AMETEK Process Instruments is a worldwide manufacturer of process analyzers and instrumentation.

At AMETEK Process Instruments, we focus our experience on designing innovative analyzers that help our customers reach higher levels of productivity and quality. We achieve this by finding ways to overcome the limitations of current methods of process monitoring, control and quality assurance. Through this focus we have created some of the most capable technologies in the world.

Our primary focus in analyzer design is reliability. We understand that you must have confidence that the analyzer will provide the correct information when you need it. It is a documented fact that many of our analyzers have been in service for well over 20 years.

Markets Served:
ABOUT US

Unique Solutions – Custom Designs

No single solution fits all applications or processes. If a pre-engineered product does not meet your needs, we will work with you to custom-design an analyzer suited to your specific application. We pride ourselves on our ability, and willingness, to produce unique analyzers and solutions for our customers.

Core Competencies

- Analysis of moisture in hydrocarbon gases and high purity gases
- Burner air/fuel mixing control
- Chemical composition analysis of gases and liquids
- Coal fired power generation
- Combustion and furnace atmosphere control
- Combustion/process heating
- Contamination monitoring of high and ultra-high purity gases
- Heat treating atmosphere monitoring/control
- Natural gas processing and transmission
- Pharmaceutical solvent drying processes
- Emissions monitoring
- Quality monitoring of gas and liquid feedstocks
- Refining and petrochemical processes
- Sulfur recovery processes
- Trace analysis
- Vacuum analysis/residual gas analysis

Analyzer Technologies

- Gas chromatographs (GC)
- Gas gravitometers
- Manual and online chilled-mirror dew point analyzers
- Process mass spectrometers
- Quartz crystal microbalance (QCM) and electrolytic moisture analyzers
- Residual gas analyzers
- Tunable diode laser absorption spectroscopy (TDLAS)
- Ultraviolet and visible (UV-VIS) and infrared (IR) process analyzers
- X-ray transmission (XRT)
- Zirconium oxide analyzers

Service Commitment

With more than 100 factory-trained service technicians worldwide, our customer commitment continues well beyond start-up and commissioning. We offer a wide variety of service plans and resources to support our customers’ installations anywhere in the world.

ametekpi.com
Find the right analyzer for your application. We've made it simple with our at-a-glance listings, separated into the key markets we supply.

**GLOSSARY**

<table>
<thead>
<tr>
<th>ABBREVIATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMU</td>
<td>Atomic mass unit</td>
</tr>
<tr>
<td>BTU</td>
<td>British thermal unit</td>
</tr>
<tr>
<td>CCR</td>
<td>Continuous catalyst regeneration</td>
</tr>
<tr>
<td>CEM</td>
<td>Continuous emission monitoring</td>
</tr>
<tr>
<td>GC-FID</td>
<td>Gas chromatography with flame ionization detector</td>
</tr>
<tr>
<td>GC-RGD</td>
<td>Gas chromatography with reduction gas detector</td>
</tr>
<tr>
<td>IR</td>
<td>Infrared</td>
</tr>
<tr>
<td>LNG</td>
<td>Liquefied natural gas</td>
</tr>
<tr>
<td>LPG</td>
<td>Liquefied petroleum gas</td>
</tr>
<tr>
<td>MAU</td>
<td>Milli-absorbance unit</td>
</tr>
<tr>
<td>NDIR</td>
<td>Nondispersive infrared</td>
</tr>
<tr>
<td>NGL</td>
<td>Natural gas liquids</td>
</tr>
<tr>
<td>P₂O₅</td>
<td>Phosphorus pentoxide</td>
</tr>
<tr>
<td>ppb</td>
<td>Parts per billion</td>
</tr>
<tr>
<td>ppbv</td>
<td>Parts per billion by volume</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>ppmv</td>
<td>Parts per million by volume</td>
</tr>
<tr>
<td>ppmw</td>
<td>Parts per million by weight</td>
</tr>
<tr>
<td>QCM</td>
<td>Quartz crystal microbalance</td>
</tr>
<tr>
<td>TCD</td>
<td>Thermal conductivity detector</td>
</tr>
<tr>
<td>TDLAS</td>
<td>Tunable diode laser absorption spectroscopy</td>
</tr>
<tr>
<td>TGTU</td>
<td>Tail gas treating unit</td>
</tr>
<tr>
<td>TRS</td>
<td>Total reduced sulfur</td>
</tr>
<tr>
<td>UV</td>
<td>Ultraviolet</td>
</tr>
<tr>
<td>ZrO₂</td>
<td>Zirconium oxide</td>
</tr>
</tbody>
</table>

1. **MODEL** - Analyzer name
2. **RANGE** - Valid measurement concentrations
3. **ACCURACY** - Degree of measurement precision
4. **TECHNOLOGY** - Measurement technology used
5. **MEASURES** - Elements or compound detected
6. **PROCESS** - Chemical operation/operating unit
7. **APPLICATION** - Particular function

To find out more or request a quote, visit our website today
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<td>NATURAL GAS</td>
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<td>PULP &amp; PAPER, GLASS, CEMENT &amp; LIME</td>
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</tr>
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<td>35</td>
</tr>
</tbody>
</table>
HYDROCARBON PROCESSING

Optimized process solutions

With decades of experience in this industry, AMETEK Process Instruments offers an extensive range of gas and moisture analyzers for the hydrocarbon processing market.

Our unique technologies and advanced designs provide the critical measurements needed to optimize your process. This ensures a high-quality product produced in safe operating conditions.

