SECU**LIFE** | **IF**PRO
Infusion Pump Analyzer

3-349-991-03
3/6.18

- PCA / Bolus

- Back Pressure Simulation

- Occlusion Alarm

- Trumpet Curve Analysis

- 1,2,3 and 4 Channel Models Available

  (Field Upgradeable)

- User Swappable Fully Self Contained Flow Modules

- Calibration In Flow Modules

  No Need To Be Down For Calibration or Service

- Performs All IEC 60601-2-24 Required Tests

- 10 uL to 1600 mL/Hr

- Configurable Pressure (mmHg, PSI, Bar, kPa)

- Smooth Dual Syringe System

  Eliminates Drain Cycle Inconsistencies

- Large 32GB Internal Memory

- High Accuracy (Up To 1%)

- User-selectable Test Limits

- Built-in Auto Test Sequences

- Selectable Pass/Fail or Numerical Test Results

- Flash Programmable, Field Upgradeable

- PC Compatible

- Test Results Printable with Optional Printer

The SECU**LIFE** **IF**PRO is the most compact, full featured four channel analyzer on the market.

It is a high accuracy, easy to use system that incorporates full touch screen control of all processes without the use of old fashioned buttons and knobs. This new cutting edge patent pending design uses a dual syringe stepper motor driven system that provides continuous monitoring of the fluid flow without the need to stop and perform intermittent drains like older technologies do. This provides a more realistic flow path for the Infusion Device under test and therefore more accurate readings. Also, independent stepper motor control of the custom designed ceramic valving allows the system to run not only more quietly and more smoothly, but it also allows

for a bidirectional powered fluid flow for use in the built-in cleaning cycle

Scope of Delivery

1   SECU**LIFE** **IF**PRO (M696A, Base Unit)
1 to 4 Flow Modules (Z696V) depending on the order
1   Information CD
1   Calibration certificate
1   Power cord

SECULIFE | IFPRO
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The SECULIFE IFPRO has built-in auto-sequence capabilities that allows the user to perform automatic test procedures. This allows specific test routines specified by various manufacturers to be run, which provides significant time savings and reduces the risk of human error. Advanced features in our auto-sequences even allows for the inclusion of pictures to aid with the setup and configuration of each step. All test results are stored internally in the large 32 GB memory. They can also be downloaded to a USB flash drive or directly to a PC.

There are specific requirements in IEC 60601-2-24 for not only flow readings but back pressure simulation, bolus (PCA) measurements and occlusion alarm monitoring. All of these features are specifically built into the SECULIFE IFPRO with simple to use on screen selections.

The SECULIFE IFPRO is designed to hold up to 4 SECULIFE IF FM flow modules. These modules are individually serialized and calibrated so that they may be moved from channel to channel and even unit to unit. Once installed, they are recognized by the SECULIFE IFPRO and their serial number and NIST traceable calibration information are presented on the display and utilized in all data reporting.

The interchangeable modules provide the user with unprecedented flexibility in their IPA Testing System. There is no need to be down when the unit is due for calibration. Only the modules need to be calibrated. This also allows for the rotating of modules or the use of a spare module, thus providing flexibility not available in other systems. The same is true for service. If there is a problem on one channel, only this specific module needs to be serviced, eliminating downtime.

SOFTWARE

BC-Flow™ software is provided with the SECULIFE IFPRO to allow PC control, Display, Storage and Recall of system data.
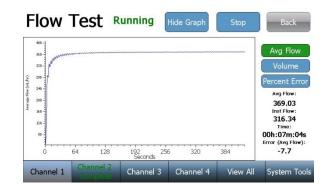A BC-Flow Test™ software module is available to allow full integration of the SECULIFE IFPRO into the BC-Test™ system.

Main Menu
1:57 PM 4/18/2017

Flow Test	Load Test Template
PCA Test	View Saved Results
Occlusion Test	AutoSequences
Prime	Clean
Drain	DUT Information

Channel 1 | Channel 2 | Channel 3 | Channel 4 | View All | System Tools

Flow Test Running
Hide Graph | Stop | Back

Avg Flow
Volume
Percent Error

Avg Flow:
369.03
Inst Flow:
316.34
Time:
00h:07m:04s
Error (Avg Flow):
-7.7

Channel 1 | Channel 2 Compute | Channel 3 | Channel 4 | View All | System Tools

Flow Test Setup
Save Setup | Start | Back

Flow Rate:	400.00 mL/hr
Volume TBI:	100.000 mL
Test Duration:	00h:15m:00s
Test Tolerance:	Avg. Flow +10 / -10 mL/hr
Back Pressure:	0.000 PSI
Start Condition:	Automatic
End Condition:	Duration

Channel 1 | Channel 2 | Channel 3 | Channel 4 | View All | System Tools

The SECU**LIFE IF**PRO display may be raised to gain full access to the four user swappable flow modules. No wiring or plumbing is required for module installation. Simply lift the display, remove the cover plate, loosen the retainer screw and slide the module out. All plumbing and electronics are self-contained and all electrical connections are made via a slide-in mating connector on the end of the module. Then just reverse the process for installation.

