

Panametrics' LNG Solutions

High-accuracy Meters and Analyzers



Reliable Measurements for Every LNG Stage

As the pioneer of natural gas moisture analyzers and ultrasonic flow meters, Panametrics has solid experience in both moisture and flow measurements. We've leveraged that experience to create accurate and effective measurement solutions for every stage of liquid natural gas (LNG) production – from dehydration to regasification. All of which are backed by our worldwide service and a highly trained staff.



Metrics Matter

Every stage of LNG production requires accurate, reliable measurements – but getting those measurements can be challenging. That's why we offer a wide range of solutions to meet every need, in every stage.

1

Pretreatment/ Dehydration

In the first phase of LNG production, dryers are used to remove moisture that can cause ice formation and blockage in the cryogenic section of the plant.

And the only way to ensure your dryer is working effectively is through highly reliable moisture measurements. Panametrics provides a wide range of solutions that deliver the accurate measurements you need to control moisture, ensuring efficient operations and more uptime.

· Moisture analyzers

- · Ultrasonic flow meters
- · Gas and liquid flow meters

2

Liquefaction

Accurate flow rate measurement during liquefaction is essential. That means flow meters must be able to handle the varying pressure while avoiding any pressure drops, temperature changes, and extreme conditions of the cryogenic process. Our line of LNG analyzers and meters are designed to deliver precise measurements under the toughest conditions, giving you everything you need to keep liquefaction running smoothly.

- · Moisture and gas analyzers
- · Flare flow measurement
- · Gas and liquid flow meters
- Flare management solutions

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Loading and Offloading

During loading and offloading, every cubic meter of LNG needs to be accounted for, but accurately measuring flow can be challenging. Our analyzers and flow meters are designed to deliver the highly accurate and reliable flow measurements you need for custody transfer – even when faced with unexpected pressure drops, harsh conditions, or changes in flow rates.

- · Moisture analyzers
- · Oxygen analyzers
- · Liquid flow meters

- Gas analyzers
- · Gas flow meters

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Regasification

The LNG process chain ends with regasification. During this stage, companies that use assisted flares tend to overaerate, causing damage to the flare tip and cutting short its lifespan. Our range of regasification products not only guard the flare tip from excess aeration that may cause in-tip damage, but they also help minimize greenhouse gases and improve combustion efficiency.

- Moisture and gas analyzers
- Flare flow measurement
- · Gas and liquid flow meters
- Flare management solutions

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LNG Vessels

Storing LNG can turn into a potentially explosive situation if not properly monitored. We offer a variety of meters and analyzers for accurate and reliable monitoring of LNG vessels, keeping workers – and product – safe.

· Process flow meters

· Oxygen analyzers

Panametrics' Product Spotlight



PM880 portable moisture meter

The PM880 moisture meter is a rugged, complete, intrinsically safe, portable system that delivers highly accurate moisture measurements in gases and non-aqueous liquids.



flare.IQ

Our groundbreaking flare.IQ platform uses an advanced process control algorithm to significantly reduce methane slip emissions, minimize costs, and improve transparency for flare operations. flare.IQ is a complete plug-and-play solution.



PanaFlow HT

Our PanaFlow HT is a SIL-rated flow meter that offers the ability to take accurate measurements at the bottom of a refinery and is rated for hazardous areas and extreme processes with temperatures from -200° C to 600° C. It can also be used to measure cryogenic liquids such as LNG.



moisture.IQ

Our moisture.IQ is a multichannel, multifunction analyzer that delivers highly accurate measurements to help control moisture and ensure that dryers are operating effectively.



PanaFlow LC on water lines

Suitable for use in hazardous environments, the PanaFlow LC is the latest generation in Panametrics' line of permanent clamp-on ultrasonic flow meters, delivering superior performance and enhanced signal processing.



PanaFlow Z3

The PanaFlow Z3 combines the advantages of ultrasonics with our deep ultrasonic flow meter experience. Designed to eliminate the need for maintenance and periodic calibration, our Z3 delivers a high-performance, low-cost-of ownership measurement solution for liquefaction.



Sentinel LNG

Based on proven technologies, the Sentinel LNG flow meter brings ultrasonic technology into cryogenic applications for measuring LNG with unbeatable performance, reliability, and safety.

No One Measures Up to Panametrics

At Panametrics, we know that metrics matter. That's why we're committed to delivering LNG meters and process analyzers that are built to withstand the extreme conditions of LNG production – while delivering reliable, high-accuracy measurements for safer operations and more uptime. Building on our extensive experience measuring moisture, gas, and liquid flow in all LNG stages, we're able to offer solutions for pretreatment all the way through to regasification. We also have a team of experts, ready to assist you with high-quality service and support, including field installation and training, calibration, repairs, and preventive maintenance.