To find out more or request a quote, visit our website today
**IPS-4**

**MEASURES:** NH₃, H₂O, CO₂, SO₂, H₂S, NO, NO₂, NOx, THC, ASTM color standards, Ethylene Glycol

**RANGE**
ppmv/ppmw to 100%, application dependent

**ACCURACY**
UV: ±1% of full scale range
IR: ±2% of full scale range
Dual Bench: ±2% of full scale typical

**APPLICATION**
Sulfur Recovery, Emission Compliance, Ethylene Oxide, Sour Gas Treatment, SO₂, Recovery/H₂SO₄

**TECHNOLOGY:** UV/NDIR

**WDG-V**

**MEASURES:** O₂, Combustibles, CH₄

**RANGE**
O₂: From 0-1% to 0-100%
Combustibles: 0-500 ppmv to 0-10,000 ppmv, 0-2% to 0-5%
Hydrocarbon: 0-5%

**APPLICATION**
Fired Heaters, Power Generation

**ACCURACY**
O₂: ±0.75% of measured value or ±0.05%, whichever is greater
Combustibles: ±2% of full-scale output range
Hydrocarbon: ±5% of full scale output range

**TECHNOLOGY:** ZrO₂, Catalytic Sensor

**5000**

**MEASURES:** H₂O

**RANGE**
0 to 1000 ppmv, trend indication above 1000 ppmv
Output capability in lb./mmscf and dew point temperature (requires sample line pressure as analog input; single point systems only)

**ACCURACY**
±1 ppmv or ±5% of reading, whichever is greater

**APPLICATION**
Continuous Catalyst Regeneration

**TECHNOLOGY:** QCM

**888**

**MEASURES:** H₂S, SO₂

**RANGE**
Standard: 0 to 1% SO₂
0 to 2% H₂S
High Range: 0 to 2% SO₂
0 to 4% H₂S

**APPLICATION**
Sulfur Recovery

**ACCURACY**
±1% of full scale

**TECHNOLOGY:** UV
**HYDROCARBON PROCESSING**

**900**

**MEASURES:** H₂S, SO₂, COS, CS₂

**RANGE**

<table>
<thead>
<tr>
<th>Species measured</th>
<th>Minimum full scale</th>
<th>Maximum full scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂S</td>
<td>5000 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>SO₂</td>
<td>2500 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>CS₂</td>
<td>5000 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>COS</td>
<td>5000 ppm</td>
<td>100%</td>
</tr>
</tbody>
</table>

**ACCURACY**

SO₂ and H₂S: ±1% of full scale of standard ranges
COS and CS₂: ±10% of full scale of standard ranges

**PROCESS**

Sulfur Recovery

**APPLICATION**

Tail Gas/Air Demand Ratio

**TECHNOLOGY:** UV

---

**909**

**MEASURES:** H₂S, SO₂, NO, NO₂, NOx, NH₃, Optional O₂

**RANGE**

<table>
<thead>
<tr>
<th>Species measured</th>
<th>Minimum full scale</th>
<th>Maximum full scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>250 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NO</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NO₂</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NOₓ</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>H₂S</td>
<td>125 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NH₃</td>
<td>500 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>Cl₂</td>
<td>500 ppm</td>
<td>100%</td>
</tr>
</tbody>
</table>

**ACCURACY**

±1% full scale of standard ranges

**PROCESS**

Sulfur Recovery

**APPLICATION**

CEMS, Mass Flow Single Gas

**TECHNOLOGY:** UV

---

**910**

**MEASURES:** H₂S, SO₂, NO, NO₂, NOₓ, NH₃, Optional O₂

**RANGE**

<table>
<thead>
<tr>
<th>Species measured</th>
<th>Minimum full scale</th>
<th>Maximum full scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>250 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NO</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NO₂</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NOₓ</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>H₂S</td>
<td>125 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NH₃</td>
<td>500 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>Cl₂</td>
<td>500 ppm</td>
<td>100%</td>
</tr>
</tbody>
</table>

**ACCURACY**

±1% full scale of standard ranges

**PROCESS**

Sulfur Recovery

**APPLICATION**

CEMS, Mass Flow Multi Gas

**TECHNOLOGY:** UV

---

**914**

**MEASURES:** H₂S, SO₂, NO, NO₂, NOₓ, CO₂, O₂

Designed to meet regulatory reporting requirements for CEM

**ACCURACY**

Designed to meet customer specifications

**PROCESS**

Emissions Control

**APPLICATION**

Continuous Emission Monitoring System (cold-dry)

**TECHNOLOGY:** UV, NDIR, Paramagnetic

---

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### 919

**Measures:** H₂S, SO₂, NO, NO₂, NOx, NH₃, Optional O₂

**Range**

<table>
<thead>
<tr>
<th>Species measured</th>
<th>Minimum full scale</th>
<th>Maximum full scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>250 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NO</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NO₂</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>H₂S</td>
<td>125 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NH₃</td>
<td>500 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>Cl₂</td>
<td>500 ppm</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Accuracy**

±1% full scale of standard ranges

**Process**

Sulfur Recovery

**Application**

CEMS Single Gas (no mass flow)

**Technology:** UV

### 920

**Measures:** H₂S, SO₂, NO, NO₂, NOx, NH₃, Optional O₂

**Range**

<table>
<thead>
<tr>
<th>Species measured</th>
<th>Minimum full scale</th>
<th>Maximum full scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>250 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NO</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NO₂</td>
<td>300 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>H₂S</td>
<td>125 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>NH₃</td>
<td>500 ppm</td>
<td>100%</td>
</tr>
<tr>
<td>Cl₂</td>
<td>500 ppm</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Accuracy**

±1% full scale of standard ranges

±2.0% full scale of standard ranges for H₂S + NH₃ application

**Process**

Sulfur Recovery

**Application**

CEMS Multi Gas (no mass flow)

**Technology:** UV

### 930

**Measures:** H₂S, SO₂

**Range**

<table>
<thead>
<tr>
<th>Species measured</th>
<th>Maximum full scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂S</td>
<td>0-4%</td>
</tr>
<tr>
<td>SO₂</td>
<td>0-2%</td>
</tr>
</tbody>
</table>

(Other ranges available on request)

**Accuracy**

±1% full scale of standard ranges

**Process**

Sulfur Recovery

**Application**

Sulfur Pit

**Technology:** UV

### 931/932

**Measures:** H₂S, Optional COS, CS₂, NH₃, SO₂, H₂, CO₂

**Range**

<table>
<thead>
<tr>
<th>Species measured</th>
<th>Maximum full scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂S</td>
<td>ppm ranges to high percent levels</td>
</tr>
<tr>
<td>H₂</td>
<td>0 to 5% or 0 to 10%</td>
</tr>
<tr>
<td>Other components and ranges are available upon request</td>
<td></td>
</tr>
</tbody>
</table>

