# BOSTON X

MADE IN ITALY

## PORTABLE FLUE GAS ANALYZER




Tecno Control

Authorized Distributor APL ASIA CO.,LTD. Tel: 02-995 4461-3 Line: @apl-asia E-Mail: sales@apl-asia.com

# BOSTON X

MADE IN ITALY

## PORTABLE FLUE GAS ANALYZER




**Boston X**, in response to modern combustion analysis requirements, brings together everything needed to perform combustion analysis on any boiler, irrespective of the fuel and power rating. A powerful processor, exemplary electronics and the use of the finest components available make this instrument an inseparable work mate.

**It must be easy to use:** with Boston X, you only have to choose the fuel and boiler type, the rest is fully automatic through to printing the report.

**It must be reliable:** with Boston X, you get an instrument made by people who have been making combustion analysis products for over 50 years. 4 YEARS WARRANTY.

**It must be helpful:** with Boston X, annexes F and G are completed automatically.

**It must be Smart:** with Boston X, you can count on a very convenient APP for optimum instrument management.

**It must be economical to use:** with Boston X, which has oxygen, carbon monoxide, and nitrogen monoxide cells, the 4 YEARS WARRANTY not only guarantees the entire instrument for that period, but maintenance costs will also be very low.

**Boston X** is also so much more. Its built-in flash memory, makes it possible to store both the names of the technicians who will use the instrument and the customer's registry data; data that can also be transferred via the USB-C port with which it is equipped.
This makes it possible to associate the tests with the customer and the technician who performed the check, for perfect traceability of each operation performed. The instrument is supplied complete with a robust IP67 watertight case that contains everything needed to perform combustion analysis, including Bluetooth printer and calibration report. Colour graphic touch display and rechargeable lithium battery complete this overview of the instrument.




USB-C PORT | BLUETOOTH | CELLS REPLACEABLE BY THE USER | COLOUR TOUCH DISPLAY | IR PORT | INTERNAL FLASH MEMORY | LITHIUM BATTERY | DEDICATED APP

## ADDITIONAL FUNCTIONS

- **User-replaceable pre-calibrated cells (with own calibration report)**
- **Automatic cell recognition**
- **Long-life cells: 4 years**
- **Powerful lithium battery: average autonomy 10 hours**
- **Colour touch display**
- **Two measurement ranges for carbon monoxide: 4,000 and 10,000 ppm (with automatic selection as required)**
- **Full instrument warranty: 4 years**
- **Automatic completion of F and G forms**
- **Free dedicated APP**
- **Can be used for any boiler and any output (also cogenerators)**
- **Extremely handy handheld instrument**
- **Case customisable with company name (anti-theft)**

4 YEARS WARRANTY

Tecno Control



## USER-REPLACEABLE SENSOR CELLS

Fast, easy, economical: undeniably convenient, on the **Boston X** you can easily replace cells when they run out. You will not need to send the instrument in for a service, simply purchase the spare part from your dealer. **Boston X** will always stay with you, no transport costs and no absence from work.

