

WE'RE FLUENT  
IN CHALLENGING  
APPLICATIONS



FLUENTA FLAREPHASE™  
TRANSDUCER RANGE

“  
Our new range represents another  
pioneering achievement for the  
team, providing customers with  
an unrivalled combination of  
flexibility, reliability, and accuracy  
in difficult flare gas installations”

Julian Dudley Smith, Managing Director, Fluenta



## WE'RE FLUENT IN EXCEEDING REGULATIONS, FOR YOU AND THE ENVIRONMENT

Reducing and ultimately eliminating routine flaring is frequently identified as a key step in the global aim to achieve net-zero emissions.

The World Bank's Zero Routine Flaring by 2030 initiative was the first to unite governments and companies in the fight against flare gas. Now with over 30 governments and 40 oil companies endorsing the initiative, and many creating environmental policies of their own, we are closer than ever to ending routine flaring.

### How do flaring policies benefit you?

These initiatives not only help the environment, they also benefit the companies themselves in a number of ways.

#### Reduce costs & create revenue

Associated gas that would usually be flared can be monetised by turning it into a saleable product such as LNG, or even capturing it and using it as feedstock.

#### Positive perceptions

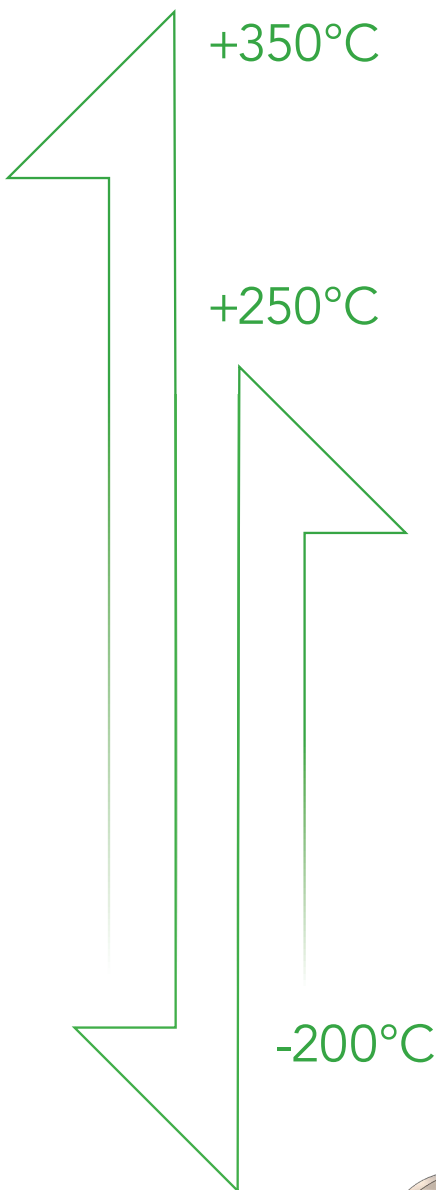
There is increasing pressure on the industry to take the necessary steps to reduce emissions. Endorsing or having your own flare gas reduction policy communicates that you are actively working towards global net-zero targets.

#### Lead the way

Be an innovator within the industry and lead the way in environmental and flare gas policy.







## Introducing, the all new Fluenta FlarePhase™ transducer range

For years, we've been setting the standard for flare gas measurement in challenging applications. Our pioneering achievements mean you can now measure flare gas accurately and reliably with Fluenta's FlarePhase™ transducer range:

### Fluenta FlarePhase™ 350

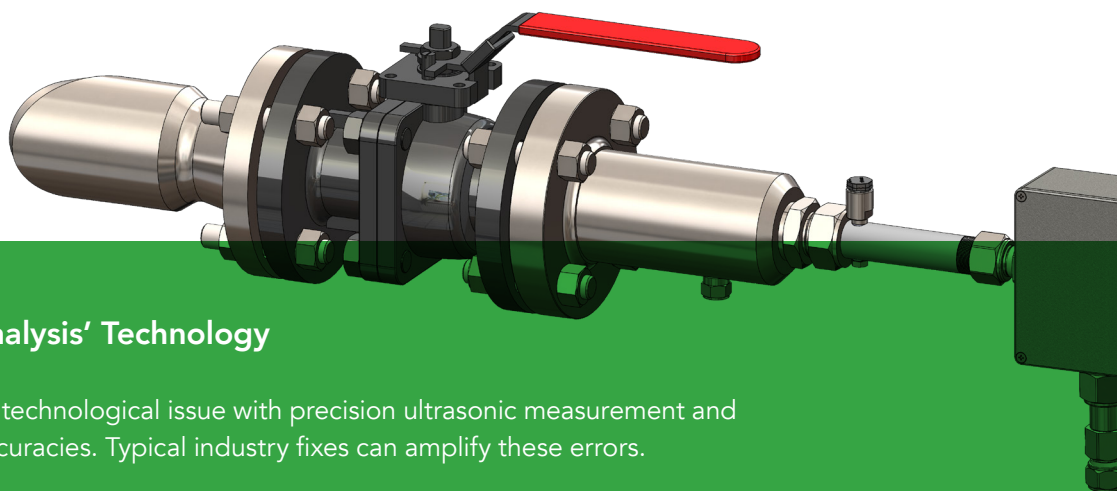
- Uniquely designed for the most challenging applications
- For extreme temperature environments
- For very low gas densities

