

**ANALYZER SOLUTIONS FOR YOUR PROCESS!**

# ta3000R Reduction Gas Analyzer

## Specifications

### Model designation and detection limit specifications

Every ta3000R includes: an on-board electronic pressure regulator, multipoint rotary valve, proven chromatography, and Reduction Gas Detector (RGD). Lower detection limits may vary depending on application. Contact AMETEK for information about your specific application. Not all models and applications are listed below.

Applications	Lower Detection Limit	Analysis Time
Dissolved H <sub>2</sub> in water headspace	50 ppb H <sub>2</sub>	2 minutes
CO in air	10 ppb CO	2.5 minutes
Ethylene in air	10 ppb C <sub>2</sub> H <sub>4</sub>	5 minutes
Ethylene oxide in air	30 ppb EtO	10 minutes
CO in ethylene / propylene	10 ppb CO	7.2 minutes
CO + H <sub>2</sub> in methane	10 ppb CO; 25 ppb H <sub>2</sub>	2 minutes
CO in Hydrogen	10 ppb CO	7 minutes
H <sub>2</sub> and CO in bulk gas: oxygen, inerts and air	10 ppb CO; 25 ppb H <sub>2</sub>	6 minutes

### Performance

Accuracy	Greater of ± 10 ppb H <sub>2</sub> ; ± 5 ppb CO; ± 10% of reading
Range	0 to 3 ppm (Higher are available as an option)
Response Time	Length of analysis is dependant on application. Response time is independent of sample concentration.
Ambient Operating Temperature	50 to 90°F (10 to 32°C)
Sample Compatibility	Specific models available for various applications
Resolution, Display	0.1 ppb
Resolution, Communication Ports	0.01 ppb

### Carrier Gas Supplies (On-Line Installation)

Inlet Pressure Range	70 to 90 psig (4.8 to 6.1 bar)
Inlet Pressure Stability	± 2%, regulator required
Return Pressure	Atmospheric vent is optimal, ± 0.5 psig maximum
Flow Rate	20 cc/min minimum, bypass at 50 cc/min
Temperature	60 to 100°F (16 to 38°C), optimum when maintained ± 2°C
Maximum Impurity Levels	Varies by application, inlet purifier may be required

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### Gas Ports

Sample Inlet	1/16-inch VICI compression
Carrier	1/16-inch VICI compression
Sample Vent	1/16-inch VICI compression
Aux	1/16-inch VICI compression

### Sample Gas

Inlet Fitting	1/16 - inch VICI compression fitting
Flow Rate	20 - 100 sccm minimum
Inlet Pressure Stability	± 2%, UHP regulator required
Vent Pressure	Atmospheric pressure vent is optimal, ± 0.5 psig maximum

### Calibration Gas

Inlet Fitting	Sample Gas Inlet (1/16 - inch VICI compression fitting)
Cylinder Concentration	Depends on application
Blender Recommended	AMETEK Trace Analytical MGB1000 Micro Gas Blender

### Chassis

Dimensions	7" H x 16.8" W x 26.5" D (18cm x 43cm x 67cm)
Weight	35 lb. (15.9 kg)
Power	100 - 120 VAC, 50/60 Hz; 200 - 240 VAC, 50/60 Hz

*One of a family of innovative process analyzer solutions from AMETEK Process Instruments. Specifications subject to change without notice.*

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