

# IDA-1S One-Channel Infusion Device Analyzer

## Technical Data



Ensure infusion pumps are tested accurately and quickly with real time results using the IDA-1S One-Channel Infusion Device Analyzer, the newest member of the Fluke Biomedical IDA family. The IDA-1S is a portable, battery-operated instrument that allows for speedy verification of infusion device performance.

The IDA-1S measures the flow rate and volume delivered, and the pressure generated in occlusions or blockages of the fluid line. The IDA-1S is based on sophisticated measurement technology trusted by biomedical professionals around the world. It is easy to set up and requires little or no training to use. The IDA-1S can be used to test a wide variety of infusion pumps and an auto-start feature simplifies syringe pump testing and other tests that have long startup times.

### Key features:

- Integrated carrying handle and lightweight (2.7 lb) for easy portability
- Battery powered with up to 10 hours of continuous operation for on-the-go operation
- LCD touch screen for ease of use
- Average and instantaneous flow measurement
- Occlusion pressure measurements to 45 psi
- Maximize accuracy with Autostart mode enabling unit to begin testing only when fluid is detected
- Compatible with a wide variety of infusion pumps
- Based on technology that is proven and trusted worldwide
- On-board memory allows test results storage instantly
- Hydrograph graphical software to control unit, display results and print results via PC
- Global sales, service and support

## Technical specifications

Flow rate measurement	
<b>Technique</b>	Flow is calculated by measuring volume over time
<b>Range</b>	0.5 ml/h to 1000 ml/h
<b>Accuracy</b>	1 % of reading $\pm$ 1 LSD for flows of 16 ml/h to 200 ml/h for volumes over 20 ml; otherwise 2 % of reading $\pm$ 1 LSD for volumes over 10 ml under laboratory conditions
<b>Max test duration</b>	10 hours on battery
Volume measurement	
<b>Technique</b>	Volume is measured directly by the measuring module in minimum sample sizes of 60 $\mu$ l
<b>Range</b>	0.06 ml to 999 ml
<b>Accuracy</b>	1 % of reading $\pm$ 1 LSD for flow rates of 16 ml/h to 200 ml/h for volumes over 20 ml. Otherwise 2 % of reading $\pm$ 1 LSD for volumes over 10 ml under laboratory conditions
<b>Max test duration</b>	10 hours on battery
Pressure measurement	
<b>Technique (Occlusion test)</b>	Direct measurement of pressure at the inlet port
<b>Range</b>	0 psi to 45 psi and equivalent in mmHg, Bar and kPa
<b>Accuracy</b>	1 % of Full Scale $\pm$ 1 LSD under laboratory conditions
<b>Max test duration</b>	30 minutes
General specifications	
<b>Storage of results</b>	Test results stored for later viewing, printing or transfer to PC. Typical practical capacity: 100 tests
<b>Power down</b>	The results of tests in progress will be saved in the case of accidental power down
<b>Computer control</b>	The Product can be fully controlled from a PC using HydroGraph V3 software for IDA-1S
<b>Battery power</b>	4 x Panasonic HHR210AB NiMh 2000 mAh batteries
<b>Charger</b>	Operating voltage range: 100 V ac to 240 V ac
	Supply frequency: 50 Hz / 60 Hz
	Supply power: <20 VA
<b>Size (HxWxD)</b>	30 cm x 17 cm x 10 cm (12 in x 8 in x 4 in)
<b>Weight</b>	~1.2 kg (2.7 lb)
<b>Temperature</b>	Operating: 15 °C to 30 °C (59 °F to 86 °F)
	Storage: -20 °C to +40 °C (-4 °F to +104 °F) when drained of all liquid
<b>Humidity</b>	10 % to 90 % non-condensing
<b>Altitude</b>	0 meters to 2000 meters (6500 feet)
<b>Safety</b>	IEC 61010-1: Overvoltage category II, Pollution Degree 2
<b>Electromagnetic environment</b>	IEC 61326-1: Basic
<b>Emissions classification</b>	IEC CISPR 11: Group 1, Class A. Group 1 have intentionally generated and/or use conductively coupled radio-frequency energy which is necessary for the internal functioning of the equipment itself. Class A equipment is suitable for use in nondomestic locations and/or directly connected to a low-voltage power supply network
<b>FCC</b>	CFR47: Class A Part 15 subpart B
<b>Electromagnetic compatibility</b>	Applies to use in Korea only. Class A: Equipment (Industrial Broadcasting and Communication Equipment) <sup>1</sup>

This product meets requirements for industrial (Class A) electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and is not to be used in homes.

## Ordering information

### Models/descriptions

**4468525** IDA-1S One-Channel Infusion Device Analyzer

### Standard accessories

**4418071** Hydrograph Software and Users Manual

**4497350** 20 ml syringe

**4480194** 3-way plastic Luerlock

**4478942** Drain tube (1 m)

**4541948** Micro-90 bottle (225 ml)

**1740487** USB data transfer cable

**2461300** 4-plug mains adapter kit for US, UK, EURO, AUS

**4329971** Power supply cord without main adapters, univ, wall mount

**4481150** NiMH replacement battery

### Fluke Biomedical Regulatory Commitment

As a medical test device manufacturer, we recognize and follow certain quality standards and certifications when developing our products. We are ISO 9001 and ISO 13485 medical device certified and our products are:

- CE Certified, where required
- NIST Traceable and Calibrated
- UL, CSA, ETL Certified, where required
- NRC Compliant, where required

### Fluke Biomedical.

*Better products. More choices. One company.*

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Printed in U.S.A. 9/2014 6002180B\_EN

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