

# IDA-5 Infusion Device Analyzer

**Fast. Accurate. Proven.**

## Technical Data



Ensure infusion pumps are tested accurately and quickly with the IDA-5 Infusion Device Analyzer. The IDA-5 is based on sophisticated measurement technology trusted by biomedical professionals around the world for over 20 years. The IDA-5 is a full-featured device that measures instantaneous flow, average flow, occlusion pressure and dual flow based on IEC60601-2-24.

The IDA-5 has built-in automation allowing users to create custom test templates for quick, standardized infusion pump analysis with minimal user intervention. The IDA-5 test automation bundle includes Ansur software for comprehensive testing.

Automated testing allows technicians to set up tests and walk away. It is easy to set up and requires little or no training to use. The IDA-5 can be used to test a wide variety of infusion pumps including volumetric pumps, syringe pumps, PCA pumps, drip-rate pumps, anesthesia pumps and ambulatory pumps. The IDA-5 maximizes productivity with multiple, independent channels for testing up to four infusion pumps at once.

With its built-in memory, the IDA-5 records test results internally, and provides easy-to-read graphs right on the analyzer's screen. Additionally, an auto-start feature simplifies syringe pump testing as well as other tests with long startup times. And the color display is so large numbers can be read from across the room. The IDA-5 also comes with Hydrograph PC software for creating full-color graphs and reports, and is compatible with plug 'n play accessories such as barcode scanners, keyboards and printers.

### Key features

- Tests up to four infusion pumps at the same time
- Customizable test templates for quick and standardized testing
- On-board and PC-based automation
- Compatible with virtually any type of infusion device
- Real time snap shots of flow and pressure for immediate issue recognition
- Instantaneous and average flow measurement of up to 1500 ml/hr
- Occlusion pressure measurements to 45 psi
- Single-flow, dual-flow (piggyback) and PCA testing
- Auto-start mode enables unit to begin testing only when fluid is detected to maximize accuracy
- Ability to automatically end flow measurement based on user-defined time, volume or both
- Convenient and easy data entry with plug 'n play, USB compatible keyboard or barcode scanner
- Built-in memory to save test results for printing or downloading to computer
- Optional Ansur automation software completely integrates medical device testing including electrical safety, visual inspection and other performance parameters for total digital data management
- Global support network delivering prompt service worldwide

## Specifications

<b>Technical specifications</b>	
<b>Flow rate measurement</b>	
<b>Method</b>	Flow is calculated by measuring volume over time
<b>Range</b>	0.1 ml/h to 1500 ml/h (2500 ml/h is shown)
<b>Accuracy</b>	1 % of reading $\pm 1$ LSD for flows of 16 to 200 ml/h for volumes over 20 ml, otherwise 2 % of reading $\pm 1$ LSD for volumes over 10 ml under laboratory conditions. Degassed water at 15 °C to 30 °C (59 °F to 86 °F) is recommended for long tests.
<b>Max test duration</b>	100 hours
<b>Volume measurement</b>	
<b>Method</b>	Volume is measured directly by the measuring module in minimum sample sizes of 60 $\mu$ l
<b>Range</b>	0.06 ml to 9999 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>	100 hours
<b>PCA bolus/dual flow measurement</b>	
<b>Method</b>	See volume measurement above
<b>Min bolus volume</b>	0.5 ml
<b>Resolution</b>	60 $\mu$ l increments
<b>Max test duration</b>	100 hours
<b>Pressure measurement</b>	
<b>Method (back pressure and flow test)</b>	Direct measurement of pressure at the inlet port
<b>Range</b>	0 psi to 45 psi or equivalent in mmHg and kPa
<b>Accuracy</b>	1 % of full scale $\pm 1$ LSD under laboratory conditions
<b>Max test duration</b>	1 hour
<b>Other specification</b>	
<b>Templates</b>	Predetermined test sequences. Typical capacity 200.
<b>Storage of results</b>	Test results stored for later viewing, printing or transfer to PC. Typical capacity 250 tests.
<b>General specifications</b>	
<b>Operating voltage range</b>	100 V ac to 240 V ac
<b>Supply frequency</b>	50/60 Hz
<b>Supply power</b>	<50 VA
<b>Fuses</b>	20 mm T1.6 A H 250 V x 2
<b>Size (HxWxD)</b>	30 cm x 20 cm x 20 cm (12 in x 8 in x 8 in)
<b>Weight</b>	3.4 kg (approx) (7.5 lbs.)
<b>Altitude</b>	0 m to 3000 m (0 ft to 10000 ft)
<b>Temperature</b>	
<b>Operating</b>	15 °C to 30 °C (59 °F to 86 °F)
<b>Storage</b>	-20 °C to +40 °C (-4 °F to +104 °F) when drained of all liquid
<b>Humidity</b>	10 % to 90 % non-condensing

### HydroGraph™ Graphics Software

Use the moving color visuals of HydroGraph to troubleshoot up to four infusion pumps at once. Data is taken directly off the transducer and transmitted to HydroGraph. The flowing graphs provide an electronic means to display, store and recall flow patterns for comparison at a later date. Each test window can display instantaneous and average flow rates, cumulative and bolus volumes, and occlusion pressure.