## MODELS AVAILABLE

**ST200AN/OC**
Boston X with $O_2$ / CO cells (Oxygen and Carbon monoxide)

**ST200AN/OCN**
Boston X with $O_2$ / CO / NO cells (Oxygen, Carbon monoxide and Nitrogen monoxide)

## CASE CONTENTS



INTAKE PROBE AND FLUE GAS TEMPERATURE



RECHARGEABLE BLUETOOTH PRINTER



COMBUSTION AIR TEMPERATURE PROBE



## FOUR SIMPLE STEPS FOR AUTOMATIC TESTING



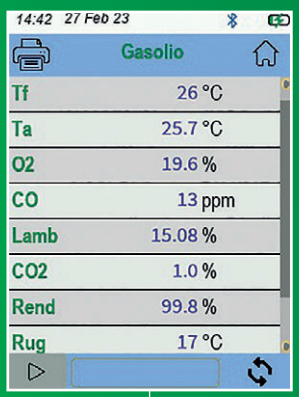

1

CHOOSE THE FUEL



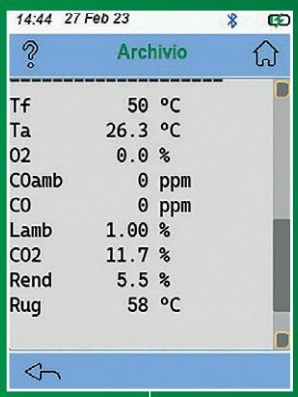

2

CHOOSE BOILER TYPE




3

THE INSTRUMENT DOES THE ANALYSIS AUTOMATICALLY




4

FINAL REPORT

# TECHNICAL SPECIFICATIONS

cod. 0023.CA03.01.EN 03/23

| PARAMETER | SENSOR TYPE | MEASUREMENT RANGE | RESOLUTION | PRECISION | NOTES |
|---|---|---|---|---|---|
| $O_2$ | Electrochemical | 0 ÷ 21% | 0,1% vol. | ± 0,3% vol. | Duration 4 years |
| CO | Electrochemical | 0 ÷ 10.000 ppm | 1 ppm up to 4.000 ppm<br>10 ppm over | ± 20 ppm up to 4.000 ppm<br>± 5% over | Duration 4 years |
| NO | Electrochemical | 0 ÷ 1.000 ppm | 1 ppm | ± 5 ppm up to 100 ppm<br>± 5% rdg | Duration 4 years<br>Only for ST200AN/OCN |
| COamb | Electrochemical | 0 ÷ 500 ppm | 1 ppm | ± 5 ppm up to 100 ppm<br>± 5% rdg | |
| $CO_2$ | Calculated | 0 ÷ 100% Vol. | 0,1% vol. | ± 0,1% vol. | |
| NOx | Calculated | 0 ÷ 1.500 ppm | 1 ppm | ± 5 ppm up to 100 ppm<br>± 5% rdg | |
| Flue gas temperature | Tc K | 0 ÷ +1.000 °C | 1 °C | ± 2 °C | |
| Combustion air temperature | Tc K | -20 ÷ +500 °C | 0,1 °C | ± 1 °C | |
| Draught | Semiconductor | -500 ÷ +500 Pa | 0,1 Pa | ± 0,5 Pa | |
| Pressure | Semiconductor | -50 ÷ +500 Pa | 1 Pa | ± 1 Pa | |

| | |
|---|---|
| Power supply | External 230Vac power supply for charging or direct power supply (also for printer).<br>Output voltage 5Vdc USB-C |
| Battery | Li-ion 3,6 Vdc 6,3 Ah |
| Display | LCD graphic TFT |
| Average autonomy | 8/10 hours |
| Battery charging time | 4 hours |
| Printer | External Bluetooth or infrared; paper width 58mm |
| Operating temperature | -10 ÷ +50 °C |
| Storage temperature | -20 ÷ +55 °C |
| Protection Index | IP40 |
| Dimensions | 200mm x 80mm x 60mm |
| Weight | Approx. 1,0 Kg |
| Weight with case | Approx. 2,5 Kg |

## CONFORMITY TO NORMS

**UNI10389-1** - Field measurements - Heat generators
Part 1: Appliances powered by liquid and/or gaseous fuel.

**UNI10389-2** - Field measurements - Heat generators
Part 2: Appliances fuelled by solid, non-pulverised biofuel.

**UNI10845** - Gas installations for civil use - Systems for the evacuation of combustion products from gas-fired appliances. Criteria for verification and remediation.

**EN50379-1** - Specifications for portable electrical apparatus designed to measure combustion gas parameters of heating appliances - Part 1: General requirements and test methods.

**EN50379-2** - Specifications for portable electrical apparatus designed to measure combustion gas parameters of heating appliances - Part 2: Performance requirements for equipment used in statutory inspection and evaluation.

DISCOVER ALL
DETAILS OF THE NEW
**BOSTON X**

**BOSTON X**
WATCH THE VIDEO

**BOSTON X**
DOWNLOAD THE MANUAL

**APL ASIA CO., LTD. Authorized Distributor**
Address: 11/129-132 Moo.5 Lamlukka Rd., T.Kookut, A.Lamlukka, Pathumthani 12130 Thailand.
TEL: 0-2995-4461-4
Website: www.apl-asia.com
EMAIL: sales@apl-asia.com
LINE@: @APL-ASIA