

Efficiency of NO_x to NO conversion

Repeatability of Stack Gas analyzers for NO_x-measurement

NO_x Converter Checker CC-100E

HORIBA Europe's NO_x Converter Checker CC-100E has been developed to test the efficiency of NO_x to NO converters, which are used in NO_x gas analyzers for stack emission measurements or process gas analysis.

HORIBA Europe's CC-100E is a compact designed instrument to precisely control the repeatability of stack gas analyzers for NO_x-measurement. Through generating Ozone by Corona Discharge and mixing it with externally provided NO, precise NO₂-concentrations are established in short reaction time.



CE marking compliant



Functions:

- The NO_x Converter Checker, HORIBA CC-100E, is based on Gas-Phase-Titration (GPT).
- Mixing NO from an external span gas cylinder and O₃, generated by Corona Discharge in an Oxygen saturated atmosphere ($\geq 99.9\%$) inserted externally into the unit. This provides determined concentrations of Nitrogen Dioxide (NO₂).
- The converter checker is optimized for a high stability of the generated NO₂ with minimal reaction time.

Specifications

Model	CC-100E
Application	NOx Converter Checker for efficiency test of NOx to NO conversion, Stack Gas Measurement
Sample gas flow rate	max. 1 l/min (optional 2 l/min)
Gas consumption	Approx. 1,1 l/min (1000 ml NO + 100 ml O ₂)
Gas pressure	20 kPa (200 mbar)
Range of span gas concentrations	10 ppm - 1,000 ppm
Required external gas:	
Span gas (NO)	100 kPa +/- 10 kPa
Zero gas (N ₂)	100 kPa +/- 10 kPa, 1000 ml
Source gas (O ₃)	O ₂ gas (≥ 99.9 %); 100 kPa +/- 10kPa, 100 ml
Piping connection:	
NO	6 mm Teflon
N ₂	6 mm Teflon
O ₃	3 mm SUS
Power supply	100 V ac to 240 V ac
Dimensions (W x D x H)	360 mm x 400 mm x 150 mm
Weight	7 kg
Conforming standards	CE marking

External dimensions

360 mm

150 mm

Front view

Rear view

Names of parts	Notes
① Power ON / OFF	
② Touchscreen for operation	
③ USB 1 (not in use)	Not in use
④ USB 2	For firmware update
⑤ Power IN	
⑥ Oxygen IN	For Ozone generation
⑦ Nitrogen for reference	
⑧ NO span gas IN	
⑨ Bypass line	
⑩ Analyzer line	



Please read the manual before using this product to assure safe and proper handling of the product.

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Contact Address:

HORIBA Europe GmbH

Office Leichlingen

Julius-Kronenberg-Strasse 9, 42799 Leichlingen (Germany)

Phone : +49 (0) 2175 8978-0 Fax : +49 (0) 2175 8978-50

Head Office

Hans-Mess-Strasse 6,61440 Oberursel (Germany)

Phone : +49 (0) 6172 1396-0 Fax : +49 (0) 6172 1373 85

<http://www.horiba.com>