

## TRANSDOX-6101 SF<sub>6</sub>

HIGHEST ACCURACY & LOWEST COST



## Portable Pumpback SF<sub>6</sub> Gas Analyzer

# Transdox-6101 SF<sub>6</sub>

Configuration:

\* Transdox 6101: SF<sub>6</sub> - SO<sub>2</sub> - H<sub>2</sub>O.

7" Full color touch screen interface.

USB port.

Eight-hour lithium battery.

SF<sub>6</sub> Pump Back.

**amperis**

[www.amperis.com](http://www.amperis.com)

 AMPERIS PRODUCTS S.L  
Agricultura,34  
27003, Lugo, Spain

 **Contact**

+T [+34] 982 20 99 20 | F [+34] 982 20 99 11  
info@amperis.com | [www.amperis.com](http://www.amperis.com)

The Transdox 6101A SF<sub>6</sub> PumpBack is the latest in fully-automatic gas analyzers, designed for controlling and monitoring the quality of SF<sub>6</sub> in gas insulated sub-stations and circuit breakers with zero waste and emissions. The analyzer is housed within a rugged IP66 Peli transport case (including wheels and handle) weighing 17kg. A lithium battery gives up to eight hours of operation, making this a truly portable field instrument.

Once connected the Transdox automatically samples the gas from the GIS / circuit-breaker, allowing the operator to stand at a safe distance. Up to five measurements can be taken, with the gas stored inside the analyzer before being pumped back automatically. A vacuum purge cycle and gas storage system ensures that no air is allowed to contaminate the gas sample and no SF<sub>6</sub> is allowed to escape during the testing period.

The analyzer simultaneously measures SF<sub>6</sub>, SO<sub>2</sub> and H<sub>2</sub>O content. Using a high-precision infra-red SF<sub>6</sub> detector, the analyzer offers exceptional accuracy and stability when measuring the purity of SF<sub>6</sub>. Additional sensors such as HF, O<sub>2</sub>, CO, H<sub>2</sub>S, CF<sub>4</sub> & R12 are available. Due to the modular design up to six sensors can be fitted within a single analyzer in order to suit a variety of customer requirements.

SF<sub>6</sub> gas pressure in the internal sample compartment is recorded and logged by the analyzer. All measured gases are analyzed and data-logged simultaneously and just a few minutes are required to achieve a stable analysis. A powerful 10 bar compressor with a separate lithium battery power supply then returns the gas to the compartment, or the gas can be stored internally for recycling at a later time.

Incorporating a 7" (18cm) full color touch screen interface with soft menu keys and a thermal printer for permanent record keeping, the Transdox is easy to operate and configure. The analyzer is fully compliant with all current IEC and CIGRE test configurations and offers the facility to create custom tests. All data is permanently logged. The test location / user name is fully editable using an alphanumeric key-pad. Data is MS Excel formatted and can be downloaded via a USB memory stick. A 2m armored sampling hose with sealed fittings is supplied and is fully compatible with.

## Features:

- Fully automatic SF<sub>6</sub> testing of GIS & circuit breakers.
- Zero waste and emissions testing of SF<sub>6</sub> purity.
- Lithium battery powered 8-hour operation.
- SF<sub>6</sub>, SO<sub>2</sub> and H<sub>2</sub>O (dew-point) measured as standard.
- Up to 3 other gas sensors available (HF, O<sub>2</sub>, CO, H<sub>2</sub>S, CF<sub>4</sub> & R12).
- Up to five separate tests performed with the gas sample stored internally.
- Housed in a rugged IP66 Peli transport case. Total weight: 17kg.
- Thermal printer fitted as standard.
- 7" (18cm) full colour LCD display with touch screen operation.
- Compatible with IEC & CIGRE test standards for fast operation.
- Full data-logging and MS Excel compatible data download onto memory stick.
- Multi-Language (English, French, German, Spanish, Portuguese, Mandarin).
- Password protection feature.
- Supplied with a 2m armored sampling hose with DILO compatible fittings.

## Applications:

- Controlling SF<sub>6</sub> quality in switches, bus bars and circuit breakers in Gas Insulated Substations (GIS).
- Checking for the buildup of corrosive decomposition products such as SO<sub>2</sub> present in the SF<sub>6</sub>.
- Measuring the moisture content of SF<sub>6</sub> gas by using a dew-point analyzer.
- Applying a condition based maintenance program (CBM) to extend the life cycle of the SF<sub>6</sub>.
- Detecting the presence of leaks and SF<sub>6</sub> discharge.
- Indication of arcing and breakdown through the buildup of corrosive by-products.



## Specifications Transdox 6101 SF<sub>6</sub>

### Technical Data: Analyzer

<b>Voltage</b>	90-260Vac, 50/60Hz
<b>Analyzer dimensions</b>	L:560mm x W:450mm x D:270mm
<b>Weight</b>	17 kg (Total instrument and case)
<b>Display</b>	7" (18cm) full colour LCD display with touch screen operation
<b>Warm up time</b>	3-4 minutes at 20°C
<b>Operating temperature</b>	-20°C to 55°C
<b>Gas Sampling</b>	Up to 5 samples taken before internal reservoir is full
<b>Compressor</b>	Up to 10 bar with up to 25 cycles per battery charge
<b>Pressure Range</b>	3.5-10 bar; displayed on-screen
<b>Battery</b>	2 Li-ion batteries in excess of 8 hours with 4-6 hour charge time
<b>Data Output</b>	Excel compatible data via USB memory stick. 4GB internal data storage allowing for approximately 1 year of continuous monitoring
<b>Printer</b>	Integrated thermal printer
<b>Sample connections</b>	2m Steel braided pressure tested hose, all fittings closed connector



### Technical Data: Sensor

<b>SF<sub>6</sub> Sensor</b>	Infrarrojo 0-100%; ± 0.5% FS precisión; Resolución 0.1%
<b>H<sub>2</sub>O Sensor</b>	-65°C a +20°Cdp; ± 2°Cdp precisión de lectura*; Resolución 0.1°Cdp
<b>SO<sub>2</sub> Sensor</b>	Célula Electroquímica 0-100ppm or 0-500ppm; ± 2% FS precisión; Resolución 0.1ppm
<b>Life expectancy</b>	2-3 años: SO <sub>2</sub> ; >5 años: SF <sub>6</sub> & H <sub>2</sub> O
<b>Measurement time</b>	3-5 minutos
<b>Calibration</b>	SF <sub>6</sub> y SO <sub>2</sub> seleccionable por el usuario valores de cal gas. Sensor de H <sub>2</sub> O calibración de fábrica

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

