

HTO-1000 Thermal Oxidiser



The Acoem HTO-1000 Thermal Oxidiser is a thermal converter designed to be used with oxides of nitrogen (NO_x) gas analysers for the measurement of ammonia (NH_3) or with sulphur dioxide (SO_2) gas analysers for the measurement of hydrogen sulphide (H_2S) or total reduced sulphur (TRS).

HTO-1000 converts normal ambient concentrations of the target gas (NH_3 , H_2S or TS/TRS). If the measurement of COS as a component of TS or TRS is required, then the oven temperature should be configured to 1040 °C.

It can also be used for hydrocarbon removal from air creating hydrocarbon free zero air.

FEATURES

The Acoem HTO-1000 Thermal Oxidiser is specifically configured for each gas application by using different catalysts and operating temperatures. The oxidiser is used to oxidise gaseous compounds in an atmosphere containing oxygen.

Conversion efficiency is dependent on gas, concentration, oven temperature and flow rate.

NH₃ version: (Flow rate 0.30 – 0.32 lpm)

- NH₃ conversion efficiency at 200ppb > 88 % at oven temp 540 °C*

TS version: (Flow rate 0.65 – 0.70 lpm)

- Operating temperature can be varied depending on desired target gas
- H₂S conversion efficiency at 200ppb > 95% at oven temp 900 °C
- DMS Conversion Efficiency at 200ppb > 85% at 900 °C
- COS Conversion possible at 1040 °C
- TRS applications[^]

SPECIFICATIONS

Power:	240 VAC, 50 Hz, 3.15 A Slo-Blow fuse 110 VAC, 60 Hz, 5 A Slo-Blow fuse
Consumption:	200 VA
Weight:	10 kg
Dimensions:	220 mm 5 RU height 484 mm width 220 mm depth
Operating temperature:	25 – 1040 °C at 240 VAC / 50 Hz
Gas temperature accuracy:	± 5 °C
Flow rate:	0.1 – 1.5 lpm
Quartz tube volume:	88.5 cc
Gas pressure:	Vacuum to max. 2 bar pressure
Response time:	5 – 10 % of rise / fall time of analyser.

* Typical temperature. Individual oven temperatures may be set differently.

[^] Requires use of SO_x scrubber (built into Acoem TRS analyser). Efficiencies may be slightly lower than TS due to losses in the SO_x scrubber.