Function Tester **IN-600**



Measurement and test device for function tests of infusion pumps in accordance with IEC 60601-2-24

- ☑ for peristaltic and syringe pumps
- ☑ touchscreen or PC operation
- ☑ 1- or 2-channel version available
- ☑ integrated nurses' call test
- ☑ robust light metal case
- ☑ user specific language setting
- ☑ optional - carrying case, transportation bag

S.P.L. Elektronik

Mess- und Prüftechnik
für medizinische und industrielle Anwendungen
Tel. +49 33232 39915, www.spl-elektronik.com
Forstweg 1, 14656 Brieselang, Deutschland

Management System ISO 9001:2015
TÜVRheinland ZERTIFIZIERT
www.tuv.com ID 0910095181

Technical Data

Line voltage:	83 – 264 V ac, 50 / 60 Hz
Nominal power:	max. 100 VA
Protection class:	1
Environmental temperature:	+5 - +40 °C
Storage temperature:	+5 - +50 °C
Measurements	
Flow rate:	0.1 – 0.99 ml/h, ± 0.1 ml/h or ± 2.5 % of measurement value [1]) 1 - 1000 ml/h, ± 0.1 ml/h or ± 1 % of measurement value [1])
Switch-off pressure:	0 – 2.5 bar, ± 0.01 bar or ± 1% of measurement value
Bolus volume:	0 – 5.0 ml
Test nurse's call switch:	contact closed / open / not connected

Interface:	1 x USB for PC-connection
Testing device connection:	4 x Luer-Lock 6 x sockets 4 mm
Digital display:	4,3'' TFT-Display
Operation:	Touchscreen
Accessories:	1 x USB interface cable 1 x power cord
Mechanical data:	light weight metal case IP20
Dimensions:	343 x 88 x 280 mm (W x H x D)
Weight:	approx. 3.7 kg
Selectable languages:	german, english, french, polish, spanish italian, portuguese, turkish

[1]) at least 5 ml of measurement liquid must be pumped by syringe pumps and at least 25 ml by discontinuous pumps (peristaltic pumps and the like)

Description of functions:

The IN-600 serves for the functional testing of infusion pumps such as syringe pumps, roller (volumetric) pumps, peristaltic (finger) pumps and the like. The IN-600 is able to perform measurements at 2 pumps at the same time. The tests can be made via touch display in the stand-alone mode or via a PC software.

The measurement parameters:

Flow rate, Volume
Switch-off pressure, minimal pressure
Bolus Volume
Function of the nurse´s call contacts
Pressure Measurement

Measurement:

The Measurement is based on a volumetric principle in which the measuring system is cyclically filled and emptied. The IN-600 displays a new arithmetic mean after each measurement cycle. The duration of measurement is in accordance with the stipulations contained in the test step selected by the operator.

In order to achieve the measurement precision of 1% of the measured value given above in the technical data, at least 5 ml of measurement liquid must be pumped by syringe pumps and at least 25 ml by discontinuous pumps (peristaltic pumps and the like).

Switch-off pressure:

The IN-600 determines the switch-off pressure by closing the entry valve, which produces artificial stenosis. When the switch-off pressure is reached, the infusion pump triggers an alarm, and the system stops the flow of infusion liquid.

Continuous measurement of the input pressure at the IN-600 enables determining the maximum pressure, which is then recorded as the switch-off pressure of the pump. If the input pressure exceeds 2.5 bar, the system automatically opens the valves and stops the measurement.

Bolus volume:

The bolus volume is defined as the volume of liquid, which leaves the infusion tube after the switch-off pressure is reached and the stenosis valve is opened. The system measures this volume immediately after the stenosis valve is opened.

(The specified measuring accuracy refers to the measuring element. Technical modifications and errors reserved. 10/2026)

S.P.L. Elektronik
Mess- und Prüftechnik
für medizinische und industrielle Anwendungen
Tel. +49 33232 39915, www.spl-elektronik.com
Forstweg 1, 14656 Brieselang, Deutschland

TÜVRheinland ZERTIFIZIERT
Management System ISO 9001:2015
www.tuv.com ID 0910095181