

ISATEC 5100

Trace Oxygen Analyzer



AVAILABLE OPTIONS:

- pressure reducer
- particle filter 2-7 μ m
- manual 5-way valve
- electronical/pneumatic gas supply pump
- electronical flowmeter
- auto-Calibration
- back purge
- 2 free adjustable measuring values
- different housings

The basics of ISATEC 5100 is the development project for a compact electronic to be used with Zircon dioxide and electrochemical sensors for the measurement of trace oxygen and Oxygen concentrations in Percent range.

The Trace Oxygen Analyser ISATEC 5100 is for the measurement of oxygen traces in inert gases. For this application the Trace Oxygen Analyser ISATEC 5100 is equipped with a Zircon dioxide sensor.

ISATEC 5100 is available in several housings for General- and Ex-Applications.

A long list of options allows adopting the Trace Oxygen Analyser ISATEC 5100 for almost every application.

The Zircon dioxide sensor is the ideal transducer for the trace analysis of Oxygen in Inert gases. The sensor can be mounted together with the electronics in one single housing. In combination with a calibration adapter the Zircon dioxide sensor can be mounted directly into a gas pipe.

This setup allows the supply of the Zircon dioxide sensors with reference- and calibration gas.

Four measuring ranges with automatic switchover can be set freely within the measuring range.

The software for remote control, calibration and service with remote display allows the direct access via the computer network of the customer to further increase the flexibility of the Trace Oxygen Analyser ISATEC 5100.

ISATEC 5100 Trace Oxygen Analyzer

TECHNICAL SPECIFICATIONS

Measuring principle	ZrO ₂ sensor with P-t electrodes
Applications	Soldering machines Gases Industries Chemical Industries
Measuring range	0-25% Vol. 0 ... 1 ppmv
Analogue signal port	(0) 4 ... 20mA or 0...10 V, galvanically separated
Reproduceability	± 2% of the measuring value
T-90 Time	ca. 20 Seconds
Display	2* 16 digit, illuminated LCD display 1. Line: display of concentration in ppm or Vol % 2. Line: messages, device status, sensor parameters
Messages	1 System message (measuring value yes / no) max. 2 messages configurable as oxygen value, calibration message, measuring value in the range, flow
Gas connection	inlet / outlet 3 / 6 mm ferrule pack
Gas sampling	built-in inlet / outlet valve
Sample flow	min. 30 NI/h, max. 50 NI/h
Sample pressure (inlet)	min. 1,01 bar abs., max. 10 bar abs.
Digital communication	serial interface RS232
Ambient operating Temp.	+5°C up to +60°C
Power supply	110 ... 230 VAC or 24 VDC
Protection class/Housing/ Dimensions	IP65 / wall mounting housing / ca. 300 x 320 x 130 mm IP 54 / panel mounting 144 x 144 mm Ex-d housing for Ex Zone 2
Weight	2,5 kg ... 10 kg depending housing and built-in options