

## **WIM Compas™ Basic**

### Specifications

Service Natural Gas, Fuel Gas, Flare Gas, Biogas, BFG, COG, etc.  
Measuring principle Residual Oxygen Method  
Sample wetted parts SS316, Inconel and Platinum  
Installation General Purpose Area

### Measuring ranges

Wobbe Index 50 MJ/Nm<sup>3</sup> span in 0 – 100 MJ/Nm<sup>3</sup> range  
Accuracy  $\pm 0,4\%$  of measured value for natural gas  
Repeatability  $\pm 0,2\%$  or  $\pm 100$  kJ (which ever is higher)  
Drift  $< \pm 0,05\%$  or  $\pm 50$  kJ per day (which ever is higher)  
Response time T90  $< 10$  seconds (includes lag time and rise time)  
CARI \* span of 15 in 0 – 25 range  
Calorific Value (SG cell option) \*\* span of 50 MJ/Nm<sup>3</sup> in 0 – 120 MJ/Nm<sup>3</sup> range  
Specific Gravity cell (SGU option) Updated signal (every 10 seconds, Hobr  SG cell)  
SG range 0 – 3  
SG accuracy  $< \pm 0,5\%$  of Full scale  
Response time  $< 20$  seconds to T90  
\* CARI = Combustion Air Requirement Index  
\*\* Response time CV signal depends on type SG cell

### Outputs

Local HMI 2-line LCD display with 7 function keys  
Analogue outputs 2 off isolated 0/4 – 20 mA (optionally up to 4)  
Digital outputs - 2 off relay SPDT malfunction, calibration status  
- 8 off 24VDC 1A or volt free, service selectable  
Digital input Start calibration, Start validation  
Communication Remote control via TCP/IP incl. software for remote operation  
Communication option MODBUS RTU via RS485

### Utilities

Power supply 115/230 VAC, 50/60 Hz  
Power consumption 650 VA max  
Instrument air 10 NI/min at 3 barG minimum  
50 NI/min for vortex cooler option  
Sample flow  $\pm 1$  NI/min  
Sample pressure 1,5 – 5 barG for standard version  
0 – 1,5 barG requires pump option

### Installation

Mounting Wall mounting  
Dimensions (HxWxD) 1000 x 800 x 400 mm  
Weight  $\pm 80$  kg (depending on options installed)  
Enclosure protection IP65 design  
Ambient temperature range 5 – 45°C standard version  
Optional -20 – +60°C

## **WIM Compas™ F**

### Specifications

Service Natural Gas, Fuel Gas, Flare Gas, Biogas, BFG, COG, etc.  
Measuring principle Residual Oxygen Method  
Sample wetted parts SS316, Inconel and Platinum  
Installation options - Non Ex

- **II 3G Ex px [ib] IIC T3**
- **II 2G Ex px [ib] IIC T3**
- **Class 1, Div. 2, Group B, C, D T3**

#### Measuring ranges

Wobbe Index 50 MJ/Nm<sup>3</sup> span in 0 – 100 MJ/Nm<sup>3</sup> range  
 Accuracy  $\pm 0,4\%$  of measured value for natural gas  
 Repeatability  $\pm 0,05\%$  of measured value or  $\pm 30$  kJ (which ever is higher)  
 Drift  $< \pm 0,05\%$  or  $\pm 30$  kJ per day (which ever is higher)  
 Response time T90  $< 5$  seconds (includes lag time and rise time)  
 CARI \* span of 15 in 0 – 25 range  
 Calorific Value (SG cell option) \*\* span of 50 MJ/Nm<sup>3</sup> in 0 – 120 MJ/Nm<sup>3</sup> range  
 Specific Gravity cell (SGU option) Updated signal (every 5 seconds, Hobr  SG cell)  
 SG range 0 – 3  
 SG accuracy  $< \pm 0,5\%$  of Full scale  
 Response time CV signal  $< 10$  seconds to T90  
 Specific Gravity cell (SGC option) Continuous measurement (oscillation principle SG cell)  
 SG range 0 – 3  
 SG accuracy  $< \pm 0,5\%$  of reading  
 Response time CV signal  $< 5$  seconds to T90  
 \* CARI = Combustion Air Requirement Index  
 \*\* Response time CV signal depends on type SG cell

#### Outputs

Local HMI 8,4" full colour display with touchpad (all functions)  
 Analogue outputs 2 off isolated 0 / 4 – 20 mA (optionally up to 4)  
 Digital outputs - 2 off relay SPDT for malfunction and calibration status  
 - 8 off 24VDC 1 A or volt free; service selectable  
 Digital input Start calibration, Start validation  
 Communication options - Remote control via TCP/IP incl. software for remote operation  
 - MODBUS RTU via RS485

#### Utilities

Power supply 115/230 VAC, 50/60 Hz  
 Power consumption 850 VA max  
 Instrument air - 10 NI/min at 4 barG minimum  
 - 50 NI/min for Ex purge option \*  
 - 50 NI/min for vortex cooler option  
 Sample flow  $\pm 1$  NI/min  
 Sample pressure 1,5 – 5 barG for standard version  
 0 – 1,5 barG requires pump option  
 \* Pre-purge: total flush volume 500 litre, pre-purge flow 70 NI/min.

#### Installation

Mounting Wall mounting  
 Dimensions (HxWxD) 1000 x 800 x 400 mm (non-Ex version)  
 Weight 80 – 250 kg, depending on version  
 Enclosure protection IP65 design  
 Ambient temperature range Non Ex and II 3G: +5..+55 C (Optional -20..+55 C)  
 II 2G: +5..+40 C (Optional -20..+40 C)