**Accuracy**

Standard range (UV): ±1% of full scale of standard ranges

Optional (TCD) H₂ sensor for TGTU applications: ±2% on a 0 to 10% range

**Process**

Sulfur Recovery

**Application**

Feed Forward/TGTU

**Technology:** UV/TCD
### 934
**Measures:** $H_2$

**Range**
- 0 to 5% or 0 to 10%

**Accuracy**
- ±2% on a 0-10% range
- ±4% on a 0-5% range

**Process**
- Sulfur Recovery

**Application**
- TGTU Efficiency

**Technology:** TCD

---

### 9900 RM/WM
**Measures:** $H_2S, SO_2, NO, NO_x, ClO_2, NO_x, NH_3, Optional O_2$

**Range**

<table>
<thead>
<tr>
<th>Species Measured</th>
<th>Single Species Minimum Full Scale</th>
<th>Multi-Species Minimum Full Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>$SO_2$</td>
<td>10 ppm</td>
<td>20 ppm</td>
</tr>
<tr>
<td>$H_2S$</td>
<td>25 ppm</td>
<td>100 ppm</td>
</tr>
<tr>
<td>NO</td>
<td>50 ppm</td>
<td>50 ppm</td>
</tr>
<tr>
<td>NO$_2$</td>
<td>100 ppm</td>
<td>100 ppm</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>n/a</td>
<td>100 ppm</td>
</tr>
<tr>
<td>$O_2$</td>
<td>0%</td>
<td>25%</td>
</tr>
</tbody>
</table>

**Accuracy**
- Better than ±1.0% of standard full scale range
- $O_2$: ±0.1%

**Process**
- Emissions Control

**Application**
- Continuous Emission Monitoring System

**Technology:** UV (opt. Paramagnetic/ZrO$_2_2$)

---

### 3050-OLV
**Measures:** $H_2O$

**Range**
- 0.1 to 2,500 ppmv
  - Readout capability in ppmv, lb/mmscf, mg/Nm$^3$, and dew point temperature in °C or °F (requires process pressure as an input)

**Accuracy**
- ±0.1 ppmv or ±10% of reading, whichever is greater

**Process**
- Continuous Catalyst Regeneration

**Application**
- Hydrogen Recycle Gas

**Technology:** QCM

---

### ta3000R
**Measures:** CO

**Range**
- 0 to 3 ppmv

**Process**
- PE/PP Production, Ethylene/Propylene Feedstock

**Application**
- Catalyst Protection

**Accuracy**
- ±10 ppbv or ±10% of reading, whichever is greater

**Technology:** GC-RGD

---

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ProLine

**RANGE**
1 ppmv-100%

**ACCURACY**
±0.5% of measured value for argon in air

**MEASURES:** BTU values, H₂, C₁-C₇ alkanes, CO, CO₂, N₂, O₂, and other components m/z 1-200

**PROCESS**
Emission Flare Compliance

**APPLICATION**
Flare BTU Monitor

**TECHNOLOGY:** Mass Spectrometer

---

WDG-IV UOP

**RANGE**
From 0-1% to 0-100%

**ACCURACY**
±0.75% of measured value or ±0.05%, whichever is greater

**MEASURES:** O₂

**PROCESS**
Catalytic Reforming/Platforming, Continuous Catalyst Regeneration (CCR)

**APPLICATION**
Oxygen Monitoring in CCR

**TECHNOLOGY:** ZrO₂

---

ProMaxion

**RANGE**
1 ppmv-100%

**ACCURACY**
±0.5% of measured value for argon in air

**MEASURES:** BTU values, H₂, C₁-C₇ alkanes, CO, CO₂, N₂, O₂, and other components m/z 1-200

**PROCESS**
Emission Flare Compliance

**APPLICATION**
Flare BTU Monitor

**TECHNOLOGY:** Mass Spectrometer

---

682T-HP

**RANGE**
Analysis range for sulfur of 0.02-6.0%

**ACCURACY**
Repeatability: Typical 1 sigma precision for (100 sec.):
10% relative at 0.04 wt. % sulfur
5% relative at 0.1 wt. % sulfur
0.1% relative at 3.24 wt. % sulfur

**MEASURES:** Sulfur

**PROCESS**
Blending Operations, Marine Fuel

**APPLICATION**
Sulfur Concentration in Crude Oil, Blending Operations, Marine Bunker Fuel

**TECHNOLOGY:** X-Ray Transmission
**WDG Insitu**

**MEASURES:** $O_2$

**RANGE**
0-1% to 0-100%

**PROCESS**
Fired Heaters, Power Generation

**APPLICATION**
Oxygen Monitoring in Power and Steam Boilers, Process Heaters, Thermal Oxidizers

**TECHNOLOGY:** $ZrO_2$

**FlarePro**

**MEASURES:** BTU values, $H_2$, C1-C7 alkanes, $CO_2$, CO, $N_2$, $O_2$, and other components m/z 1-200

**RANGE**
1 ppmv-100%

**PROCESS**
Emission Flare Compliance

**APPLICATION**
Flare BTU Monitor

**TECHNOLOGY:** Mass Spectrometer

**5100HD**

**MEASURES:** $CO$, $CO_2$, $O_2$, $H_2O$, $H_2S$

**RANGE**
ppmv to % level, application dependent

**ACCURACY**
±2% of reading (typical)

**PROCESS**
Ethylene Production, Refining, Emission Compliance

**APPLICATION**
Acetylene Conversion Rate, CO and $CO_2$ Levels in Furnace Decoking, Moisture in Continuous Catalyst Regeneration, Moisture in Hydrogen Recycle Gas, Moisture in Olefins (UOP Catalytic Regeneration), $H_2$ in Flare and Refinery Fuel Gas

Consult AMETEK for more potential applications

**TECHNOLOGY:** TDLAS

To find out more or request a quote, visit our website today
Ready to face the challenge

AMETEK Process Instruments’ expertise delivers a solution that ensures safety, quality and efficiency in the high-heat environment of metals and mining.

