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Product Catalog

"What's Your Application?" ™





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Looking for a product not shown in this catalog? We offer additional products and Custom Solutions.

Contact us to learn more:



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Infusion ONE by New Era Instruments

The InfusionONE* is a syringe pump capable of infusing fluids at extremely low or high rates with exceptional accuracy to meet your every need. With its sleek, space-saving design and easy-to-use interface that saves stored settings, it is the ideal tool to use any time a syringe is used. It is designed to contain just the features you need at a fraction of the cost.



Highlights

- Simple interface to learn and operate.
- Pumping Precision, within +/- 1 % accuracy.
- Rates from .73 μ L/hr to 1568 mL/hr.
- Infuses fluids with celerity and reliability.
- Supports syringes from 1 mL to 140 mL.
- Infusion settings can be saved and loaded on start-up.
- **Power Failure mode** resumes infusing after sudden power interruptions.
- Space saving footprint; only 5.75" x 8.75".
- 2 year warranty and lifetime technical support.
 - * This product is not an FDA cleared device.

3-Step Setup

1. Set the syringe (Diameter)

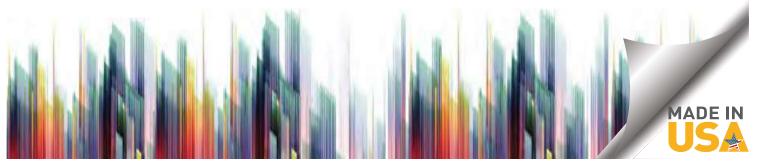
2.

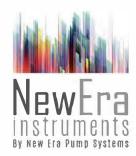
Set the pumping Rate

3. Insert the syringe and

Start







SyringeONE

by New Era Instruments



The **SyringeONE*** is a single channel syringe pump capable of infusing or withdrawing fluids at extremely low or high rates. It contains features not available in the *InfusionONE*, such as stall detection, programmable dispense volumes, and more.

Applications





2.





4-Step Setup

Set the syringe

Set the pumping

(Diameter)

Rate

3. Select the direction

4. Insert the syringe and







Highlights

- Simple interface to learn and operate.
- Pumping Precision, within +/- 1% accuracy.
- Infusion and withdrawal rates from .73 μL/hr to 2120 mL/hr.
- Infuses and withdraws fluids with celerity and reliability.
- Supports syringes from 1 mL to 140 mL.
- **Easy to program** simple dispenses, continuous flow, complex automation and more via the keypad or a PC.
- Available in a **High Pressure** version, which has double the force of the standard **SyringeONE**.
- Space saving footprint; only 8.75" x 5.75".
- 2 year warranty and lifetime technical support.
- Can be **upgraded** with advanced firmware versions.
 - * This product is not an FDA cleared device.



New Era Instruments By New Era Pump Systems

Fast, Easy, Precise.

SyringeTWO by New Era Instruments



The Syringe TWO is two channel syringe pump that is able to infuse or withdraw using two syringes simultaneously. Both syringes infuse or withdraw at the same rate.



Comes with advanced functions and features including:

- Selectable Sub-Programs
- RS-232 Control
- Stall Detection
- Power Failure Mode
- TTL logic I/O firmware inputs
- and many more!

- Can **dispense or withdraw** fluids simultaneously.
 - Can hold **two** of the same or different sized syringes, up to 140 mL each.
- **Easy to program** simple dispenses, continuous flow, complex automation and more via the keypad or a PC.
- Program and store up to 41 unique phases.
- Flow Rates from 1.436 μ L/hr to 7515 mL/hr.
 - Space saving dimensions of 8.75" x 5.75" x 4.50"
 - Network up to 100 pumps together.
 - Two year warranty and lifetime technical support.





MicroFLUIDICS by New Era Instruments

Rate





SKU: 4002X

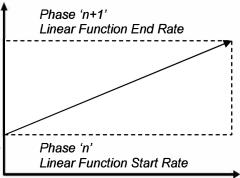
Features:

- All of the same programming features as the SyringeONE / SyringeTWO.
- Supports syringe sizes from .5 μL to 140 mL.
- Smooth, precise pumping at ultralow flow rates.
 - From 0.007 nL/hr to 2505 μL/min (model, syringe dependent).
 - > Linear/Gradient Pumping Feature: Delivers a smooth, linear flow rate
 - > Advance per step: 4.185267857 nm
 - Dispense accuracy within ± 0.5%
- Upgradeable to X or X2 firmware versions

Microfluidic pumps are also available in Single and Dual Channel OEM Versions!

Single Channel = SKU: 502X Dual Channel = SKU: 4502X





Time







MULTISyringe by New Era Instruments

The MULTISyringe* is a syringe pump capable of infusing and withdrawing fluids at extremely low or high rates with exceptional accuracy to meet your every need. With its sleek, space-saving design and easy-to-use interface that saves stored settings, it is the perfect device to use when pumping with multiple syringes at once. It is capable of utilizing up to 12 syringes (model dependent).



