Vacuum-Box Gas-Bag Sampler

YQ-1110Z

Overview

The YQ-1110Z uses gas bags to collect VOCs from stationary-source waste gas and ambient air, and other toxic or harmful gases suitable for gas-bag sampling. It supports unattended timed, quantitative and fixed-volume collection of 1-4 gas bags. Under vacuum-box negative pressure, the bags passively collect external gas; samples enter the bags without passing through the sampling pump. The brochure lists applications in environmental protection, health, labor, security, military, research and education.



Technical specifications

Parameter	Value
Suitable gas-bag volume	(1-10)L
Sampling flow	High flow: 6.5 L/min, 5 settings; low flow: 100-1000 mL/min as printed
Sampling time	00:00:59-99:59:59
Load capacity	<-15 kPa
Operating temperature	-20 to 60 °C
Battery	12 V 5000 mAh
Power supply	DC 12 V
Flue-gas preprocessor length	0.8 m
Telescopic sampling tube	Extended length 1.5 m
Unit power	≤5 W
Dimensions (L×W×H)	360×240×350 mm (excluding telescopic rod)
Unit weight	3.5 kg

Technical features

• Integrated design with a foldable 5-inch color touchscreen.
• Four independent sampling channels; individual volume settings support one-hour continuous sampling for hourly ambient-air averages.
• ABS engineering-plastic case, resistant to shock and drops.
• A viewing window in the case panel shows bag sampling status.
• Dedicated telescopic sampling tube with dust filtration for ambient air.
• Adjustable-temperature heated sampling tube for duct waste gas.
• Collects 1 L continuously or at intervals over one hour, with timed sampling support.
• Dual pumps provide high-flow rapid sampling (5 settings, maximum 6.5 L/min) and low-flow precision sampling (100-1000 mL/min).
• Up to four gas bags sampled sequentially, with unattended timed, quantitative and fixed-volume collection of 1-4 bags.
• Automatic bag cleaning without disconnecting the bag tube; cleaning cycles and sampling mode are configurable.
• Real-time vacuum-box pressure monitoring; sampling stops when the bag is full.
• Box pressure automatically equalizes after sampling to aid opening.
• Suitable for 1-10 L gas bags.
• Built-in lithium battery, sampling time greater than 8 hours.
• Queryable sampling data; storage for 10000 records and USB export.
• Optional Bluetooth wireless printing of sampling data.
• Optional BeiDou positioning and 4G remote wireless status inquiry.

Standards listed in the brochure

• H732-2025 - Stationary source waste gas: VOC sampling by gas-bag method
• HJ194-2017 - Technical specification for manual ambient air quality monitoring
• HJ/T 55-2000 - Technical guidelines for monitoring unorganized emissions of air pollutants
• H1262-2022 - Ambient air and waste gas: odor determination by three-point comparison odor-bag method
• HJ/T47-1999 - Technical requirements for flue-gas samplers
• HJ604-2017 - Ambient air: total hydrocarbons, methane and non-methane hydrocarbons by direct injection gas chromatography-mass spectrometry
• HJ1261-2022 - Stationary source waste gas: benzene-series compounds by gas-bag sampling and direct-injection gas chromatography
• HJ38-2017 - Stationary source waste gas: total hydrocarbons, methane and non-methane hydrocarbons by gas chromatography
• DB 13/T 5500-2022 - Technical guidelines for verification and monitoring of stationary-source VOCs

Standard accessories

• Main unit
• Telescopic rod
• Charger

Optional accessories

• Flue-gas preprocessor
• Heated tube
• Bluetooth printer

Source and review notes

• Standard numbers and titles are transcribed from the brochure, not independently verified; prefixes H732-2025 and H1262-2022 are retained as printed pending confirmation.
• The low-flow figure 100-1000 mL/min is retained; the precise adjustment method needs confirmation.
• The features mention a heated sampling tube; the accessory list identifies the heated tube as optional.
• Specifications and standards have not been independently verified.
• English translation has not received native-speaker technical review.