Using our accurate technologies – including TDLAS lasers, mass spectrometers and UV analyzers – we provide the measurements you require, from furnace control to emissions reduction.
**MEASURES:** $\text{H}_2$, $\text{O}_2$, $\text{CO}$, $\text{CO}_2$, $\text{N}_2$, $\text{Ar}$, $\text{CH}_4$, and other components

**m/z 1-200**

**PROCESS:** Steel Production

**APPLICATION:** Basic Oxygen, Electric Arc Furnace, Blast Furnace, VD

**ACCURACY**

$\text{O}_2$: ±0.75% of measured value or ±0.05%, whichever is greater

Combustibles: ±2% of full scale output range

**RANGE**

$\text{O}_2$: From 0-1% to 0-100%

Combustibles: From 0-2,000 ppmv to 0-10,000 ppmv or from 0-1% to 0-5%

**TECHNOLOGY:** ZrO$_2$, Catalytic Sensor

---

**MEASURES:** $\text{H}_2$, $\text{O}_2$, $\text{CO}$, $\text{CO}_2$, $\text{N}_2$, $\text{Ar}$, $\text{CH}_4$, and other components

**m/z 1-200**

**PROCESS:** Steel Production

**APPLICATION:** Basic Oxygen, Electric Arc Furnace, Blast Furnace, VD

**ACCURACY**

$\text{O}_2$: ±0.75% of measured value for argon in air

Combustibles: ±2% of full scale output range

**RANGE**

1 ppmv-100%

**TECHNOLOGY:** Mass Spectrometer

---

**MEASURES:** $\text{O}_2$, Combustibles

**PROCESS:** Foundry/Metals Production

Furnaces, Kilns

**APPLICATION:** Combustion Control and Oxygen Monitoring in Blast Furnace Stoves, Reheat Furnaces and Lime Kilns; Excess Fuel Monitoring of Graphite Electrodes in Electric Arc Furnaces (with Excess Fuel Option)

**ACCURACY**

$\text{O}_2$: ±0.75% of measured value for argon in air

Combustibles: ±2% of full scale output range

**RANGE**

O$_2$: From 0-1% to 0-100%

Combustibles: From 0-2,000 ppmv to 0-10,000 ppmv or from 0-1% to 0-5%

**TECHNOLOGY:** UV, Mass Spectrometer

---

**MEASURES:** $\text{SO}_2$, $\text{F}_2$, Uranium

**PROCESS:** Emissions Compliance

**APPLICATION:** Emissions

**ACCURACY**

Better than ±1.0% of standard full scale range

**RANGE**

ppmv/ppmw to 100%, application dependent

**TECHNOLOGY:** UV
### IPS-4

**MEASURES:** SO₂, F₂, Uranium

**RANGE**
ppmv/ppmw to 100%, application dependent

**PROCESS**
Emission Compliance

**APPLICATION**
Emissions

**TECHNOLOGY:** UV/NDIR

**ACCURACY**
UV: ±1% of full scale range
IR: ±2% of full scale range
Dual Bench: ±2% of full scale typical

### 5100HD

**MEASURES:** CO, CO₂, O₂, H₂O, CH₄, H₂S

**RANGE**
ppmv to % level, application dependent

**PROCESS**
Operations

**APPLICATION**
Safety, Emissions, Operational Efficiency Monitoring

**TECHNOLOGY:** TDLAS

### WDG Insitu

**MEASURES:** O₂

**RANGE**
0-1% to 0-100%

**PROCESS**
Coke Ovens, Power Generation

**APPLICATION**
Process Oxygen Monitoring in Coke Ovens and Power and Steam Boilers

**TECHNOLOGY:** ZrO₂

**ACCURACY**
±1% of measured value or ±0.05%, whichever is greater

### WDG-V

**MEASURES:** O₂, Combustibles, CH₄

**RANGE**
O₂: From 0-1 to 0-100%
Combustibles: 0-1000 ppmv with overrange 0-2,000 ppmv;
0-10,000 ppmv; 0-2 to 0-5%
Hydrocarbon: 0-5%

**PROCESS**
Foundry/Metals Production Furnaces, Power Generation

**APPLICATION**
Combustion Control and Oxygen Monitoring in Reheat Furnaces and Power and Steam Boilers

**TECHNOLOGY:** ZrO₂, Catalytic Sensor

**ACCURACY**
O₂: ±0.75% of measured value or ±0.05%, whichever is greater
Combustibles: ±2% of full scale output range
Hydrocarbon: ±5% of full scale output range

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Proven technologies for critical measurements

With extensive experience and continuous product development, AMETEK Process Instruments provides a comprehensive portfolio of specialized solutions, utilizing advanced technologies to provide vital analysis across the full range of natural gas processes.

From drilling to gas processing and transmission to the production of liquefied natural gas (LNG), we have the process instrumentation to ensure natural gas meets quality specifications and tariff requirements for gas treating, processing, transmission, and end use as a fuel or feedstock.

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**NATURAL GAS**

### 931/932

**MEASURES:** H₂S, Optional COS, CS₂, NH₃, SO₂, H₂, CO₂

**RANGE**
- H₂S: ppmv ranges to high percent levels
- H₂: 0 to 5% or 0 to 10%
- Other components and ranges are available upon request

**PROCESS**
- Drilling Wells, Sweetening, Transmission Pipelines, Underground Storage, LNG

**APPLICATION**
- Amine and Glycol Contactor Efficiency, Transmission Sales Gas Quality, Custody Transfer Tariff Limits, Feed Gas Quality for LNG Liquefaction

**TECHNOLOGY:** UV/TCD/IR

**ACCURACY**
- Standard range (UV): ±1% of full scale
- Optional (TCD) H₂ sensor for TGTU applications: ±2% on a 0 to 10% range; ±4% on a 0 to 5% range
- Optional (IR) sensor for THC, CO₂; application specific, consult factory

### 933

**MEASURES:** H₂S, COS, CH₃SH

**RANGE**
- H₂S: 0 to 3 ppmv min.; 0 to 100 ppmv max.
- COS: 0 to 15 ppmv min.; 0 to 500 ppmv max.
- MeSH: 0 to 9 ppmv min.; 0 to 250 ppmv max.

