Infutest 2000 Series E

Infusion Pump Analyzer

The Infutest 2000 *Series E*, our newly introduced Multi-Channel Infusion Pump Analyzer, lets you breeze through the inspection of your ever-growing inventory of IV pumps!

- **Test virtually any type of infusiondevice on the market**
- **Single rate, dual rate and fullfeatured PCA testing**
- **Automated PCA bolus triggering and nurse call interface**
- **Exclusive SynchroStart feature for accurate volume measurements**
- **Test results are displyed in both alphanumeric and graphical formats**
- **Measure flow rates from 0.1 ml/Hr and occlusion presures up to 50 PSI**

To satisfy the guidelines of your quality assurance program and meet your IV pump-testing schedule, there is but one solution - the Infutest 2000 Series E - rated #1 by both hospital-based biomeds and testing laboratories worldwide! You can simultaneously inspect up to four single channel IV pumps or four independent channels of a multi-channel infusion device in just seconds with the fully-equipped Infutest 2000 Series E Analyzer. If your budget is limited, the flexible Infutest 2000 *Series E* can be initially purchased with either one or two internal channels. Then, you can add an internal channel to expand your testing capabilities. The Infutest 2000 Series E is the test solution for all your device inspection requirements. Conduct the full range of flow, pressure, volume and interval tests on practically any fluid delivery system including single flow, dual flow and patient controlled analgesia (PCA) devices.

These tests are performed in easy-to-use manua and autosequence formats using the analyzer front panel keypad and alphanumeric/graphical display. DTP-4 is a new Windows-based program for creating IV pump output graphs and IEC trumpet curves from Infutest 2000 Series E test data for product evaluation and clinical investigation purposes.

You can store and then print out complete records or summaries along with the applicable IV pump and technician information. Transfer Infutest 2000 *Series E* test data in Excel or Quattro Pro format for spreadsheet presentations.

Accurate test results are obtainable in just seconds across the flow rate range from 0.1 up to 999ml/Hr and pressure measurements up to 50 PSI to ensure the safety and performance of the IV pumps used in both critical and general-purpose IV therapy applications throughout the health care delivery sytem.

Accurate flow rate and volume-to-be-infused (VTBI) measurements are a snap with the exclusive Infutest 2000 Series E SynchroStart feature. Just press the start pushbutton on the analyzers front panel and it will automatically begin flow, volume and time measurements only when the IV pumpoutput is sensed.SynchroStart accurately captures the inDTP-4 is a new Windows-based program for creating IV pump output graphs and IEC trumpet curve

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Specifications*

Modes of Operation
Manual, Autosequence or Remote
Flow Rate Testing
Ranges (automatic selection)
(2) Low & High
Low 0.1 - 170 ml/h
High 170 - 999 ml/h
Nominal Flow Ranges:
Single Rate (Continuous flow)
0.1 - 999 ml/h
PCA/Dual Rate Continuous 0.1 - 170 ml/h
Pulsatile Flow 5 - 999 ml/h
Measurement sample size
(continuous flow)
Low flow rate range - 0,014 ml (nominal)
High flow rate range - 1,1 ml (nominal)
Minimum Continuous Flow 0,04 ml/h
Maximum Continuous Flow:
PCA & Dual Rate 200 ml/h
Single Rate 1700 ml/h
Minimum Pulsatile Flow 2,75 ml/h
Maximum Pulsatile Flow 1700 ml/h
Flow Rate Accuracy (@ 100 ml/h)
Single Rate Continuous Flow ± 1%
PCA/Dual Rate Continuous Flow ± 1%
Pulsatile Flow ± 1%
Volume Testing
Measurement Range 0 - 9999 ml
Display resolution 0,001 ml
Accuracy ± 1%
Back Pressure Testing
Range: 0-300 mmHg
Zero offset error: ± 5 mmHg
Display resolution: 1 mmHg
Accuracy: ± 1% FS (± zero offset error)
Occlusion Pressure Testing
Display units: mmHg and psi
Measurement range: 0 - 2586 mmHg
(0-50 psi)
Measuring time: 2 seconds
Display resolution: 1 mmHg (0.1 psi)
Zero offset error: ± 5 mmHg (0.1 psi)
Accuracy: ± 1% (± zero offset error)
Elapsed Test Time
Range: 0 to 100 hours
Display format: HH:MM:SS
Accuracy: + 0 and -1 second
Manual Mode Testing
Single Rate flow test
Dual Rate flow test
PCA flow test
Occlusion pressure test
Automated Mode Testing
Autosequences
9 total
6 factory/user-programmable
3 user-programmable
User-programmable features
Pump make or model
pump ID# (none, control# or serial#*)
flow rate test
occlusion pressure test
test time
printer output format
Infutest ID# (none serial# or user input*)

Fluid Inputs
Analyzer input type: Delrin Twist-lock
(Female), self sealing connectors
Tubing input connector type: Luer lock
Flow restrictor type: 21 gauge needle
Technical reference: IEC 601-2-24 Part 2
Fluid Outlet
Analyzer output type: Delrin twist-lock (Male)
PCA Trigger Input
Type: Floating
Connector type: 1/4" phone jack
(3 conductor)
Wiring format: Normally-open ring to shield,
Normally-closed top to shield
Nurse Call Inputs
Type: Floating
Connector Type: 1/4" phone jack
(3 conductor)
Wiring format: Change of state at input (tip & ring) triggers occlusion test peak pressure measurement
Compatible signal types: Normally-open or normally-closed relay contacts, open collector, TTL output, RS-232 level or 20mA current loop
Test Data Outputs
Memory type: NVRAM (battery-backed)
Report types: Print Summary or Data Log
Maximum data points: Flow 900 per channel, Pressure 700 per channel
Ports
Printer port / Connector: Parallel
Centronix/DB25 (F)
Driver: Epson MX/FX Series 80cps
Serial port/Connector: RS-232/DB25 (M)
Baud rate: 9600
Internal Time/Date Clock*
Display Formats:
USA: Month-Day-Year
EUR(ope): Day-Month-Year
Standard Accessories
Power cord set(s):
60 cc (locking-luer): 7006-006
RSM Module: 7300-005
** Each of the above sets will include an input tubing assembly for each measurement channel consisting of the following parts:
21 gauge needle assembly,
three-way luer-type stopcock and a
20” luer-lock to Delrin twist-lock extension set.
Additionally, a 20” Delrin twist-lock outlet tubing assembly is included in each of the above sets.
Optional Software
DTP4 Data Transfer and Graph Program:
7006-031
Download a report or a data log to printer;
build a graph to display variability/pulsatility;
create a record for clinical investigations;
print reports for evaluation of pumps for purchase;
transfer data easily and edit files from pulldown menus; graph a trumpet curve to IEC standards.
Certification
CE EMC Tested
CSA/UL/NRTL Certified
*Effective in units shipped June 1, 1999 with firmware versions 3,4 and higher.

***All specifications subject to change without notice.**

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