

# Tiger-*i* 2000 HF

## Trace Hydrogen Fluoride Monitor for Ambient Molecular Contaminants



Designed for ambient 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

### PERFORMANCE

<b>Lowest Detection Limit*:</b>	0.2 ppb
<b>Sensitivity:</b>	0.1 ppb
<b>Accuracy (greater of):</b>	4% of reading or $\pm 0.2$ ppb
<b>Speed of Response (typical):</b>	80% response < 2 minutes
<b>Operating Range:</b>	0-1 ppm
<b>Environmental Conditions:</b>	10°C-40°C
<b>Storage Temperature:</b>	-10°C-50°C

\* Based on 24-hour peak-to-peak variation

### MATERIALS OF CONSTRUCTION

<b>Materials of Construction:</b>	316L stainless steel, Teflon®, PFA, Monel
<b>Wetted Components:</b>	10 Ra surface finish
<b>Gas Connection:</b>	1/4" M VCR Inlet & Outlet
<b>Leak Tested to:</b>	$< 2 \times 10^{-8}$ mbar • l /sec

### ELECTRICAL

<b>Alarm Indicators:</b>	User programmable set points
<b>Power Requirements:</b>	90-240 VAC, 50/60 Hz
<b>Power Consumption:</b>	200 Watts max.
<b>Output Signals:</b>	
• Recorder	0-5VDC, Isolated 4-20
• Alarm	Form-C relay
<b>Communications:</b>	RS-232, Wireless (optional)
<b>User Interface:</b>	5.6" LCD touch screen, 10BaseT Ethernet, RS-232

### DIMENSIONS

<b>Mounting (H x W x D):</b>	8.75" x 8.5" x 22.5" (22.2 cm x 21.6 x 57.2)
<b>Weight:</b>	33 pounds (15 kg)

### GAS SAMPLE CONDITIONS\*\*

<b>Sample Inlet Pressure:</b>	0 psig -5 psig
<b>Flow Rate:</b>	Approx. 1,000 sccm
<b>Sample Gas:</b>	Ambient (cleanroom)
<b>Sample Line Temperature:</b>	Up to 60°C

\*\* Vacuum source required

### TECHNOLOGY

<b>Approvals:</b>	CE: LVD & EMC
<b>Method:</b>	Cavity Ring-Down Spectroscopy
<b>Patents:</b>	U.S. Patent # 5,528,040 Other Patents Pending