**PROCESS**
- Sweetening, Transmission Pipelines, LNG, Underground Storage

**APPLICATION**
- Amine and Glycol Contactor Efficiency, Transmission Sales Gas Quality, Custody Transfer Tariff Limits, Feed Gas Quality for LNG Liquefaction

**TECHNOLOGY:** UV/IR

**ACCURACY**
- Standard range: ±2% of full scale
- Low range: ±5% of full scale

### 5100P

**MEASURES:** Moisture

**RANGE**
- 0 to 2500 ppmv

**ACCURACY**
- ±4 ppmv, or ±2% of reading, whichever is greater

**PROCESS**
- Dehydration, Transmission Pipelines, Underground Storage

**APPLICATION**
- Glycol Contactor Efficiency, Transmission Sales Gas Quality, Custody Transfer Tariff Limits

**TECHNOLOGY:** TDLAS

### 5100HD

**MEASURES:** CO, CO₂, O₂, H₂O, H₂S

**RANGE**
- H₂O: 0.25 to 60 lbs
- CO₂: 0-50 ppmv to 0-100%
- H₂S: 0-300 ppmv to 0-100%

**PROCESS**
- Dehydration, Sweetening, Transmission Pipelines, Underground Storage, LNG

**APPLICATION**
- Amine and Glycol Contactor Efficiency, Transmission Sales Gas Quality, Custody Transfer Tariff Limits, Feed Gas Quality for LNG Liquefaction

**ACCURACY**
- H₂O: ±4 ppmv or ±2% of reading, whichever is greater
- CO₂: range dependent
- H₂S: range dependent

**TECHNOLOGY:** TDLAS

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5100

**MEASURES:** CO₂, H₂O, H₂S

**RANGE**
0.25-60 lb/MMscf/4-1900 mg/m³
(5 to 2500 ppmv)
Other ranges available

**PROCESS**
Sweetening, Dehydration,
Transmission Pipelines,
Underground Storage

**APPLICATION**
Amine and Glycol Contactor
Efficiency, Transmission Sales Gas
Quality, Custody Transfer Tariff Limits

**TECHNOLOGY:** TDLAS

241CE II

**MEASURES:** Hydrocarbon
Dew Point Temperature

**RANGE**
Cooling capability: Typically 60°C
below the temperature at the
analyzer installation

**PROCESS**
Dehydration, Drilling/Wells,
Transmission Pipelines, LPG & NGL
Fractionation

**APPLICATION**
Glycol Contactor Efficiency,
Dryer Efficiency & Breakthrough,
Custody Transfer Tariff Limits,
Liquids Separation

**ACCURACY**
Hydrocarbon dew point
temperature ±1°C

**TECHNOLOGY:** Chilled Mirror

Chanscope II

**MEASURES:** H₂O and
Hydrocarbon Dew Point Temperature

**RANGE**
Dew point temperature ranges:
-29°C to ambient, with liquid
propane; -62°C to ambient, with
liquid carbon dioxide; -129°C to
ambient, with optional liquid
nitrogen chiller

**TECHNOLOGY:** Chilled Mirror

**APPLICATION**
Glycol Contactor Efficiency,
Transmission Sales Gas Quality,
Custody Transfer Tariff Limits,
Liquids Separation

Model 13

**MEASURES:** H₂O and Hydrocarbon
Dew Point Temperature

**RANGE**
Dew point temperature range dependent on which
thermometer is chosen

**TECHNOLOGY:** Chilled Mirror

**APPLICATION**
Amine and Glycol Contactor
Efficiency, Transmission Sales Gas
Quality, Custody Transfer Tariff Limits

**ACCURACY**
±0.25°C

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**3050-OLV**

**MEASURES:** $H_2O$

**RANGE**
0.1 to 2,500 ppmv
Readout capability in ppmv, lb/mmscf, mg/Nm$^3$, and dew point temperature in °C or °F (requires process pressure as an input)

**APPLICATION**
Feed Gas Quality to Turbo Expander

**ACCURACY**
±0.1 ppmv or ±10% of reading, whichever is greater

**TECHNOLOGY:** QCM

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**3050-SLR**

**MEASURES:** $H_2O$

**RANGE**
0.01 to 100 ppmv
Readout capability in ppmv, lb/mmscf, mg/Nm$^3$, and dew point temperature in °C or °F (requires process pressure as an input)

**APPLICATION**
Glycol Contactor Efficiency, Transmission Sales Gas Quality, Custody Transfer Tariff Limits

**ACCURACY**
±0.03 ppmv or ±10% of reading, whichever is greater

**TECHNOLOGY:** QCM

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**3050-DO**

**MEASURES:** $H_2O$

**RANGE**
0.02 to 100 ppmv
Readout capability in ppmv, lb/mmscf, mg/Nm$^3$, and dew point temperature in °C or °F (requires process pressure as an input)

**APPLICATION**
Glycol Contactor Efficiency, Dryer Efficiency and Breakthrough

**ACCURACY**
±0.02 ppmv or ±10% of reading, whichever is greater

**TECHNOLOGY:** QCM

---

**3050-TE**

**MEASURES:** $H_2O$

**RANGE**
0.01 to 100 ppmv
Readout capability in ppmv, lb/mmscf, mg/Nm$^3$, and dew point temperature in °C or °F (requires process pressure as an input)

**APPLICATION**
Feed Gas Quality to Turbo Expander

**ACCURACY**
±0.01 ppmv or ±10% of reading, whichever is greater

**TECHNOLOGY:** QCM
303B

**MEASURES:** H₂O

**RANGE**
0 to 1000 ppmv (0-2000 ppmv range with reduced sample flow)

**PROCESS**
Dehydration, Transmission Pipelines, Underground Storage, LNG

**APPLICATION**
Glycol Contactor Efficiency, Transmission Sales Gas Quality, Custody Transfer Tariff Limits, Feed Gas Quality for LNG Liquefaction

**TECHNOLOGY:** P₂O₅

IPS-4

**MEASURES:** H₂O, CO₂, Cl₂, FeCl₃, CH₃I, SO₂, H₂S, NO, NO₂, ClO₂, NOx, H₂S in rich amine, ASTM color standards, Bisphenol-A, Ethylene Glycol

**RANGE**
ppmv/ppmw to 100%, application dependent

**PROCESS**
Gas Sweetening

**APPLICATION**
Rich Amine

**TECHNOLOGY:** UV/NDIR

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The remedy for your process requirements

Pharmaceutical applications require outstanding sensitivity and stability combined with accurate real-time monitoring.

