

Transdox-6100 SF₆

HIGHEST ACCURACY & LOWEST COST



Portable SF₆ Gas Analyzer

Transdox-6100 SF₆

4 available configurations:

* Transdox 6100 A: SF₆ - SO₂ - H₂O

* Transdox 6100 B: SF₆

* Transdox 6100 C: H₂O

* Transdox 6100 D: SO₂

7" Full color touch screen interface.


USB port.

Eight-hour lithium battery.

SF₆ gas recovery bag available.

amperis

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The Transdox 6100 is the latest portable gas analyzer designed for monitoring the quality of SF₆ in gas insulated sub-stations and circuit breakers. The analyzer is housed in a rugged IP66 Peli-case with eight-hour lithium battery & weighing 8.5kg, making this a truly portable field instrument.

The analyzer simultaneously measures SF₆, SO₂ and H₂O. Using an infra-red SF₆ detector, the analyzer offers exceptional accuracy and stability when measuring the purity of SF₆. The decomposition products of SF₆ can be identified by analyzing the ppm SO₂ content of the gas; this forms from the breakdown of SOF₂ and SOF₄ after an electrical discharge. The dew-point of the gas (in ppmV or °C) is an important parameter to measure as this has an effect on the dielectric properties of SF₆. The Transdox is fitted with a special high-speed dew-point sensor fitted with a system allowing stable measurements in less than three minutes.

The GIS compartment gas pressure is also recorded and logged by the analyzer. Maximum input pressure is 10 bar. All three gases are analyzed and data-logged simultaneously and just a few minutes are required to get a stable analysis.

Incorporating a 7" full colour touch screen interface with soft menu keys and a thermal printer for permanent record keeping the Transdox is easy to operate both in permanent or sampling modes. ISO and CIGRE test configurations are pre-programmed for fast operation and all data is permanently logged for review at a later date. The user can also program custom test configurations. The test location / user name can be entered and displayed using an alphanumeric key-pad. Data can be downloaded via a USB memory stick and is MS Excel formatted.

The analyzer has a gas output nozzle allowing all sampled gas to be recovered and recycled, ensuring that no SF₆ gas is released into the atmosphere (in accordance with the Kyoto agreement). A Low-cost SF₆ gas recovery bags are available to ensure no gas escapes into the atmosphere when using the Transdox. A 2m armored sampling hose with sealed fittings is available and is fully compatible with DILO couplings.

Features:

- Portable battery powered SF₆ - SO₂ - H₂O gas analyzer with 8-hour operation.
- High precision infra-red gas detector for SF₆ purity over the range 0-100%.
- Electrochemical SO₂ sensor for trace analysis of contamination gas 0-100ppm or 0-500ppm.
- High speed dew-point sensor for moisture analysis -65°C to + 20°Cdp (or ppmv).
- Gas compartment pressure recorded.
- Permanent or Sampling modes available.
- Housed in a rugged IP66 Peli-case total weight 8.5kg.
- Thermal printer fitted as standard.
- 7" full colour LCD display with touch screen operation.
- Pre-loaded standard ISO and CIGRE tests for fast operation.
- Full data-logging and Excel compatible data download onto memory stick.
- Multi-Language (English, French, German, Spanish, Portuguese, Mandarin).
- Password protection feature.
- Available with a 2m armored sampling hose with DILO compatible fittings.

Applications:

- Controlling SF₆ quality in switches, bus bars and circuit breakers in Gas Insulated Substations (GIS).
- SF₆ insulated devices in power stations.
- Checking for the buildup of corrosive decomposition products such as HF and SO₂ present in the SF₆.
- Measuring the moisture content of SF₆ gas by using a dew-point analyzer.
- Applying a condition based maintenance program (CBM) to extend the life cycle of the SF₆.
- Detecting the presence of leaks and SF₆ discharge.
- Indication of arcing and breakdown through the buildup of corrosive by-products.



Specifications Transdox 6100 SF₆

Technical Data: Analyzer

Voltage	90-260Vac, 50/60Hz
Analyzer dimensions	480mm x 360mm x 180mm
Weight	8.5 kg
Display	7" full colour LCD display with touch screen operation
Warm up time	3-4 minutes at 20°C
Operating temperature	-10°C to 40°C
Gas Flow	100 to 1000 ml.min ⁻¹
Max inlet pressure	0.5-10 bar (protected) Displayed on-screen
Battery Life	In excess of 8 hours with 4-6 hour charge time
Data Output	Excel compatible data via USB memory stick
Printer	Thermal printer output of results
Sample connections	6mm OD / 4mm ID Rectus / DILO style closed coupled fittings



Technical Data: Sensor

SF₆ Sensor	Infra-Red 0-100%; ± 0.5% FS accuracy; Resolution 0.1%
H₂O Sensor	-65°C to +20°Cdp; ± 2°Cdp accuracy of reading*; Resolution 0.1°Cdp
SO₂ Sensor	Electrochemical Cell 0-100ppm or 0-500ppm; ± 2% FS accuracy; Resolution 0.1ppm
Life expectancy	2-3 years: SO ₂ ; >5 years: SF ₆ & H ₂ O
Measurement time	3-5 minutes
Calibration	SF ₆ and SO ₂ user selectable cal gas values. H ₂ O sensor factory fixed

* Minimum accurate reading possible with this sensor is -60°Cdp. Sensor will respond from wet to dry in approximately three minutes.

Optional Transdox Gas Recovery Bag



Optional Transdox Sampling Kit:

- Transdox 6100 analyzer (A, B, C or D)
- Set of DN8 and DN20 DILO fittings with 2m hose