



# T-I Max AIR CH<sub>4</sub> and CO<sub>2</sub> Next-Gen Monitors for Greenhouse Gases

GASES & CHEMICALS

CEMS

ENERGY

SEMI & HB LED

ATMOSPHERIC

LAB & LIFE SCIENCE

**A compact and user-friendly solution for monitoring ambient levels and emissions of methane and carbon dioxide, the next-generation T-I Max AIR offers:**

- Accuracy traceable to the world's major national reference labs
- Specificity—no moisture or other interference
- High precision at ambient or even higher levels
- Freedom from the need for span calibrations
- No periodic sensor replacement/maintenance
- Wide dynamic range and no drift
- Compact and rugged design

## **Combat Global Warming at the Source**

The T-I Max AIR greenhouse gas (GHG) analyzers for methane and carbon dioxide are designed for versatile use. They can measure ambient levels of CH<sub>4</sub> and CO<sub>2</sub> with high precision over a wide range of temperatures with excellent reliability, and they can monitor emissions of greenhouse gases from various sources such as landfills, gas and oil exploration sites, refineries, and agricultural facilities. The T-I Max AIR helps users to easily and accurately assess their GHG emissions and implement measures to reduce global warming.

Using Tiger Optics' T-I Max AIR analyzers, you can measure ambient levels of methane and carbon dioxide with parts-per-billion accuracy, drift-free stability, and fast response. You'll find our systems fast to install, exceptionally easy to use, extremely reliable, 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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Performance	
Operating range	See table below
Detection limit (LDL, 3σ/24h)	See table below
Precision (1σ, greater of)	± 0.75% or 1/3 of LDL
Accuracy (greater of)	± 4% or LDL
Speed of response	See table below
Environmental conditions	10°C to 40°C 30% to 80% RH (non-condensing)
Storage temperature	-10°C to 50°C

Gas Handling System and Conditions*	
Wetted materials	316L stainless steel 10 Ra surface finish
Gas connections	1/4" male VCR inlet and outlet
Leak tested to	1 x 10 <sup>-9</sup> mbar l / sec
Inlet pressure	0 – 15 psig (1 – 2 bara)
Outlet pressure	Vacuum (<10 Torr)
Flow rate	~1 slpm
Sample gases	Ambient air, dry air (CDA) and N <sub>2</sub>
Gas temperature	Up to 60°C

Dimensions	H x W x D [in (mm)]
Standard sensor	8.73 x 8.57 x 23.6 (222 x 218 x 599)
Sensor rack (fits up to two sensors)	8.73 x 19.0 x 23.6 (222 x 483 x 599)

Weight	
Standard sensor	33 lbs (15 kg)

Electrical and Interfaces	
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
User interfaces	5.7" LCD touchscreen 10/100 Base-T Ethernet USB, RS-232, RS-485 Modbus TCP (optional)
Data storage	Internal or external flash drive
Certification	CE Mark

Performance in dry air or N <sub>2</sub> :	Range	LDL (3σ)	Precision (1σ) @ zero	Speed of Response
T-I Max AIR CH <sub>4</sub> (low range)	0 – 25 ppm	1.5 ppb	0.5 ppb	3 min to 95%
T-I Max AIR CH <sub>4</sub> (high range)	0 – 100 ppm <sup>†</sup>	7.5 ppb	2.5 ppb	3 min to 95%
T-I Max AIR CO <sub>2</sub>	0 – 3000 ppm	150 ppb	50 ppb	3 min to 95%

Performance in ambient air:	Range	Precision (1σ) at typical ambient levels	Accuracy at typical ambient levels
T-I Max AIR CH <sub>4</sub> (low range)	0 – 25 ppm	<15 ppb over 24 hours	<80 ppb
T-I Max AIR CH <sub>4</sub> (high range)	0 – 100 ppm <sup>†</sup>	<15 ppb over 24 hours	<80 ppb
T-I Max AIR CO <sub>2</sub>	0 – 1500 ppm	<3 ppm over 24 hours	<16 ppm

\*Vacuum source with >2 slpm @ 10 Torr required  
<sup>†</sup>Upper range available as high as 1000 ppm on request.  
 U.S. Patent # 7,277,177

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9/2021