AMETEK Process Instruments delivers field-proven systems that provide the multi-component analysis required for fermentation process control and drying while offering compact designs and ease of operation.
**PHARMACEUTICAL**

**WDG-V**

**RANGE**
- $O_2$: From 0-1% to 0-100%
- Combustibles: From 0-2,000 ppmv to 0-10,000 ppmv or from 0-1% to 0-5%
- Hydrocarbon: From 0-1% to 0-5%

**ACCURACY**
- $O_2$: ±0.75% of measured value or ±0.05%, whichever is greater
- Combustibles: ±2% of full scale output range
- Hydrocarbon: ±5% of full scale output range

**MEASURES:** $O_2$, Combustibles, $CH_4$

**TECHNOLOGY:** $ZrO_2$, Catalytic sensor

**PROCESS**
- Fired Heaters, Power and Steam Generation

**APPLICATION**
- Combustion Control in Process Heaters, Power and Steam Boilers, Thermal Oxidizers

**WDG-HPII**

**RANGE**
- $O_2$: From 0-1% to 0-100%
- Combustibles: From 0-2,000 ppmv to 0-10,000 ppmv or from 0-1% to 0-5%

**ACCURACY**
- $O_2$: ±0.75% of measured value or ±0.05%, whichever is greater
- Combustibles: ±2% of full scale output range

**MEASURES:** $O_2$, Combustibles

**TECHNOLOGY:** $ZrO_2$

**PROCESS**
- Lime Kilns

**APPLICATION**
- Combustion Control

**5100HD**

**RANGE**
- $H_2O$: ppmv to % level, application dependent
- Combustibles: From 0-2,000 ppmv to 0-10,000 ppmv or from 0-1% to 0-5%

**ACCURACY**
- $O_2$: ±0.75% of measured value or ±0.05%, whichever is greater
- Combustibles: ±2% of full scale output range

**MEASURES:** $O_2$, $H_2O$

**TECHNOLOGY:** TDLAS

**PROCESS**
- Drying Operations

**APPLICATION**
- Moisture in Final Product, Oxygen Concentration in Dryers

**ProMaxion**

**RANGE**
- $N_2$, $O_2$, $CO_2$, $CO$, Argon, Methanol, Ethanol, Organic Solvents, VOCs, and other components m/z 1-200

**MEASURES:** $N_2$, $O_2$, $CO_2$, $CO$, Argon, Methanol, Ethanol, Organic Solvents, VOCs, and other components m/z 1-200

**TECHNOLOGY:** Mass Spectrometer

**PROCESS**
- Safety-Health, Endpoint Detection

**APPLICATION**
- Ambient Air, Solvent Drying, Reaction Monitoring

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ProLine

MEASURES: N₂, O₂, CO₂, CO, Argon, Methanol, Ethanol, Organic Solvents, VOCs, and other components m/z 1-200

RANGE
1 ppm-100%

ACCURACY
±0.5% of measured value for argon in air

PROCESS
Safety-Health, Endpoint Detection

APPLICATION
Ambient Air, Solvent Drying, Reaction Monitoring

TECHNOLOGY: Mass Spectrometer
The power to control your process

Controlling the ratio of air and combustibles in combustion is key to safety, fuel efficiency and cost-effectiveness.

With a wealth of experience in providing power generation solutions, AMETEK Process Instruments has developed a range of products using proven zirconium oxide oxygen sensing for accurate combustion control.
POWER & STEAM GENERATION

WDG-V Blowback

**MEASURES:** \( \text{O}_2 \), Combustibles, \( \text{CH}_4 \)

**RANGE**
\( \text{O}_2 \): From 0-1% to 0-100%
Combustibles: 0-1000 ppmv with overrange 0-2,000 ppmv to 0-10,000 ppmv, 0-2 to 0-5%
Hydrocarbon: 0-5%

**ACCURACY**
\( \text{O}_2 \): ±0.75% of measured value or ±0.05%, whichever is greater
Combustibles: ±2% of full scale output range
Hydrocarbon: ±5% of full scale output range

**TECHNOLOGY:** \( \text{ZrO}_2 \), Catalytic Sensor

WDG Insitu

**MEASURES:** \( \text{O}_2 \)

**RANGE**
From 0-1% to 0-100% \( \text{O}_2 \)

**PROCESS**
Power and Steam Boilers, Recovery Boilers

**APPLICATION**
Oxygen Monitoring in Boilers, Stratification

**TECHNOLOGY:** \( \text{ZrO}_2 \)

WDG 1200/1210 Insitu

**MEASURES:** \( \text{O}_2 \)

**RANGE**
0-1% up to 0-25% v/v \( \text{O}_2 \)

**PROCESS**
Power and Steam Boilers

**APPLICATION**
Combustion Control for Boilers

**TECHNOLOGY:** \( \text{ZrO}_2 \)

WDG-HPII

**MEASURES:** \( \text{O}_2 \), Combustibles

**RANGE**
\( \text{O}_2 \): from 0-1% to 0-100%
Combustibles: from 0-2,000 ppmv to 0-10,000 ppmv or from 0-1% to 0-5%

**ACCURACY**
\( \text{O}_2 \): ±0.75% of measured value or ±0.05%, whichever is greater
Combustibles: ±2% of full scale output range

**PROCESS**
Coal Fired Boilers, Waste Wood Boilers, Biofuel Boilers, Recovery Boilers, High Particulate/Dusty Processes

**APPLICATION**
Combustion Control

**TECHNOLOGY:** \( \text{ZrO}_2 \), Catalytic Sensor

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WDG-V

**MEASURES:** O<sub>2</sub>, Combustibles, CH<sub>4</sub>

**RANGE**
- O<sub>2</sub>: From 0-1% to 0-100%
- Combustibles: 0-1000 ppmv with overrange 0-2,000 ppmv to 0-10,000 ppmv, 0-2 to 0-5%
- Hydrocarbon: 0-5%

**APPLICATION**
Combustion Control

**PROCESS**
Power and Steam Boilers

**TECHNOLOGY:** ZrO<sub>2</sub>, Catalytic Sensor

**ACCURACY**
- O<sub>2</sub>: ±0.75% of measured value or ±0.05%, whichever is greater
- Combustibles: ±2% of full scale output range
- Hydrocarbon: ±5% of full scale output range

---

3050-OLV

**MEASURES:** H<sub>2</sub>O

**RANGE**
- 0.1 to 2,500 ppmv
- Readout capability in ppmv, lb/mmscf, mg/Nm<sub>3</sub>, and dew point temperature in °C or °F (requires process pressure as an input)

**APPLICATION**
Moisture Control

**PROCESS**
Hydrogen Cooled Electric Generators

**TECHNOLOGY:** QCM

**ACCURACY**
- ±0.1 ppmv or ±10% of reading, whichever is greater

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5100HD

**MEASURES:** CO, CH<sub>4</sub>, O<sub>2</sub>

**RANGE**
- ppmv to % level, application dependent

**APPLICATION**
Combustion

**ACCURACY**
- CH<sub>4</sub> and CO: ±2% of reading
- O<sub>2</sub>: ±0.2%

**PROCESS**
Combustion

**TECHNOLOGY:** TDLAS

**APPLICATION**
Safety and Operational Efficiency Monitoring

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AMETEK Process Instruments’ extensive knowledge of combustion control and emissions monitoring plays a key role in industries such as pulp and paper, glass, and cement and lime.