### Fluenta FlarePhase™ 250

- Ideal for the petrochemical and refining industries
- For high temperatures
- Optimised for high levels of hydrogen and CO<sub>2</sub>

### Fluenta FlarePhase™ Cryo

- Ideal for the LNG and gas liquefaction industries
- For very low temperatures
- For difficult gas conditions including high methane



### With 'Active Phase Analysis' Technology

Phase shifts are a common technological issue with precision ultrasonic measurement and result in measurement inaccuracies. Typical industry fixes can amplify these errors.

Fluenta's FlarePhase™ transducers use novel 'active phase analysis technology' to combat this inherent issue. By accurately determining phase shifts and providing a definite figure to calculate the necessary compensation, the Fluenta FlarePhase™ range provides laboratory levels of accuracy in the field.

## WE'RE FLUENT IN ACCURATE MEASUREMENT IN EXTREME CONDITIONS

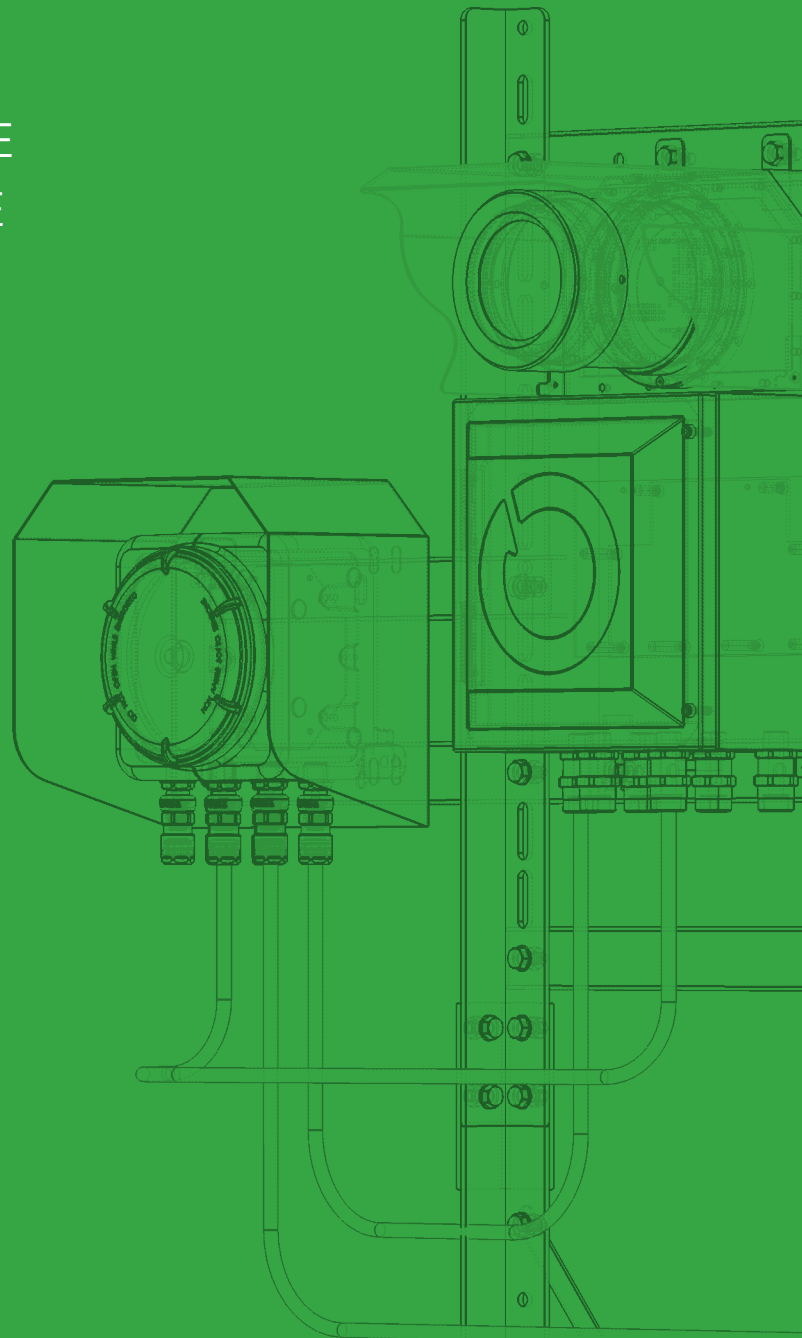
### Advanced Temperature Capabilities

The Fluenta FlarePhase™ transducer range offers the highest temperature capabilities on the market, offering measurement up to 350°C and down to -200°C.