Highlights

- **Simple interface** to learn and operate.
- Pumping Precision, within +/- 1 % accuracy.
- Rates from .454 $\mu L/hr$ to ... and syringes from 1 mL to ...

Model	Number of Syringes	Maximum Syringe Size	Maximum Pumping Rate
SyringeSIX	6	140 mL	1451 mL/hr with a B-D 60 mL syringe
SyringeEIGHT	8	10 mL	410.7 mL/hr with a B-D 10 mL syringe
SyringeTWELVE	12	3 mL	153.2 mL/hr with a B-D 3 mL syringe

- Can be **upgraded** with **advanced firmware** versions.
- Pumping **settings can be saved** and loaded on start-up.
- Power Failure mode resumes infusing after sudden power interruptions.
- Space saving footprint; only 10 1/4" x 15" x 5"
- 2 year warranty and lifetime technical support.
- Program up to 41 pumping phases via the **keypad or PC**.
 - * This product is not an FDA cleared device.

Applications











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SyringeONE - High Pressure

by New Era Instruments



SKU: 8000

Features:

- All of the same programming features as the SyringeONE.
- Supports syringe sizes from 1 mL to 200 mL.
- Ideal for High Pressure Applications capable of pumping with up to 200 lbs. of force
 - > Rates from 1.733 μL/hr to 340.6 mL/min.
 - > Dispense accuracy within ± 1%
- Upgradeable to X or X2 firmware versions

Custom Modifications can be made to suit your application.

Please contact your dealer if you have an inquiry.





PeriPumpone by New Era Instruments



The pump head NEVER comes into contact with fluid!

- <u>Peristaltic Pump</u> that can dispense or withdraw fluids. Interchangeable models of pump heads.
- **Customizable** pumping modes to maximize accuracy, efficiency, and integrity of products.
- **Easy to program** simple dispenses, continuous flow, complex automation and more via the keypad or a PC. Flow Rates from .004 mL/min to 1038 mL/min.
- Space saving dimensions of 7.75" x 5.25" x 5.75" Network up to 100 pumps together.
- Two year warranty and lifetime technical support.
- * This product is not an FDA cleared device.

BLUE



Blue Head Kit

- Best for pumping at higher flow rates and larger dispense volumes
 - Flow rates from .035 mL/min to 775.2 mL/min

GREEN



Green Head Kit

- Best for pumping at a low, precise flow rate and dispense volume
 - Flow rates from .004 mL/min to 75.19 mL/min

CLEAR



Clear Head Kit

- Best for pumping at the highest flow rates and dispense volumes
 - Flow rates from .04 mL/min to 1038 mL/min

All models come with features **OPTIMIZED** for dispensing and withdrawing fluids, including:

- Learn and Repeat easily teach then repeat a set dispense setting.
- Slow Down slows down the pumping rate as the desired volume is reached.
- Anti-Drip prevents dripping or oozing of fluids when the pump stops.
- Calibration improves pumping accuracy to under a 3% degree of error.





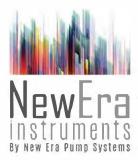
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Syringe: OEM by New Era Instruments



Our **Syringe:OEM** syringe pumps are available in the SyringeONE or SyringeTWO versions. They are designed to integrate into pre-existing systems seamlessly and are controlled via PC.



OEM Accessories

OEM Starter Kit

**Essential for OEM Operation ** Includes: Power supply, Pump-to-PC network cable, and a User Manual.

OEM Network Kit

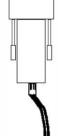
**Required for connecting two OEMs together. **

Includes: Power supply and a Pump-to-Pump network cable.

Foot Switch

A pedal that enables remote control of a pump. This can be used to start, stop, or send signals.





Applications





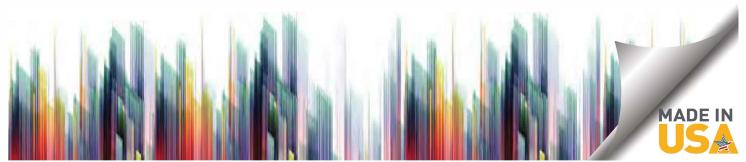


Highlights

- An **economic alternative** to our standard pumps.
- Can be integrated into existing systems and processes.
- Programming and operation are performed using RS-232 communications via our FREE Terminal Emulator software, Pumping Program Generator, SyringePumpPro, and more.
- Pumping Precision, within +/- 1 % accuracy.
- Available in High Pressure, Stall Detection, and Long Chassis versions.
- 2 year warranty and lifetime technical support.
- Can be **upgraded** with advanced firmware versions.
 - * This product is not an FDA cleared device.

