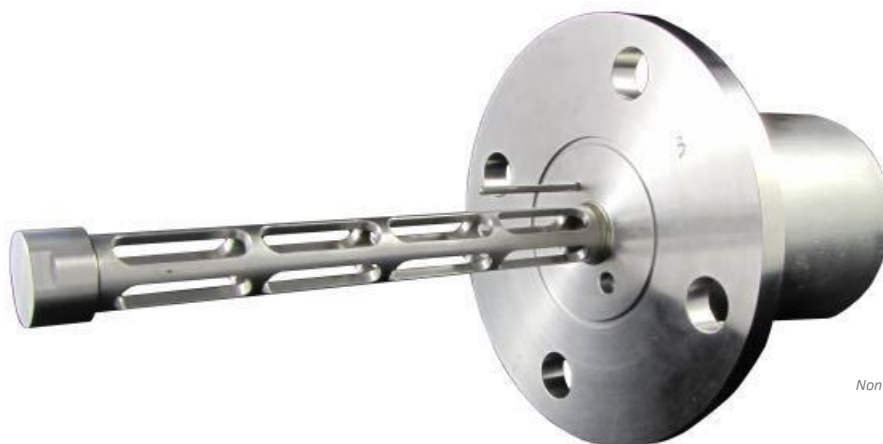


MAJ : 15/09/2020

« REAL-TIME » MEASUREMENTS OF NATURAL GAS FUEL QUALITY FOR THE BEST PERFORMANCE OF YOUR DEVICE



Non-contractual photo

KEY BENEFITS

- Better fuel consumption (i.e by allowing engine tuning closer to the knocking limit)
- Less risk of engine shut-down with relation to gas quality
- Computes gas quality parameters - including
- Methane Number
- No calibration required from the user
- Software is fully upgradable by CAN bus
- Communication without dismantling the sensor
- Incorporates optical measurement for fast
- Response times (<1 second)
- Directly connects to the pipeline - no gas sampling
- Easily plugs into the engine or into the gas train

FEATURES

- XIS is a gas quality sensor installed directly on the fuel gas pipe or engine
- XIS measures gas composition and its variations in real time
- XIS computes the main gas parameters including methane number, Wobbe index, heating value (higher and lower), density and relative density
- No daily calibration is needed with XIS
- XIS is easily installed in a short amount of time
- Custom algorithms can be added or dedicated calibrations done to the XIS on demand (i.e.: methane number)

MAIN CHARACTERISTICS

Technical specifications:

MEASURING RANGE	Methane	50-100%
	Ethane	0-20%
	Propane	0-10%
	Butane	0-10%
	Gas temperature	0-50°C
	Gas pressure	0,8 – 10 bars absolute
OUTPUT PARAMETERS	Concentrations	CH ₄ , C ₂ H ₆ , C ₃ H ₈ , C ₄ H ₁₀ , «others»
	Methane number	ISO-TR 22302-2014
	Wobbe index	ISO 6976
	Density	ISO 6976
	Heating value	ISO 6976
	Response time	< 1second
	Accuracy	± 2 points on MN
INSTALLATION INTERFACES	Power supply	24 VDC (18 V to 36 V DC)
	Peak power	15 watts
	Connector	M12 - 5 pins, Binder series 763
	Data output format	CAN J1939
	Data repetition period	500 ms
	Data transmission baud rate	500 kbs
	Vibrations	2Hz to 25Hz – amplitude ±1.6mm 25Hz to 100Hz – acceleration ±4g
	Ambient temperature	0 – 80°C
	Protection class	IP66
	Mass	2,5 kg
	«others» counted as N ₂ + CO ₂ + C _n H _{2n+2} with n ≥ 5	

MAIN FUNCTIONALITIES AT A GLANCE

Gas composition measurement	The infrared spectroscopy measurement allows the sensor to quantify the molar fractions of methane, ethane, propane and butane present in the natural gas.
Gas quality parameters	The microprocessor's embedded program computes different parameters based on industry standards.
Real time measurements	The sensor's high technicity of opto-electronic design and software allow for a response time of less than 1 second.
Plug and measure	No calibration is needed before, during or between measurements. Power up the XIS sensor with the CAN bus connection and get the data!



Z.I. de la Herray

65500 VIC-EN-BIGORRE – France



+33 (0)5 62 33 44 44



www.isp-system.fr



contact@isp-system.fr

Capital de 1 000 000 € - SIRET : 410 675 078 00027 – APE : 71128 – TVA : FR 19 410 675 078