### Challenging Gas Compositions? No Problem

The Fluenta FlarePhase™ transducers can accurately measure in high levels of H<sub>2</sub>, CO<sub>2</sub>, or CH<sub>4</sub> typically across the full pipe diameter.

This makes them ideal for the LNG, refinery and petrochemical sectors, providing accurate and stable measurement, even with prolonged exposure to challenging environments.



“ The advanced technical capabilities of the range are the product of our sole focus in flare gas measurement solutions ”

Stuart Tyers, Group CTO, Fluenta

# Technical Specifications for the Fluenta FlarePhase™ Range

	FlarePhase™ Cryo	FlarePhase™ 250	FlarePhase™ 350
<b>Functional Characteristics</b>			
Transducer Type	Ultrasonic / Time-of-flight / Wetted non-intrusive as standard		
Available Materials	Full titanium execution (NACE compliant)		
Specialist Material Certification	Certified for -200°C (-328°F)	Certified for +250°C (+482°F)	Certified for +350°C (+662°F)
Velocity Range	0.03 m/s - 120 m/s (0.1 ft/s - 400 ft/s)		
Turn Down Ratio	4000:1		
Uncertainty <sub>1</sub>	Up to 0.75%		
Resolution	0.0008 m/s (0.003 ft/s)		
<b>Operating Conditions</b>			
Pipe Sizes	6" to 100" as standard (application dependent) <sub>2</sub>		
Process Connection	2" or 3", 150# or 300# lateral flanges		
Gas Composition Limits <sub>3</sub>	Suitable for high levels of H <sub>2</sub> , CO <sub>2</sub> and CH <sub>4</sub>		
Operating Temperatures	-200°C to +250°C (-328°F to +482°F)	-200°C to +250°C (-328°F to +482°F)	-40°C to +350°C (-40°F to +662°F)
Operating Pressure	0.8 barA to 10 barA (11.6 psiA to 145 psiA)		
<b>Ex Certification</b>			
Awarding Bodies	IECEX, ATEX, NRTL, TR-CU (pending), INMETRO		
Details	Ex ia IIC T2-T4 (Zone 0), IP66		

Please note specifications are subject to change

<sup>1</sup> For optimal accuracy, we recommend a multi-point calibration at an accredited flow calibration facility

<sup>2</sup> Solutions may be possible outside this range

<sup>3</sup> For full gas capability reports, please contact your Fluenta representative

## WE'RE FLUENT IN SIMPLE SOLUTIONS FOR COMPLEX INSTALLATIONS

Flare gas measurement; for over 30 years, it's all we've done. And because it's been our sole focus, our dedication to innovation and precision is unrivalled. With our expert team, we can find a simple solution to your measurement challenge.

### Unrivalled measurement capabilities with our range of transducers

- TFS
- TFS-55
- TFS-HT
- FlarePhase™ Cryo
- FlarePhase™ 250
- FlarePhase™ 350

### Flexible, optimised solutions

- Computational fluid dynamics for detailed installation analysis
- Total system uncertainty calculations

