

Technical Specifications

LOI 901 – Oxygen Index Analyzer

Measurement method	Determination of the burning behavior of plastics by oxygen index at ambient temperature in accordance with ISO 4589-2 and ASTM D 2863
Sample dimensions	<ul style="list-style-type: none"> ▪ 6.5 mm x 3.0 mm x 70-150 mm, rod-shaped specimen ▪ 52 mm x 140 mm, flat specimens, thickness as manufactured
Sample holder	<ul style="list-style-type: none"> ▪ 1x for rod-shaped specimens ▪ 1x for flat specimens ▪ 1x for round, rod-shaped specimens
Ignition device	Propane gas igniter with handle, fine adjustment and shut-off valve according to standard*
Measuring gases	<ul style="list-style-type: none"> ▪ O₂, ≥98% purity, gas pressure 4.0 bar, or 7.0 bar for calibration* ▪ N₂, ≥98% purity, gas pressure 4.0 bar*
Measuring and control unit	<ul style="list-style-type: none"> ▪ Single Board Computer ▪ 1x input for thermoelectric voltage ▪ 1x input for oxygen analyzer ▪ 24-bit Sigma Delta ADC integrating ▪ Cold-junction compensation ▪ 2x output magnetic valves for O₂ and N₂ ▪ 2x output control valves for O₂ and N₂ ▪ Paramagnetic oxygen cell: 0% - 100% O₂ - Measurement uncertainty and linearity: ±0.1% ▪ Flow indicator for gas mixture: O₂/N₂
Operation/display, touchscreen	<ul style="list-style-type: none"> ▪ 7", 1024 x 800 wide touchscreen ▪ Temperature display for O₂/N₂ gas mixture ▪ Flow rate in mm/s ▪ Preselection of the gas concentration, automatic control ▪ O₂ display in % ▪ Time display
Software	SBC, Windows 10 IoT, LOI2016_SBC
Interfaces	2x USB, 1x Ethernet
Complete Setup	19" desktop device with fixture for glass column
Operating conditions	Temperature: 23°C ± 5 K, relative humidity: 50% ± 20%
Dimensions (W x D x H)	360 mm x 360 mm x 630 mm
Weight	21 kg
Power supply	110-230 V / 50/60 Hz, max. 40 W
Scope of delivery	<ul style="list-style-type: none"> ▪ 1 LOI analyzer with fixture for glass column ▪ 2 borosilicate glass columns 75 mm (ø) x 450 mm (H) ▪ 3 sample holders ▪ 1 propane gas igniter ▪ 3 gauges for sample size and flame height ▪ 1 manual, English
Options/spare parts	<ul style="list-style-type: none"> ▪ 1 borosilicate glass column ▪ Sample holders ▪ 1 O₂ pressure reducer, max. 10 bar ▪ 1 N₂ pressure reducer, max. 10 bar

* Gas to be provided by the user