

Air Flow Control for Inhaler Testing – the FIA Way

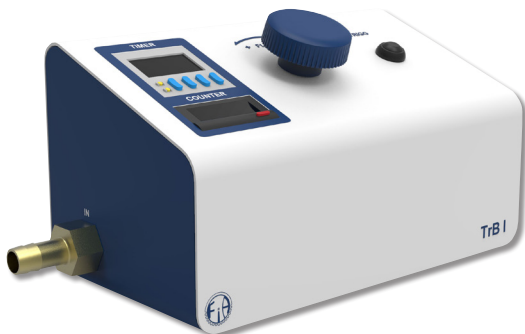
Control and monitoring of the air flow is essential for performance testing of inhalation devices in accord with regulatory standards. FIA engineers have designed a user-friendly family of products that enable full compliance with the test requirements of the European Pharmacopoeia and the US Pharmacopoeia. FIA offers three models of flow controllers – basic to advanced – that put you, the USER, in control – repeatably, reliably.

– Need to coordinate MDI dosing and flow sequences? No problem.

– Need to ensure proper flow in real time for DPI testing? Yes.

Flow control, however you want it.

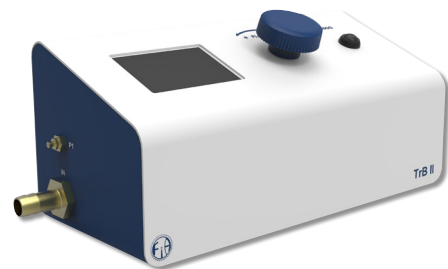
AND with the absolute minimum footprint...as small as 23x13 cm PLUS easy-to-read displays that work even when you wear gloves – “hands-on” equipment made with the analyst in mind.



Trigger Model I



Optional output and inputs configurable according to customer needs.



Trigger Model II

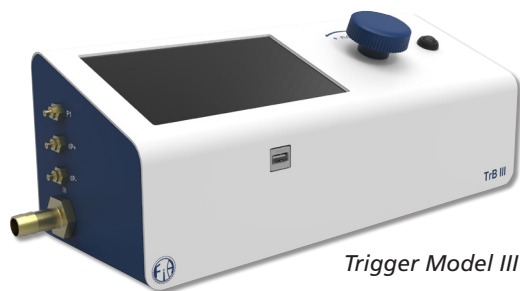
Trigger Box Model II – Critical Flow Controller

This model builds on the functions of Model I with the addition of differential pressure transducers for measuring and displaying pressure at P1, P2, and P3.

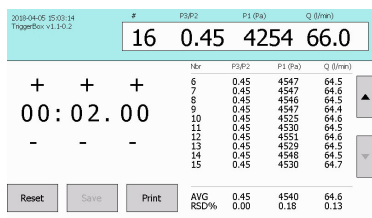
Trigger Box Model I – Basic

This model gives the analyst the basic functionality in a very compact and easily managed format.





Trigger Model III



Trigger Model III Screen dump

Trigger Box Model III – Critical Flow Controller with Flow Measurement

Trigger Box Model III has the same functions as Model II but is also equipped with an internal flow meter. With this equipment the user has full control of the testing, including volumetric flow measurement. The latter is enabled by an integrated laminar flow element downstream of the test set-up (e.g. dose collector or impactor). The air flow into the device is presented. The principle has proven to be robust and has been used by FIA's customers for over 25 years but has now been integrated into a compact format for routine use. Further, two additional pressure sensors ("dP") make it possible to do impactor stage mensuration by pressure drop.

	TRB I	TRB II	TRB III
Flow actuation	0-99 min, 0.1s resolution	0-60 min, 0.1s resolution	0-60 min, 0.1s resolution
Actuation counter	Resettable, 8 digits	Resettable 0-999	Resettable 0-999
Foot switch	Optional	Yes	Yes
Display	4 and 8 digits	4.3" touch	7" touch
P1 Measurement	No	Yes, 0-16 kPa	Yes, 0-16 kPa
P3/P2 Measurement	No	Yes	Yes
Flow Measurement	No	No	Yes, 0-120 l/min
dP (e.g. stage dP)	No	No	Yes, high precision 0-6 kPa
Printable data	No	Prints new actuations continuously – Flow "on" time – Dose number – P1 – P3/P2 (if < 0.5)	Prints new actuations continuously or print all actuations from reset. – Date/time of first dose – Instrument ID – Instrument ver – Flow "on" time – External relay timing – Atmospheric pressure – Dose number – P1 – P3/P2 (if < 0.5) – Flow – dP
Relay output for actuation of external equipment	No	No	Yes, configurable timing of output relative vacuum opening.
Displayed history of recent actuation data	No	Last 3 actuations	All actuations from reset.
USB memory stick export	No	No	CSV format named with current date time.
Automatic leak test	No	No	Yes
Dimensions (cm)	23x13x13	23x13x13	34x13x13



AB FIA Vinkelhaken 1 D
SE-247 32 Södra Sandby, Sweden
+46 46 13 90 00
i@fia.se • www.fia.se

AB FIA Member of
MVIC
MEDICON VALLEY
INHALATION CONSORTIUM
www.mvic.se