

PanaFlare

XGF1100

Our most advanced
flare gas transmitter



Why the XGF1100?

The XGF1100 is an advanced ultrasonic flow transmitter for flare and gas flow measurement, built on generations of expertise.



Features

Up to 4 paths configuration

Refresh rate of 10+Hz

Faster response time <0.5s

Improved timing resolution

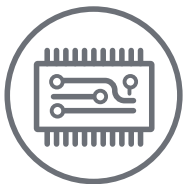
Computational fluid dynamics capability

CE/DRE monitoring

NHV measurement

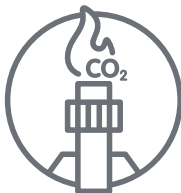
Signal processing

The XGF1100 offers:



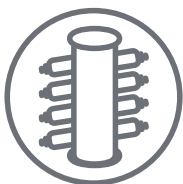
State-of-the art electronics

The XGF1100 features advanced electronics that leap ahead of competitors and past models. It delivers exceptional timing resolution (less than 2 nanoseconds) and accuracy, especially at low flow rates where regulations are toughest. Its fast response and refresh rate (10+Hz) ensure reliable, real-time data.



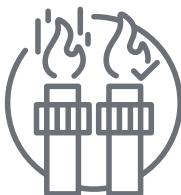
Real-Time CE and DRE monitoring

Panametrics leads in live monitoring of combustion efficiency (CE) and destruction removal efficiency (DRE). With this measurement feature, operators gain accurate insights into their emissions, enabling smarter decisions and improved environmental compliance and reporting.



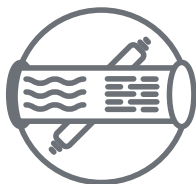
Up to 4 path configurations

As flare gas measurement becomes more regulated and fiscally critical, multipath configurations are increasingly necessary. The XGF1100 is the first ultrasonic flare transmitter to offer up to 4 paths—enhancing accuracy, installation flexibility, and redundancy.



Integrated NHV measurement for cleaner flares

Measuring flare gas energy content in real time helps optimize combustion and reduce fuel waste. The XGF1100 includes built-in Net Heating Value (NHV) measurement, enabling efficient, smokeless flaring—especially when paired with flare. IQ for full system optimization.



High accuracy across all flow conditions

From low to high flow, the XGF1100 maintains precision:

High flow: Measures 0.1 to 328 ft/s (up to 394 ft/s with extended version) across pipe sizes from 4 to 120 inches.

Low flow: Delivers reliable data during normal operations and emergency events using a long single path and specialized transducers.



Built-In CFD for installation flexibility

The XGF1100 includes Computational Fluid Dynamics (CFD) capabilities to correct for non-ideal installations, improving accuracy without costly piping changes – helping meet regulations and reduce project costs.



Leak detection, steam optimization, and compliance

Leak detection: Identifies sudden flow increases and molecular weight changes to catch issues early.

Steam injection: Enables precise control and mass balance calculations to reduce waste and improve DRE.

Compliance: Built-in diagnostics like sound speed verification ensure audit-ready data and regulatory alignment.



Efficiency without compromise

With zero flow obstruction and sealed metal transducers, the XGF1100 resists erosion and thermal stress. Its non-intrusive design minimizes maintenance and operating costs, delivering fast ROI—often within months.

Engineered for **precision** under
extreme flare conditions

Enhanced **accuracy** and
reliability + **faster response times**

Complies with latest global
environmental regulations

Reduces operational **costs** =
minimizing venting and **steam** usage

Real-time monitoring of NHV, CE/DRE, etc



Panametrics is the world leader in flare measurement, with a legacy rooted in innovation, precision, and reliability. As the original inventor of the world's first ultrasonic flare flowmeter, Panametrics revolutionized how industries monitor and manage flare systems – setting a new standard for environmental compliance and operational efficiency.

For decades, our cutting-edge technologies have empowered Oil & Gas, LNG, Petrochemical & Chemical, and Refining operations to accurately measure flare gas under the most demanding conditions.

From low to high-velocity flows and variable gas compositions, Panametrics solutions deliver consistent, reliable, and real-time data that helps operators achieve an accurate balance of plant, track and reduce emissions, improve safety, and meet global regulatory standards. Our commitment to continuous improvement and deep application expertise ensures that Panametrics remains the trusted partner for flare measurement across the globe – driving smarter, more sustainable operations today and into the future.

Contact us

For more information please contact your local Panametrics representative, or visit:

panametrics.com