Our trusted zirconium oxide (ZrO₂) analyzers provide important oxygen measurements, while we offer critical measurements for sulfur dioxide and NOx waste products.
**CMFA-P2000**

**Range**
100% to 0.1% excess O₂ and 0.1% to 50% excess fuel

**Accuracy**
- Excess O₂: ±2% of measured value or ±0.1%, whichever is greater.
- Excess Fuel: ±5% of measured value or ±0.25%, whichever is greater.

**Specifications**
Based on 0-15% range, natural gas.

**Process**
Fiberglass Strand and Glass Container Melt Tanks/Forehears, Ribbon Burners on Flame Treating Lines, Brazing Machines (pre-heat, flux, and braze).

**Application**

**Technology:** ZrO₂

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**PreMix 2000**

**Range**
All or selected portions of the range from 100% to 0.1% excess O₂ and 0.1% to 50% excess fuel.

**Accuracy**
- Excess O₂: ±2% of measured value or ±0.1%, whichever is greater.
- Excess Fuel: ±5% of measured value or 0.25%, whichever is greater.

**Process**

**Application**
Control of Product Quality via Oxygen and Air/Fuel Mixture Monitoring in Glass and Fiber Manufacturing.

**Technology:** ZrO₂

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**5100HD**

**Range**
- ppmv to % level, application dependent.

**Accuracy**
- CO: ±2% of reading.
- CH₄: ±0.5% of reading.
- O₂: ±2% of reading.
- Combustibles: ±2% of reading.

**Process**
Combustion.

**Application**
Safety and Operational Efficiency Monitoring.

**Technology:** TDLAS

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**WDG-HPII**

**Range**
- O₂: From 0-1% to 0-100%.
- Combustibles: From 0-2,000 ppmv to 0-10,000 ppmv or from 0-1% to 0-5%.

**Accuracy**
- O₂: ±0.75% of measured value or ±0.05%, whichever is greater.
- Combustibles: ±2% of full scale output range.

**Process**
Kilns, Power Generation, Process Furnaces.

**Application**
Combustion Control and Oxygen Monitoring in Rotary Kilns, Power and Steam Boilers, Black Liquor Recovery Boilers, Multiple Hearth Furnaces, Glass Melting Tank Exhaust.

**Technology:** ZrO₂, Catalytic Sensor.

---

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**IPS-4**  
**MEASURES:** SO₂, NOₓ, ClO₂, CO  
**RANGE**  
ppmv to 100%  
**ACCURACY**  
UV: ±1% of full scale range  
IR: ±2% of full scale range  
Dual Bench: ±2% of full scale typical  
**TECHNOLOGY:** UV/NDIR  
**APPLICATION**  
Pulp Bleaching, Emissions Compliance

**9900RM**  
**MEASURES:** SO₂, NOₓ, ClO₂  
**RANGE**  
ppmv/ppmw to 100%, application dependent  
**ACCURACY**  
Better than ±1.0% of standard full scale range  
**TECHNOLOGY:** UV  
**APPLICATION**  
Emission Compliance

**9900WM**  
**MEASURES:** SO₂, TRS, ClO₂  
**RANGE**  
ppmv/ppmw to 100%, application dependent  
**ACCURACY**  
Better than ±1.0% of standard full scale range  
**TECHNOLOGY:** UV  
**APPLICATION**  
Pulp Bleaching, Emissions Compliance

**WDG-V Blowback**  
**MEASURES:** O₂, Combustibles, CH₄  
**RANGE**  
O₂: From 0-1% to 0-100%  
Combustibles: 0-1000 ppmv with overrange 0-2,000 ppmv to 0-10,000 ppmv, 0-2 to 0-5%  
Hydrocarbon: 0-5%  
**TECHNOLOGY:** ZrO₂, Catalytic Sensor  
**APPLICATION**  
Fired Heaters, Process Generation, Process Furnaces, Kilns  
**ACCURACY**  
O₂: ±0.75% of measured value or ±0.05%, whichever is greater  
Combustibles: ±2% of full scale output range  
Hydrocarbon: ±5% of full scale output range
Accurate monitoring of moisture and impurity contamination

Moisture contamination in semiconductor manufacturing is a major cause of defects and process variations, significantly impacting yield.

This makes moisture analysis essential, both for cleanroom areas where semiconductor wafers are produced and stored, and for the ultra-high purity gases used in manufacturing processes.

A variety of methods are available for measuring moisture from high levels to trace amounts. Many manufacturing applications rely on trace measurements of water vapor to ensure process quality is maintained.
**5910**

