



OEM solutions guide

Specifying moisture, oxygen, and process gas sensors

Specifying sensors is business critical

Original equipment manufacturers (OEMs) are charged with designing and building equipment that their customers rely on. To that end, they need to specify the right sensors not only for their technical applications, but also for their long-term business needs and those of their customers.

Ensuring the functionality, safety, reliability, innovation, and support their customers need means partnering with the right suppliers. The choice is vital, not only for the equipment OEMs are manufacturing today, but also for the new designs they will need to support in the future.

When it comes to solutions for measuring moisture, oxygen, and hydrogen, OEMs need a partner with proven technologies that are well-known and widely deployed. That is where Panametrics comes in. At Panametrics, we work with OEMs around the world in energy, manufacturing, research, and more, giving us a unique perspective on the specification process and what OEMs should look for in a supplier.

Total cost of ownership

When considering the cost of a component, it is important to look not only at the purchase price, but also at the implications for long-term support costs and reputational impact.

Choosing Panametrics sensors for your designs can lower the total cost of ownership by offering:

- **Reduced maintenance:** Our sensors are built to work well and last a long time in extreme environments with minimal maintenance required
- **Robust support:** Should you or your end users require support, Panametrics has sites all over the globe ready to provide local support, which means there's no need to work with a third party or ship equipment for repair

- **Superior reliability:** With decades of experience backing our products, you can rest assured they will work as intended. Fewer problems and faults translate to fiscal savings
- **A trusted name:** The Panametrics name is well-known in the industry and helps add value to your solution

Support availability

Choosing a solution backed by a global company means customers can get direct support to solve their issues faster and more efficiently, wherever they are located. If your vendor can support training, product repairs, extended warranties, and field assessments, you're ahead of the game.

Panametrics operates in more than 120 countries, helping ensure the availability of local support wherever you or your customers need it. Your measurement needs can be addressed with expert technology and application specialists, whether you are in a remote location or in a large city. Product-specific services include technical support, project management, inspections, calibrations, repairs, and more.

Quality and reliability

For critical industrial, research, and energy applications, customers are indirectly relying on your suppliers to ensure safety and quality. You can be certain that our sensors will function properly because of our well-established dependability and support.

For demanding applications that require the highest level of accuracy and reliability, you may need to consider compact designs, integrated displays, low maintenance and calibration demands, fast response times, and the elimination of background interference.

Our solutions can measure in our customers' required ranges in a wide variety of extreme environments. We design our devices and user interfaces to produce a positive client experience that will benefit your company.

With Panametrics, you gain reliability and consistency in measurement in addition to solutions that fit your process perfectly. Because we understand that rapid and accurate outcomes are critical to process operation and product quality, we provide white-glove service to our OEMs, treating you as a priority and ensuring prompt shipments so you don't waste time waiting for sensors.

Fit-for-purpose solutions

To stay competitive, OEMs must continually refine their designs, streamlining product features and looking for ways to improve efficiency, usability, and safety. That means the sensors used in earlier designs won't always be the best fit as your products evolve. Each application will have distinct requirements, which means you need the ability to select devices that combine the right features for your purpose—going beyond one-size-fits-all devices.

With one of the broadest portfolios in the industry, Panametrics can serve as your supplier for a wide range of measurement and analysis solutions. Using proven technology, we can work with you to choose off-the-rack products or develop custom solutions for measuring and analyzing gas, moisture, and oxygen. We'll work hard to set you up with the best possible integrated systems of sensors and analyzers that meet your specific needs.

Innovation

You want to work with a company that is as focused on next-generation solutions as you are. Such a relationship pays dividends over time because you are prepared to access the newest technology sooner. By working with Panametrics, you'll be working with a recognized leader in pushing technology forward.