## Ordering information

### Models/descriptions

<b>4349304</b>	IDA-5/1 US120V One-Channel Infusion Device Analyzer, US
<b>4349337</b>	IDA-5/1 AUS250V One-Channel Infusion Device Analyzer, Australia
<b>4349343</b>	IDA-5/1 DEN250V One-Channel Infusion Device Analyzer, Denmark
<b>4349355</b>	IDA-5/1 SHK250V One-Channel Infusion Device Analyzer, Shuko
<b>4349362</b>	IDA-5/1 ISR250V One-Channel Infusion Device Analyzer, Israel
<b>4349370</b>	IDA-5/1 ITAL250V One-Channel Infusion Device Analyzer, Italy
<b>4349381</b>	IDA-5/1 IND250V One-Channel Infusion Device Analyzer, India
<b>4349396</b>	IDA-5/1 SWZ250V One-Channel Infusion Device Analyzer, Switzerland
<b>4349409</b>	IDA-5/1 UK250V One-Channel Infusion Device Analyzer, UK
<b>4349411</b>	IDA-5/1 BRAZ230V One-Channel Infusion Device Analyzer, Brazil
<b>4349319</b>	IDA-5/2 US120V Two-Channel Infusion Device Analyzer, US
<b>4349427</b>	IDA-5/2 AUS250V Two-Channel Infusion Device Analyzer, Australia
<b>4349430</b>	IDA-5/2 DEN250V Two-Channel Infusion Device Analyzer, Denmark
<b>4349448</b>	IDA-5/2 SHK250V Two-Channel Infusion Device Analyzer, Shuko
<b>4349453</b>	IDA-5/2 ISR250V Two-Channel Infusion Device Analyzer, Israel
<b>4349466</b>	IDA-5/2 ITAL250V Two-Channel Infusion Device Analyzer, Italy
<b>4349475</b>	IDA-5/2 IND250V Two-Channel Infusion Device Analyzer, India
<b>4349482</b>	IDA-5/2 SWZ250V Two-Channel Infusion Device Analyzer, Switzerland
<b>4349494</b>	IDA-5/2 UK250V Two-Channel Infusion Device Analyzer, UK
<b>4349516</b>	IDA-5/2 BRAZ230V Two-Channel Infusion Device Analyzer, Brazil
<b>4349328</b>	IDA-5/4 US120V Four-Channel Infusion Device Analyzer, US
<b>4349525</b>	IDA-5/4 AUS250V Four-Channel Infusion Device Analyzer, Australia
<b>4349533</b>	IDA-5/4 DEN250V Four-Channel Infusion Device Analyzer, Denmark
<b>4349540</b>	IDA-5/4 SHK250V Four-Channel Infusion Device Analyzer, Shuko
<b>4349557</b>	IDA-5/4 ISR250V Four-Channel Infusion Device Analyzer, Israel
<b>4349569</b>	IDA-5/4 ITAL250V Four-Channel Infusion Device Analyzer, Italy
<b>4349584</b>	IDA-5/4 IND250V Four-Channel Infusion Device Analyzer, India
<b>4349591</b>	IDA-5/4 SWZ250V Four-Channel Infusion Device Analyzer, Switzerland
<b>4349600</b>	IDA-5/4 UK250V Four-Channel Infusion Device Analyzer, UK
<b>4349617</b>	IDA-5/4 BRAZ230V Four-Channel Infusion Device Analyzer, Brazil

### Standard accessories

<b>4418071</b>	Hydrograph Software and Users Manual
<b>4354014</b>	20 ml syringe
<b>4354038</b>	3-way plastic Luerlock
<b>4478942</b>	5-ft plastic drain line
<b>4541948</b>	Micro-90 bottle (225 ml)
<b>4354452</b>	USB data transfer cable

### Optional accessories

<b>4354490</b>	Optional miniature keyboard
<b>4354503</b>	Ansur Test Software, IDA-5 plug-in license
<b>4354532</b>	One-channel upgrade option

### About Fluke Biomedical

Fluke Biomedical is the world's leading manufacturer of quality biomedical test and simulation products. In addition, Fluke Biomedical provides the latest medical imaging and oncology quality-assurance solutions for regulatory compliance. Highly credentialed and equipped with a NVLAP Lab Code 200566-0 accredited laboratory, Fluke Biomedical also offers the best in quality and customer service for all your equipment calibration needs.

Today, biomedical personnel must meet the increasing regulatory pressures, higher quality standards, and rapid technological growth, while performing their work faster and more efficiently than ever. Fluke Biomedical provides a diverse range of software and hardware tools to meet today's challenges.

### 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