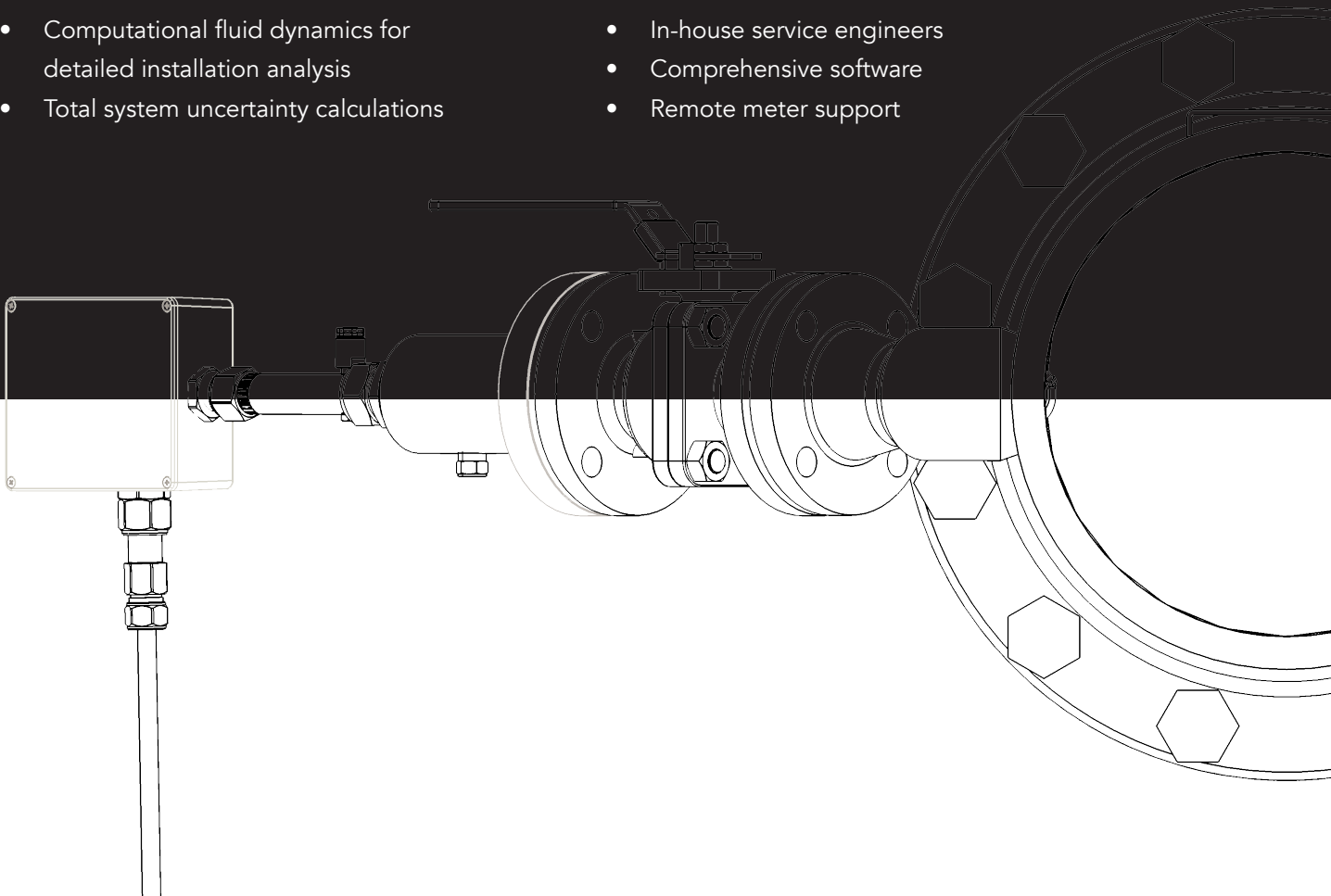
### Optional configurations

All our transducers are available in a number of configurations to optimise your installation:

- Single-path - for standard measurement
- Dual-path - for increased accuracy
- Bias 90 - for space limitations & retrofits

### Ongoing customer support

- In-house service engineers
- Comprehensive software
- Remote meter support



# WE'RE FLUENT. WE'RE FLUENTA.

With over 3,000 installs across 6 continents, Fluenta has the experience to help you more accurately measure flare gas, to make better business decisions and meet the most stringent regulations.

## Global Head Office

---

Fluenta AS. Haraldsgata 90, PO Box 420, N-5501, Haugesund, Norway

Operations/Support helpline: +47 21 02 19 27

For sales enquiries: [sales@fluenta.com](mailto:sales@fluenta.com)

All other enquiries: [info@fluenta.com](mailto:info@fluenta.com)

## Sales EMEA

---

Fluenta Solutions Ltd.  
Unit 8, Gransden Park  
Potton Road, Abbotsley  
St Neots, PE19 6TY  
United Kingdom

Phone: +44 1223 491 972

Sales enquiries: [sales@fluenta.com](mailto:sales@fluenta.com)

## Sales Asia Pacific

---

Fluenta Asia Pacific Sdn. Bhd.  
T3-15-11, 3 Towers  
296, Jalan Ampang 50450  
Kuala Lumpur  
Malaysia

Phone: +6 03 2770 8558

All enquiries: [sales@fluenta.com](mailto:sales@fluenta.com)

## Sales Middle East

---

Fluenta Solutions Ltd. (DMCC Branch)  
Office 1605,  
JBC 4  
Cluster N, JLT  
Dubai, UAE

Phone: +971 (0) 4564 7357

Sales enquiries: [sales@fluenta.com](mailto:sales@fluenta.com)

## Sales Americas

---

Fluenta Inc.  
1710 Dairy Ashford Road  
Suite 200  
Houston, TX 77077  
United States of America

Phone: +1 832 456 2021

All enquiries: [sales@fluentainc.com](mailto:sales@fluentainc.com)

## Product Support

---

Support helpline: +47 21 02 19 27

Email: [support@fluenta.com](mailto:support@fluenta.com)

[www.fluenta.com](http://www.fluenta.com)