Specifications to look for

When choosing a sensor supplier, there are many important factors and dimensions to consider. Depending on your application, you may have to consider some or all of the following:

- **Ruggedness:** Sensors may need to withstand extreme environments. That includes temperature, pressure, humidity, chemical exposure, motion, and impact.
- **Accuracy:** Even the most robust sensor isn't worth much if it doesn't supply accurate readings. Meeting accuracy and precision specifications is core to the measurement.
- **Maintainability:** When equipment fails or requires maintenance, it can bring production to a halt. You don't want your customers frustrated by productivity loss associated with a cumbersome maintenance schedule.
- **Safety:** This is absolutely critical for customers using your devices in high-risk environments. Failures could lead to loss of product, damage to equipment, and even severe personal injury. Our products deliver proven reliability with fail-safe sensor designs and packages designed for all types of hazardous-area installations.
- **Mounting options and size:** Sensors must fit well into your overall equipment designs. Larger sensors are appropriate and cost-effective where space is not an issue. However, smaller designs give you more room for other components. Panametrics offers many products with maximum functionality in a minimum footprint.
- **Analyzer technology:** Each sensor technology provides specific advantages over others. One moisture sensor might use aluminum oxide for trace measurements while another sensor relies on polymer capacitance to measure moisture in wetter applications. Panametrics offers multiple measurement technologies to suit your specific application needs and budget.
- **Speed of response:** In most cases, sensor response time is critical. Operators need to know as soon as possible if conditions change so they can prevent damage, product loss, or safety issues. Panametrics is continually pushing the sensor-response envelope.

Specify the best for your business success

There are many choices when it comes to specifying process measurement solutions for your OEM solutions. While component pricing is obviously critical for profitability, it's only one piece of the puzzle. The strength of the partnership, the quality and innovation your supplier brings to the table, and the availability of support can also affect sales and customer relationships.

When you work with Panametrics, you know your customers are getting equipment they can rely on—and you are freeing up time your engineers and customer-facing personnel can use to focus on your unique ways of adding value.

Learn more about specifying Panametrics technology for your next offering. Contact us today.



Our device portfolio at a glance

Panametrics offers one of the broadest device portfolios in the moisture and oxygen analyzer industry, backed by teams of engineers ready to help us choose the right products to complement your design. Because our analyzers and sensors integrate well with each other, your overall design will be more streamlined and efficient. The table demonstrates a sample of moisture, oxygen, and hydrogen analyzers we offer by industry.

Industry applications		Product Technology									
Panametrics' process measurement solutions cover a wide range of industry and applications	Moisture Analysis	moisture.IQ Aluminum Oxide	✓	✓	✓	✓	✓		✓		✓
		dew.IQ Aluminum Oxide	✓	✓		✓	✓	✓	✓		✓
		HygroPro [®] Aluminum Oxide	✓	✓	✓	✓	✓		✓		✓
		MMY30 Aluminum Oxide	✓	✓	✓	✓	✓	✓	✓		✓
		MMY31 Aluminum Oxide						✓			
		PMM80 Aluminum Oxide	✓	✓	✓	✓	✓	✓	✓		✓
		VeriDri Aluminum Oxide	✓			✓	✓	✓	✓	✓	✓
		MTS6 Aluminum Oxide	✓			✓	✓	✓	✓	✓	✓
		Aurora Laser		✓	✓	✓	✓				
		Optica Chilled Mirror				✓	✓	✓	✓	✓	
		OptiSonde Chilled Mirror				✓	✓	✓	✓	✓	
		MMR30 Polymer Capacitance	✓					✓	✓	✓	
		MMR31 Polymer Capacitance						✓	✓	✓	
		MMR101 Polymer Capacitance				✓		✓	✓	✓	
		Key to Industries	Gas Analysis	XMO2pro Thermoparamagnetic		✓	✓	✓	✓	✓	✓
oxy.IQ Electrochemical	✓			✓	✓	✓	✓	✓	✓		✓
Delta F Non-depleting/Electrochemical				✓		✓	✓	✓			
XMTCpro Thermal Conductivity	✓			✓	✓	✓	✓		✓		✓

About Panametrics

Panametrics develops solutions for measuring and analyzing moisture, oxygen, liquid, steam, and gas flow with proven technologies that are well-known and widely deployed across many industries, including oil and gas.

For more than 60 years, we've been constantly evolving our product line to deliver the most effective moisture and gas measurement systems on the planet.

Today, the culmination of decades of expertise, insight, and innovation is expressed in our Sentinel portfolio of high-accuracy liquid flowmeters that cover a range of operating temperatures and applications.

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