Tiger-*i* 2000
Trace Monitors for Environmental and Airborne Molecular Contaminants

AUTOMOTIVE | ENERGY | ENVIRONMENTAL | GASES & CHEMICALS | LABORATORIES | LEDS | SEMICONDUCTORS

Designed for continuous emissions monitoring and detection of atmospheric pollutants, as well as indoor airborne molecular contaminants, the compact Tiger-*i* 2000 offers:

- Accuracy traceable to the world's major national reference labs
- Specificity – no ozone or other interference
- Sub-ppb detection capability
- Freedom from the need for span calibrations
- No periodic sensor replacement/maintenance
- Great sensitivity
- Wide dynamic range

Delivering your best measurements

The Tiger-*i* 2000 is extremely versatile and used for monitoring trace levels of contaminants in both harsh outdoor and extremely clean indoor conditions. Outside, Tiger-*i* applications include continuous emissions monitoring of sources such as cement kilns or power plants, and the measurement of atmospheric pollutants from other industrial sites. In cleanrooms, the Tiger-*i* analyzers detect levels of airborne molecular contaminants (AMC) before they damage semiconductor products, processes, and equipment.

Using Tiger Optics' Tiger-*i* 2000 analyzers, you can verify levels of contamination in ambient air with parts-per-billion accuracy, drift-free stability, and virtually immediate response. The Tiger-*i* detects trace NH_3, HCl, HF, H_2S and CO among other species. You'll find our systems fast to install, exceptionally easy to use, and effortless to maintain due to their built-in calibration verification. The robust design – free of moving parts – results in an analyzer that has a high mean time between failure (MTBF) and a very low cost of ownership (COO).

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Tiger-*i* 2000

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Performance	
Operating range	See table below
Detection Limit (LDL,	See table below
24 hr. peak-to-peak variation)	
Sensitivity (3σ)	See table below
Precision (1σ, greater of)	± 0.75% or ⅓ of Sensitivity
Accuracy (greater of)	± 4%, or LDL
Speed of response	See table below
Environmental conditions	10°C – 40°C, 0 – 99% RH (non-cond)
Storage temperature	-10°C – 50°C

Gas Handling System and Conditions*	
Wetted materials	316L stainless steel,Teflon, PFA
	or other proprietary materials
	10 Ra surface finish
Gas connections	¼" male VCR inlet and outlet
Leak tested to	1 x 10^{-9} mbar l / sec
Inlet pressure	0 – 10 psig
Outlet pressure	Vacuum (2 slpm @ 10 torr)
Flow rate	~ 1 slpm
Sample gases	Ambient air, CDA, or N_2
Gas temperature	Up to 60°C

* Vacuum Source Required

Dimensions	H x W x D [inches (mm)]
Standard sensor	8.75 x 8.5 x 23.6 (222 x 216 x 600)
Sensor rack	8.75 x 19 x 23.6 (222 x 483 x 600)

Weight	
Standard sensor	33 lbs (15 kg)

Electrical	
Alarm indicators	2 User programmable, 1 System fault
	Form-C relays
Power requirements	90-240 VAC 50/60 Hz
Power consumption	40 Watts max.
Signal output	Isolated 4-20 mA output per sensor
User interface	5.6" LCD Touchscreen
	10/100BaseT Ethernet
	802.11g Wireless (optional)
	RS-232

Performance: In Ambient Air	Range	LDL	Sensitivity	Speed of Response
Tiger-*i* 2000 HCl	0-4 ppm	1 ppb	0.75 ppb	2 min to 80%
Tiger-*i* 2000 HF	0-1 ppm	0.2 ppb	0.15 ppb	2 min to 80%
Tiger-*i* 2000 H_2S	0-500 ppm	100 ppb	75 ppb	3 min to 95%
Tiger-*i* 2000 NH_3	0-40 ppm	8 ppb	6 ppb	3 min to 95%
Tiger-*i* 2000 CO	0-1000 ppm	400 ppb	300 ppb	3 min to 95%

Contact us for additional analytes and matrices.
U. S. Patent # 5,528,040 • Other patents pending

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