect on Zero	+/-0.1% per °C	+/-0.25% per °C	+/-0.1% per °C	n/a	+/-0.1% per °C	TBA
Temperature effect on Span	+/-0.2% per °C	+/-0.25% per °C	+/-0.1% per °C	n/a	+/-0.1% per °C	TBA
Response Time	T90 of 4 secs	T90 of 4 secs	T90 of 4 secs	T90 of 10 secs	T90 of 20 secs	TBA

Criteria	General Specifications
Pump flow rate	Typically, 0.2 to 1.2 litres per min
Flowmeter	Electronic or manual with control
Electrical Connections	Round 8 pin DIN for analogues RS232 data port, relay alarm contacts
Gas Connections	6mm or ¼“ tube compression fittings
Operating Conditions	5-40°C ambient, 0-95% RH 0-50 °C non-condensing at analyser
Gas Conditions Power	Nominal 90-240V AC 50/60Hz max 120VA
Requirements Dimensions	H133 x W483 x D500 mm—3U
Weight	From 12-15 Kg dependent upon configuration

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