

TRTECCORA®
POLLUTION CHECK



In compliance with:
EN 14385, CEN/TS 13649, EN 12919,
EN 13284, EN 1911, EN 13211, EN 14790,
ISO 9096, EN 16911.

Continuous Flow Sampler BRAVO X

BRAVO X is the evolution of the "BRAVO PLUS"!

We gave a new "BRAIN" to the PLUS sampler of the BRAVO line, automating some control and data storage functions.

BRAVO X has the same mechanical features as the PLUS version, but the flow is electronically controlled instantaneously, as well as display / memorize the sampled volume.

This means the possibility of not supervising after entering initial settings!

Built-in microprocessor enables **DATA STORAGE** of all sampling parameters with local recall features and USB port for download.

IP65 keypad and colour display are the user interface to input/modify/access to all the sampler functionality.

With the suppression of flow fluctuations and pressure pneumatic dampener, **BRAVO X** can keep steady flow during all sampling time period

If a more performing pump is required, **BRAVO X-R** version is equipped with a rotary vane pump with graphite: this means linear flow, higher flow rate and higher vacuum.

Sampling in isokinetic conditions: using **FLOWTEST ST** flow via USB cable, **BRAVO X** becomes an isokinetic sampler.

Through a Venturi that offers the advantage of instantaneous flow control in any flow condition, a version with flow meter is available as option.

TOUCH-KEYPAD dual display. We created a user interface that meets the needs of everyone in all using conditions. Is possible to operate using the large 5 "colour screen in touch-screen mode, using the keyboard in harsh conditions or both touch and keyboard.

UMTS modem is the latest technological "revolution" that allows remote sampler control.

This option can be used simply by purchasing a SIM data and by subscribing an annual subscription to a web provider that offers **REMOTE DESKTOP** service.

Sampling data can be downloaded at any time and check the operating status of the sampler.

Another feature of **BRAVO X** is the capability to control sequential systems for particulate sampling (groups of filter holders with 8 positions up to 24 total) and sorbent tubes sampling (outdoor system up to max. 24 tubes).

Due to its special edge protections, mounted in **BRAVO X**, damage from accidental shocks are avoided. Furthermore, these mechanic bumpers reset all structural twist, are easy to change and very cheap.

External LED indicators, visible at long distances, warns about local running conditions.



Main Features

- Automatic portable steady flow sampler with microprocessor based control;
 - Electronic flow controller, data display and acquisition;
 - Flow range: from 0.2 l/min to max 60 l/min (optional: 80 l/min depending on the pump type installed);
 - Pneumatic damper to keep constant the flow during sampling and free of fluctuations;
 - High accuracy and stability of the flow measurement;
 - Volumetric counter (DGM), class 1.5, for accurate measurement of sampled volume;
 - Data storage of all parameters with easy recall by keyboard (up to 512 samples):
 - User, site, measuring point;
 - Sampled volume, air temperature, atmospheric pressure (optional);
 - Data export via USB port (.txt file);
 - Reporting of power failures;
 - Vacuum gauge for leaks;
 - Available power supply: 230 VAC-110 VAC – 24 VDC battery (for diaphragm pump only).
- ☑ Flow rate from 0.2 l/min to 60l/min (optional 80 l/min);
 - ☑ High precision in flow and volume measurement;
 - ☑ Microprocessor data management;

"The perfect combination of evolution and simplicity of use, this is... BRAVO X"





BRAVO X

Bravo X-R Model

Bravo X-M Model

Line 1 Automatic Flow Control

Line 1

Line 1 Automatic Flow Control

Line 1

with FLOWTEST st
it becomes an **Isokinetic SAMPLER**



- Color display and membrane keyboard
- Volumetric counter
- Retractable Handle
- Sampler Status LED bar
- Safety Edge Protections
- Vacuum Gauge
- Particulate Filter
- Moisture Trap

**New
Keyboard**





BRAVO X

Technical Features

Bravo X-R Model

Pump Type	Rotary vane with graphite palette
Maximum flow rate (with no restrictions)	Max. 1-70 l/min
Flow range	0.5-70 l/min
Dry gas meter (DGM) range	0.04 – 6 m ³ /h acc. class 1,5
Flow measure sensor	Encoder on DGM (in option Venturi flow meter)
Digital gas temperature sensor range (input DGM)	-50÷70 °C accuracy 1 °C Resolution 0.1 °C
Dry gas meter working temperature	-10÷40 °C
Enviro. humidity sensor range	10÷ 99 % RH (optional)
Atmospheric pressure sensor range	0-103 kPa, accuracy ± 0.1 kPa, resolution 0.01 kPa (optional)
Sampler Control	Microprocessor control
User interface	IP65 keypad/colour display
Weight	13 Kg
Dimensions	200 x 315 x 460 mm
Power Supply	230 VAC 50-60Hz 110 VAC 50-60 Hz
Power Consumption	650W

Bravo X-M Model

Pump Type	Single head diaphragm pump, corrosion-resistant
Maximum flow rate (with no restrictions)	Max 32.5 l/min
Flow range	0.5-32.5 l/min
Dry gas meter (DGM) range	0.016 - 2.5m ³ /h acc. class 1,5
Flow measure sensor	Encoder on DGM (in option venturi flow meter)
Digital gas temperature sensor range (input DGM)	-50÷70°C accuracy ±1°C resolution 0.1°C
Dry gas meter working temperature	-10÷40 °C
Enviro. humidity sensor range	10÷ 99 % RH (optional)
Atmospheric pressure sensor range	0-103 kPa, accuracy ± 0.1 kPa, resolution 0.01 kPa (optional)
Sampler Control	Microprocessor control
User interface	IP65 keypad/color display
Weight	11 Kg
Dimensions	200 x 315 x 460 mm
Power Supply	230 VAC 50-60Hz 110 VAC 50-60 Hz
Power Consumption	350W

