SO_2 Upgrade for 973-SF_6 Analyzer

Latest Specifications

The 973-SF_6 is the most accurate and stable SF_6 gas analyzer currently available. With integrated SF_6 collection and pump back, it is the reference in the analysis of SF_6 and will exceed all current SF_6 measurement specifications. The SO_2 upgrade adds further functionality and extends the specification of the 973-SF_6 still further.

Reference

Chilled mirror technology provides accuracy and stability for both dew/frost point and SF_6 purity. Users can be easily trained to achieve excellent measurement reproducibility and dependable results. Incorrect measurements from inferior instruments can waste time on site, waste SF_6 gas and can cause unnecessary SF_6 handling.

Gas Recovery

The 973-SF_6 integrated gas handling system makes life easy for engineers performing measurements in SF_6. The instrument needs no separate gas collection equipment. Tested SF_6 gas can be pumped straight back into the compartment or to another collection vessel without any loss of gas.

SO_2 Functionality

Measurement of SO_2 concentration in SF_6 is increasingly popular in maintenance and system health checks. The 973-SO_2 upgrade includes a mechanical modification to switch gas flow through an integrated SO_2 measurement cell using the existing sample gas connection.

SO_2 Maintenance

Since SO_2 sensors need routine replacement (approximately every 2 years), the measurement cell is mounted externally to the 973-SF_6 so that the user can easily replace the sensor when required. In combination with the high stability of the chilled mirror system, this means that the 973-SF_6 does not require frequent and costly return to the supplier or manufacturer.

Compatible

The SO_2 upgrade can be factory applied to all 973-SF_6 Analyzers. However, older instrument may require more adaptions in order to work with the new SO_2 module. Please contact us to verify your serial number and get a reliable cost estimate.

SO_2 Upgrade Details

- Instrument pre-check
- General cleaning
- Inspect, clean and test sample tubes and internal cylinder
- Replace back panel components
- Modify internal wiring
- Fit SO_2 measurement module
- Fit calibrated SO_2 sensor and printed circuit board
- Upgrade instrument firmware version
- Check functionality, control and coefficients
- SO_2 Calibration including Report

MBW calibration

Specifications 973-SF_6 Analyzer

Measuring Range:				
Frost/Dew Point	-50…+20 °C			
Humidity content by volume	40…20'000 ppm_v			
Humidity content by weight	5…2'500 ppm_w			
Volume SF_6	80…100%			
Inlet pressure	120…1'000 kPa abs.			
Accuracy:				
Frost/Dew Point	± 0.5 °C			
ppm_v/ ppm_w	± 1 ppm +6% of reading			
Volume SF_6	± 0.5%			
Pressure	± 3 kPa			
Standard Features:				
Digital I/O	RS-232			
Thermoelectric mirror cooling	3-stage			
Mirror temperature sensor	RTD (Pt-100)			
Display	5.7" LCD with touch screen			
Internal gas tubes	Stainless steel 316L / FEP			
Gas connections	Self-sealing quick connect fitting (Swagelok® QM Series)			
Couplings	Self-sealing SF_6 coupling DN8 (VK/F-02/8) and DN20 (VK/F-02/20)			
External sample gas tube	Self-sealing 6 m stainless steel armored PTFE tubing			
ORIS	**O**ptimum **R**esponse **I**njection **S**ystem			
Transport case	Custom fit foam lined Peli 1620			
Power cable	2.5 m			
Operating instructions	English, German, French, Italian or Spanish			
Calibration certificate	Pressure calibration, 2-point dew/frost point, 3-point volume %SF_6			
Optional:				
Internal SO_2-Module	Measuring range:	0…100 ppm_v	or	0…500 ppm_v
	Accuracy:	< 2% of range		< 2% of range
	Sensitivity drift:	≤ 5% / year		≤ 5% / month
	Life time:	2 years in normal operation		
Additional Information:				
Supply voltage	100-120 VAC / 200-240 VAC, 50/60 Hz (auto switching)			
Supply voltage fluctuations	up to ± 10% of nominal voltage / Overvoltage category II Rated pollution degree 2			
Power consumption	200 Watt			
Pump back pressure max.	900 kPa			
Cooling	Air			
Operation conditions	-10 °C…+40 °C, 98 %rh, non-condensing, altitude up to 2000 m			
Storage temperature	-20 °C…+50 °C			
Outdoor use	Permissible, instrument must be protected against exposure to water			

Weights & Dimensions:	**Instrument**	**with Transport Case**
Width	420 mm	650 mm
Height	155 mm	370 mm
Depth	390 mm	510 mm
Weight	16.5 kg	32 kg

We reserve the right to change design or technical data without notice.