E-CIGARETTE & THP TESTING

SM450e
20 Channel e-Cigarette & THP Tester

PRODUCT DESCRIPTION

The SM450e is a 20-channel vaping machine specifically designed for e-cigarette and Tobacco Heating Product (THP) applications. Equipped with twenty 210ml puff engines, it enables users to seamlessly configure four different regimes at a given time, controlled in banks of five channels. All parameters of the vaping process are PC controlled via the intuitive software, with results stored on a database and reports that can be easily prepared and printed.

The output from each sample is passed through a CFH fitted with a glass fibre filter pad, which is removed after each experiment for weighing before being sent for subsequent chemical analysis. The pre-and-post weights of the CFH can be entered to establish delivery mass.

Operating on a Windows 10 platform, the SM450e is equipped with additional features such as automatic button actuation for pre-activating electronic devices, angled vaping with the ability to vape at 15° intervals between +90° and -90°, optional End-point Detection System (EDS) and 21 CFR pt. 11.

The spacious work area allows the fitting of multiple impingers, cryogenic traps and electrostatic precipitators for sophisticated capture experiments. The SM450e vaping machine is compliant with CORESTA Recommended Methods CRM81, which makes it ideal for a broad range of e-cigarette and Heat-Not-Burn testing applications.

FEATURES

- Up to 20 e-cigarettes or THP/HNB products
- 20 off 210 ml puff engines
- Up to four different vaping regimes at a given time.
- Windows 10 Operating System
- Fixed puff operation – up to 250 puffs
- User defined pre-puff button activation for e-cig & THP products
- Variable vaping angle
- Optional End-point Detection System (EDS)
- Optional 21 CFR pt. 11

APPLICATIONS

- Testing Tobacco Heating Products/Heat-Not-Burn
- Testing puff activated and switch activated e-cigarettes
- Impinger capture methods:
  - maximum of two impingers per port
- Electrostatic traps for metal capture

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TECHNICAL SPECIFICATIONS

Electrical requirements:	100 — 250 V 50 - 60 Hz
Power consumption:	< 1800 VA
Air supply:	3.0 bar (required for button activation device)
Ambient operating temperature:	15 – 35° C
Humidity:	40 to 90% RH non-condensing
Dimensions (approx.):	1200 mm (H) x 2246 mm (W) x 903 mm (D)
Weight:	< 250 kg
Sample mouth piece diameter:	Round or oval. Ranges shown in table below
Product diameter:	4.5 mm to 30 mm
Product capacity:	Up to 20 e-cigarettes & THP/HNB products

Puff: Volume:
        Profile:
        Duration:
        Interval:
	1 - 210 ml
	Square or ISO bell
	1 - 9.9 seconds
	10 - 999 seconds

Data interface:	USB2 / Ethernet / RS232
Button Activation (THP):	Button press time range: 1 - 10 seconds Delay period range: 1 - 60 seconds Pre-activation cycle: enabled / disabled

Round Lip Seals		Oval Lip Seals	
Range Dia. (mm)	Stock Code	Oval Range (mm)	Stock Code
4.50 - 5.49	66332	8 - 10 x 3 - 4	66212
5.50 - 6.49	66333	8 - 10 x 4 - 5	66213
6.50 - 7.49	66334	8 - 10 x 5 - 6	66214
7.50 - 10.00*	66316	10 - 12 x 3 - 4	66215
* Supplied as standard		10 - 12 x 4 - 5	66216
		10 - 12 x 5 - 6	66217

OPTIONS

End-point Detection System   Stock code: 98401

Puff profile analyser - VFA450RH   Stock code: 99459

Hoffmann impinger kit (no glassware)   Stock code: 92158

1 set of 10 glass impingers   Stock code: 91184

Volume Indicator / Bubble stick - VOL 100   Stock code: 91024

(*used for measuring up to 50ml puffs, alternative bubble stick devices up to a maximum of 150 ml are available*)

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