Need a Custom Setup?

If your application requires a custom design or features not listed, there are no limits to what we can create for you. Contact us by phone or e-mail to develop the best pumping system for your needs.







Pump Upgrades by New Era Instruments



Enhance your pump with a firmware upgrade and utilize the X version's advanced capabilities.

X SKU: FW-1-X = SyringeONE, SyringeTWO, MULTISyringe SKU: FW-5-X = Syringe:OEM

X2 SKU: FW-1-X2 = SyringeONE, SyringeTWO, MULTISyringe, PeriPump Series SKU: FW-5-X2 = Syringe:OEM

X Version Upgrade

Adds additional features to your pump, including:

Linear-Gradient Program Mode

- Smooth, linear pumping in a gradient.
- As simple as programming the start rate, end rate, and time.
- Gradients can be programmed alongside other features.

Dual Pump NeXtGen Mode

- Creates a continuous dual pump system.
- Eliminates flow drop off, pauses, and flow rate inconsistency issues in dual pump systems.

❖ Dual Pump Constant Flow Rate Gradient Mode

- Inverse, linear gradient pumping with two pumps achieve a constant flow rate.
- Both pumps increase and decrease pumping rates in tandem.

Additional Programming Functions & Enhancements

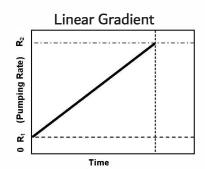
• For unique and complex applications.

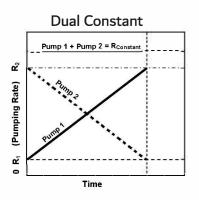
X2 Version Upgrade

Along with the features of the X Version, the X2 version has:

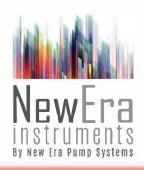
❖ 8x MORE Programming Phases

• Increases the amount of programmable pumping phases from 41 to 340.









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Fast, Easy, Precise.

NextGen by New Era Instruments

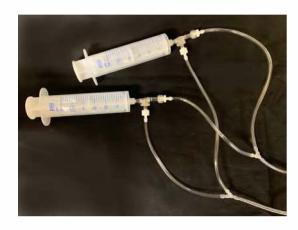


What is the NeXtGen Difference?

NeXtGen Continuous pump systems eliminate the problems that traditional push-pull pumps face. Rather than infusing and refilling two syringes at the same rate, the refilling syringe fills faster than the one infusing.

This eliminates issues that typical push-pull pumps face, which means there are **NO** flow rate drop-offs, **NO** pauses, and **NO** inconsistencies in flow rates.

Additionally, the **NeXtGen** mode allows the refilled syringe to begin infusing before the infusing syringe is completely empty.





Select any two pumps from the SyringeONE, SyringeTWO, MULTISyringe, or SyringeOEM Series.



Upgrade both pumps with the X chip. (FW-1-X)



Link both pumps together with the Dual Pump Cable. (CBL-DUAL-3)

Accessories

Dual Pump Plumbing Kit

Pre-assembled with 2 sets of tubing and connectors that are used to create a Continuous Infusion system.

Includes:

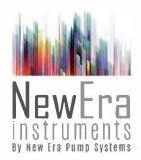
- ❖ 2x Dual Check Valves
- ❖ 2x 50 mL NormJect® syringes
- ❖ 2x Y-connectors
- ❖ 12' of .125" ID Tubing

Need Custom Features?

If your application requires custom features, there are no limits to what we can create for you. Contact us by phone or e-mail to develop the best pumping system for your needs.







Syringe Heater by New Era Instruments



The **SyringeHeater** is a thermo-kinetic heat clamp that attaches to syringes or tubing in applications where temperature matters.

- ❖ A **SyringeHeater** uses a thermo-kinetic control algorithm to raise and maintain a desired temperature.
- ❖ Set the desired temperature and sensors on the heating pad keep it within range.
- ❖ Temperature and other parameters are saved in the settings.
- ❖ Heated syringes can be mounted on any syringe pump.
- Start with a single SyringeHeater kit, and add up to 11 additional Heating Pads per Control Unit!
- ❖ Heater Kits include a Control Unit and a Primary Heater Pad.



To add more heating pads to an existing kit, Secondary and Additional pads are available for both 1LG and 5SP versions.

(xxx correlates to the pad version.)