**MEASURES:** $H_2O$

**RANGE**
0 to 150 ppbv
Trend indication to 1000 ppbv

**ACCURACY**
$\pm 100$ ppbv or $\pm 10\%$ of the reading, whichever is greater

**PROCESS**
Gas Purification

**APPLICATION**
Quality

**TECHNOLOGY:** QCM

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**5920**

**MEASURES:** $H_2O$

**RANGE**
0 to 150 ppbv
Trend indication to 1000 ppbv

**ACCURACY**
$\pm 1$ ppbv or $\pm 10\%$ of the reading, whichever is greater

**PROCESS**
Gas Purification

**APPLICATION**
Quality

**TECHNOLOGY:** QCM

---

**ta7000**

**MEASURES:** $H_2$, $CO$, $CO_2$, $CH_4$, NMHC

**RANGE**
0 to 199.9 ppbv

**ACCURACY**
$\pm 1$ x LDL or $\pm 10\%$ of reading, whichever is greater

**PROCESS**
Gas Purification

**APPLICATION**
Quality

**TECHNOLOGY:** GC-RGD/FID

---

**ta5000**

**MEASURES:** $CO$, $CO_2$, $H_2$, $CH_4$, NMHC

**RANGE**
RGD: 0-3 ppmv
FID: 0-5 ppmv

**ACCURACY**
$\pm 1$ x LDL or $\pm 10\%$ of reading, whichever is greater

**PROCESS**
Gas Purification

**APPLICATION**
Quality

**TECHNOLOGY:** GC-RGD/FID

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SEMICONDUCTOR, LCD/OLED DISPLAY MANUFACTURING & INDUSTRIAL GASES

5800

**MEASURES:** $H_2O$

**RANGE**
0.02 to 100 ppmv
Indicates trend to 1000 ppmv

**ACCURACY**
±20 ppbv or ±5% of the reading, whichever is greater

**PROCESS**
Gas Purification

**APPLICATION**
Quality

**TECHNOLOGY:** QCM

5830

**MEASURES:** $H_2O$

**RANGE**
0 to 100 ppmv
Indicates trend to 1000 ppmv

**ACCURACY**
±20 ppbv or ±10% of the reading, whichever is greater

**PROCESS**
Gas Purification

**APPLICATION**
Quality

**TECHNOLOGY:** QCM

3050-AMS

**MEASURES:** $H_2O$

**RANGE**
0.035 to 100 ppmv
Indicates trend to 1000 ppmv

**ACCURACY**
±0.035 ppmv or ±10%, whichever is greater

**PROCESS**
Gas Purification

**APPLICATION**
Quality

**TECHNOLOGY:** QCM

3050-AM

**MEASURES:** $H_2O$

**RANGE**
0.1 to 100 ppmv
Indicates trend to 1000 ppmv

**ACCURACY**
±0.1 ppmv or ±10%, whichever is greater

**PROCESS**
Gas Purification

**APPLICATION**
Quality

**TECHNOLOGY:** QCM

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### 3050-RM

**MEASURES:** H₂O

**RANGE**
- 0.1 to 2,500 ppmv
  - Readout capability in ppmv, lb/mmscf, mg/Nm³, and dew point temperature in °C or °F

**ACCURACY**
- ±0.1 ppmv or ±10%, whichever is greater

**TECHNOLOGY:** QCM

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### 2850

**MEASURES:** H₂O

**RANGE**
- 0.1 to 1000 ppmv

**ACCURACY**
- ±0.05 ppmv or ±5% of the reading, whichever is greater

**TECHNOLOGY:** QCM

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### ta3000

**MEASURES:** CO, CO₂, H₂, CH₄, NMHC

**RANGE**
- RGD: 0-3 ppmv
  - FID: 0-5 ppmv

**ACCURACY**
- ±10 ppbv or ±10% of reading, whichever is greater

**TECHNOLOGY:** GC-RGD/FID

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### TM2000

**MEASURES:** O₂

**RANGE**
- 0.1 ppmv O₂ to 100% O₂

**ACCURACY**
- ±1% of reading or 0.02% absolute, whichever is greater

**PROCESS**
- Air Separation, Inert Gas Purity (N₂, Ar, CO₂, He, etc.), Blanket/Purge Gases, Glove Box Applications, Cryogenic Gas Generation, Atmospheric Oven/Furnace Control, UV Curing Ovens

**APPLICATION**
- Trace Oxygen Monitoring for Quality Control of Inert Gas and High Purity Streams

**TECHNOLOGY:** ZrO₂
**LC-D**

**MEASURES:** All components m/z 1-300

**RANGE**
Total Pressure ≤10⁻⁵ torr

**ACCURACY**
Source sensitivity (Faraday cup): 2 x 10⁻⁴ amps per Torr at detector (measured with nitrogen at mass 28) with peak width = 0.5 at 10% height and 1 x 10⁻³ amps emission current

**TECHNOLOGY:** Mass Spectrometer

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**CG1000**

**MEASURES:** O₂

**RANGE**
0.1 ppmv O₂ to 100% O₂

**ACCURACY**
±2% of reading or 0.05% absolute, whichever is greater

**TECHNOLOGY:** ZrO₂

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**Dymaxion**

**MEASURES:** All components m/z 1-300

**RANGE**
1-100, 1-200, 1-300 AMU

**ACCURACY**
Source sensitivity (Faraday cup): 2 x 10⁻⁴ amps per Torr at detector (measured with nitrogen at mass 28) with peak width = 0.5 at 10% height and 1 x 10⁻³ amps emission current

**TECHNOLOGY:** Mass Spectrometer

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**PROCESS**
Chemical Vapor Deposition, Physical Vapor Deposition, Rapid Thermal Processing

**APPLICATION**
Quality

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**PROCESS**
Rapid Thermal Processing (RTP), Air Separation, Inert Gas Purity (N₂, Ar, CO₂, He, etc.), Blanket/Purge Gases, Glove Box Applications, Cryogenic Gas Generation, Atmospheric Oven/Furnace Control, UV Curing Ovens

**APPLICATION**
Trace Oxygen Monitoring for Quality Control of Inert Gas and High Purity Streams

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To find out more or request a quote, visit our website today
Versatile, customized solutions

Our expertise and industry-leading technologies can be used in a range of applications across a variety of industries. If your process demands accurate, high-quality gas analysis, backed by global support and servicing, AMETEK Process Instruments delivers.

Additionally, to ensure accurate and reliable process measurements, a representative sample of the process fluid must be delivered to the analyzer. A well-designed sample conditioning system will consider filtration, temperature, pressure, flow rate and environmental conditions. Installations may require a full analyzer shelter including analyzers, sample systems, calibration gases, HVAC controls, and power distribution.

Contact AMETEK Process Instruments or your local AMETEK representative for more information on our analyzers.

WellPro

MEASURES: Components m/z 1-200 AMU

RANGE
1 ppmv-100%

ACCURACY
±0.5% of measured value for argon in air

PROCESS
Well Logging

APPLICATION
Well Logging/Drilling

TECHNOLOGY: Mass Spectrometer

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