The SECU**LIFE IF**PRO allows for easy field expansion. You can buy a 1 channel unit and later purchase additional modules that can be added in the field. Just plug them in and the system will automatically recognize the additional module(s), reconfigure itself and you are ready to go.

Flow Test Running
Show Graph | Stop | Back

Flow Measurements

Time:	00h:03m:19s	Average:	399.09 mL/hr
Pressure:	0.004 PSI	Instant:	412.09 mL/hr
Volume:	22.075 mL	Max Inst:	547.10 mL/hr
Err (Avg Flow):	-0.2 %	Min Inst:	280.13 mL/hr

Channel 1 | Channel 2 | Channel 3 | Channel 4 | View All | System Tools

SECULIFE | IFPRO
Infusion Pump Analyzer

Ordering information

Model	Order number	Description
SECULIFE IFPRO1	M6960A01	Infusion pump analyzer, 1 channel (M696A + 1x Z696V + 20-41360 + 20-00161)
SECULIFE IFPRO2	M6960A02	Infusion pump analyzer, 2 channel (M696A + 2x Z696V + 20-41360 + 20-00161)
SECULIFE IFPRO3	M6960A03	Infusion pump analyzer, 3 channel (M696A + 3x Z696V + 20-41360 + 20-00161)
SECULIFE IFPRO4	M6960A04	Infusion pump analyzer, 4 channel (M696A + 4x Z696V + 20-41360 + 20-00161)
Accessory Base Unit		
SECULIFE IFPRO	M696A	Infusion pump analyzer without Flow Module
Accessory Components		
SECULIFE IFPRO FM	Z696V	Flow Module for SECULIFE IFPRO
	20-41360	Cable, communication null modem for SECULIFE IFPRO
	20-00161	SECULIFE IFPRO accessory kit

Specifications

	Parameter	SECULIFE IFPRO
	Display Range (ml/hr)	0.01 - 2600
	Flow Rate (ml/hr)	0.10 - 1600
	Flow Resolution (ml/hr)	0.010 (10 µL)
Flow Measurement		1% rdg + 0.005 mL/hr 0.1 to 9.9 mL/hr
	Accuracy	1% rdg 10 to 700 mL/hr
		2% rdg 700 to 1600 mL/hr
	Min Volume (ml)	0.05 (50 µL)
	Channels	1, 2, 3 or 4 (user-installable)
Volume Measurement	Volume Range (mL)	0 to 9999
	Volume Resolution (mL)	0.001 (1.0 µL)
	Volume Accuracy	1% rdg after 100 µL
PCA/Bolus Measurement	Display Range (mL)	0.1 to 100
	Measurement Range (mL)	0.5 to 100
	Accuracy	+/- 1%
	Min Bolus Volume (mL)	0.01 (10 µL)
Elapsed Time	Range	0 - 120 Hours
	Resolution	1 Second
	Accuracy	0.5 Second
Occlusion (Pressure) Test	Range	-258.57 to 2585.75 mmHg (-5 to 50 PSI)
	Resolution	0.05 mmHg (0.001 PSI)
	Accuracy	0.1% FS
Back-Pressure Control	Range	-200 to 600 mmHg (-3.867 to 11.602 PSI)
	Resolution	0.05 mmHg (0.001 PSI)
	Accuracy	0.1% FS
Pressure Units	Selectable	mmHg, PSI, Bar, kPa
	Fluid fittings	Inlet Female Luer
		Drain Male Luer Lock
Interfaces	USB	Printers, Flash Disk, BT-Module
	Aux	Nurse Call, PCA trigger
	Display	7" Color Touch Screen (800 x 480)
Power Supply	Voltage	90 to 264 VAC, 50/60 Hz, 90 VA
	Weight	1 ch<8lbs, 2ch<10lbs, 3ch<12lbs, 4ch<14lbs
	Size (HxWxD)	7.8 (H) x 9.1 (W) x 10.2 (D)
	Storage Temperature	0 to 50°C
	Operating Temperature	15 to 40°C
	Data Storage	Internal 32 GB