# Multi-in-One Waste-Gas Sampling Probe

YQ-5233SW

## Overview

The YQ-5233SW is used with an automatic particulate/flue-gas analyzer or an intelligent flue-gas sampler. Mixed-phase sampling requires an integrated stationary-source sampler. It can collect sulfuric acid mist, hydrogen fluoride, hydrogen chloride and hydrogen bromide and is intended for horizontal and vertical ducts.



## Technical specifications

| Parameter | Value |
|---|---|
| Sampling-probe length | 1.5 m |
| Heating temperature | 100-160 °C, temperature-control accuracy ±1 °C |
| Sampling-probe material | Titanium alloy |
| Power consumption | <350 W |
| Pitot tube coefficient | 0.84±0.01 |
| Sampling-port diameter | ≥Φ70 mm |
| Power supply | AC 220 V±10%，50 Hz |

## Technical features

• Titanium-alloy body with polytetrafluoroethylene lining.
• Separate sampling tube, heated insulated box and ice-water bath box can be combined according to sampling needs.
• Gas- and mixed-phase sampling of sulfuric acid mist, hydrogen fluoride, hydrogen chloride and other substances.
• Measures flue-gas temperature and velocity via a Pitot tube; the sampling tube is heated throughout with automatic temperature control.
• For sulfuric acid mist, a No. 3 glass-fiber or quartz-fiber filter cartridge is placed at the front; for hydrogen fluoride, hydrogen chloride and hydrogen bromide, a polytetrafluoroethylene membrane holder is placed in the heated box.
• Includes an ice-water bath box and polypropylene hydrogen-fluoride absorption bottle.
• A stop valve helps prevent absorption-liquid backflow during sampling.
• Corrosion-resistant titanium-alloy sampling nozzle is heated as a whole with adjustable temperature.

## Standards listed in the brochure

• HJ 544-2016 - Stationary-source waste gas: sulfuric acid mist determination by ion chromatography
• HJ 548-2016 - Ambient air and waste gas: hydrogen chloride determination by silver-nitrate volumetry
• HJ 549-2016 - Ambient air and waste gas: hydrogen chloride determination by ion chromatography
• HJ 688-2019 - Stationary-source waste gas: hydrogen fluoride determination; the source prints 例子色谱法 for the method
• GB/T 16157-1996 - Sampling of particulate and gaseous pollutants in stationary-source exhaust

## Standard accessories

• Fabric bag
• Tripod
• Aluminum case
• Ice-bath box

## Source and review notes

• The HJ 688-2019 method is printed as 例子色谱法 in the brochure, apparently a typographical error; it is retained pending verification.
• The accessory illustration lists only fabric bag, tripod, aluminum case and ice-bath box and does not establish the complete delivery contents.
• Specifications and standards have not been independently verified.
• English translation has not received native-speaker technical review.