

Datasheet

GH2+ - Flow Measurement System for Gaseous Hydrogen

Product Code: 300KK/RK-6-X-X-X-X

The GH2+ is a legal-for-trade custody transfer measurement system for gaseous hydrogen, designed as a flow measurement solution for H2 deliveries via hydrogen trailer vehicles. The system is characterized by its straightforward operation, high pressure ratings, recalibration without vehicle downtime, and seamless integration into existing infrastructure.

Medium:	Gaseous Hydrogen
Operating Pressure Range:	20 to 500 bars
Flow Range Qmin to Qmax:	0.33 to 8.33 kg/min
Separation Flow Qt:	1.67 kg/min
Cut-off Limit:	0.067 kg/min
Measurement Accuracy:	1.5 % for 1.67 kg/min ≥ Q ≥ 0.33 kg/min 2.5 % for 8.33 kg/min > Q ≥ 1.67 kg/min
Operating Temperature for Pressurized Parts:	-50 to +120°C
Gas temperature Range:	-40 to +55°C
Mechanical/Electrical Environment:	M2/E2
Power Supply:	12-24 VDC +/-10 %

Components and Parts

Coriolis Mass Flow Meter RHM06

Housing Material:	1.4301 / SS 304, IP 65
Material in Contact with Medium:	1.4571 / SS 316Ti
Process Connections:	Autoclave 9/16" MP (13/16"-16 UN)
Approvals:	ATEX: <Ex> II 2G Ex ib IIC T6...T1 Gb; IECEX: <Ex> ib IIC T6...T1 Gb
	Certificate No.: IECEX BVS 17.0063 (Ex safety regulations must be complied with!)
	Execution according to PED 2014/68/EU Art4 (3) SEP



Transmitter RHE28/RHE42

Housing:	Aluminum
Protection Class:	IP 65
Operating Temperature:	-20 to +60°C
Outputs:	2 analog outputs 4-20 mA, active / passive; 2 frequency / pulse / status outputs 2 digital status outputs
Inputs:	2 digital signal inputs; 1 analog input 4-20mA, active All analog inputs/outputs according to NAMUR NE43 All digital inputs/outputs according to DIN IEC 60946 Interfaces: Modbus RS485, HART
Power Supply:	12-24 VDC +/-10%, max. 4W

Controller C401/C406

Housing:	Aluminum
Protection Class:	IP54
Operating Temperature:	-25 to +55°C
Operation:	via 6 push buttons, USB, RS485
Billing Unit:	kg / Nm³
Power Supply:	16-27 VDC +/-10 %

Electrical Wiring

Connector:	Various connector options available	
Cable length between components:	Coriolis and Transmitter	3 meters
	Transmitter and Flow Controller	3 meters
	Flow Controller and Trailer	3,5 meters
	Can be customized upon request	

Certifications

Conformity Assessment: **Valid for 2 years**

Documentation

- **Maintenance Manual**
- **User Manual**
- **Calibration Certificate from TrigasFI GmbH**
- **Declaration of Conformity**

The GH2+ hydrogen flow measurement system is delivered ready for installation, fully tested, and accompanied by all necessary documentation for legal metrology—developed and manufactured by TrigasDM, your specialist in precise hydrogen measurement.

Contact us – we are happy to advise you personally and find the right solution for your application.