Secondary Pad: (Pad #2)

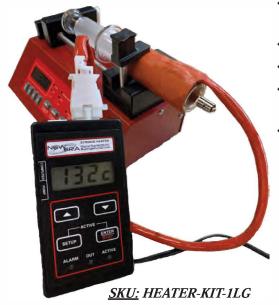
SKU: HEATER-PAD2-xxx

Additional Pad: (Pad #'s 3-12)

SKU: HEATER-PAD3-xxx

(!) Cautions

- Please contact your dealer about syringe and pump compatibility when heating above 100°C.
- 1 If you are in a region where the voltage is greater than 120V, a step-down transformer is required.









by New Era Instruments



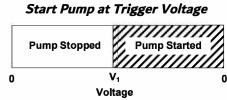
Closed Loop Analog Sensor Interface

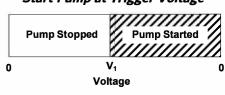
- ❖ Control start and stop operation of the pump at set voltages.
- Set changes in flow rate by setting specific voltage parameters.
- ❖ Works with any pump (except the **InfusionONE**).
- ❖ Input voltage parameters directly into the desired pump.
- ❖ Data log and output settings can be saved by connecting the Ana-Box to a PC.
- Can integrate with other sensors and systems. (i.e. connect the Ana-Box to a pressure sensor with a voltage output. The pumping rate changes can be set to adjust automatically to reach a specified pressure.)

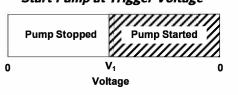


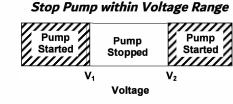
Sample Operational Modes:

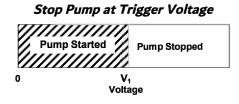
Gradient with Voltage 8 (Pumping Rate) Time

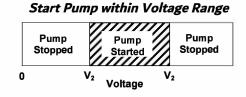




















SyringePumpPro

Control Software for Syringe Pumps

SyringePumpPro creates an easy-to-use interface on a computer to control and program syringe pumps.

SyringePumpPro...

- ❖ Allows pumping programs to be created and uploaded to pumps.
- Synchronizes start and stop operation of multiple pumps.
- ❖ Can be used to monitor pumping parameters, protocols, and commands.
- * Reduces command and program input time; gives you more time to focus on your application.
- Commands do NOT need to be input repeatedly like in terminal software.
- ❖ Can be used with any New Era pump that has computer communication ports.

Download SyringePumpPro and experience effective, user-friendly software support like never before.

SyringePumpPro is compatible with the following brands:





















Cables by New Era Instruments

+1.866.567.5804 info@airfloeq.com

Pump-to-PC Primary Network Cable



<u>SKU:</u> CBL-PC-PUMP-7 (7 ft. cable)

<u>SKU:</u> CBL-PC-PUMP-25 (25 ft. cable)

Pump Synchronization Cable



SKU: CBL-DUAL-3

- Used to create dual or continuous systems.
- ❖ Establishes a link between two pumps, allowing data to be transferred.

Lockout Disable Key



SKU: ADPT-LOCKOUT

- Prevents unauthorized changes to settings by locking the keypad.
- Enable/Disable Lockout Mode using this key with the TTL Logic port on the desired pump.

- ❖ Enables full control over a pump system via PC.
- ❖ Connects to a PC using RS-232 communications.

Pump-to-Pump Secondary Network Cable



SKU: CBL-NET-7 (7 ft. cable)

<u>SKU:</u> CBL-NET-25 (25 ft. cable)

- Networks an additional pump to an established pump system and PC.
- ❖ The first pump in the series must be connected to a PC with the Pump-to-PC cable.

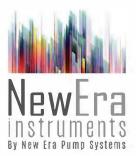
RS-232 to USB Converter



SKU: CBL-USB232

❖ Adds an RS-232 Port to a PC by using a USB port.





Other Devices by New Era Instruments



Single/Double Valve Control Box

<u>SKU:</u> ADPT-VALVE-INTERFACE-x = 1 for Single 2 for Double

Controls the electronic valve(s) in a system. (Single if a system has 1 valve, double if a system has 2 valves.)

- ❖ Attach 12V DC valves, and the Control Box will open or close the valves, depending on the pumping direction.
- Connects to the pump's TTL Logic Port.
- ❖ Includes a power supply for 1 or 2 valves.
- ❖ Double Valve Control Box includes CBL-DUAL-3 to synchronize operation of two pumps.



Clock Timer SKU: ADPT-CLK

- Triggers a pump to execute a single operation or an entire pumping program at time specific date and time intervals.
- ❖ Stores up to 16 unique programs for 16 different programs.
- ❖ Has an alternative **Manual** program setting that allows the Clock Timer to operate as a foot switch.
- ❖ Compatible with any New Era pump that has TTL I/O Ports.

Foot Switch <u>SKU: ADPT-FOOTSW-2</u>

- Send a signal to a pump. (i.e. start, stop, other signals to a pumping program)
- ❖ 20 ft of cable between switch and TTL Logic Port.
- ❖ Fast and simple setup.



