

Tools of Discovery

for the Most Demanding Labs





Gemini X2

Electroporation System with maximum flexibility allows success with the most challenging range of cell types.

- Mammalian, bacterial and plant cells
- Suspension and adherent cells
- In vitro, In Vivo, In Ovo & In Utero tissues
- Huge selection of specialty electrodes for every application
- Pre-set library of protocols as well as the ability to create your own
- Remote operation via foot switch

VWR Cat. No. Description

76221-816	Gemini X2 Generator System includes Cuvettes 1 mm, 2 mm, 4 mm, pkg. of 30 (10 ea), Safety Dome, and Cuvette Rack
76221-818	Gemini X2 Generator System with High Throughput Plate Handler (Automatic), includes 1 mm, 2 mm, 4 mm, pkg. of 30 (10 ea), Safety Dome, HT200 Plate Handler, 1x2mm gap HT Plate, 1x4 mm HT Plate and Cuvette Rack



ECM[®] 2001+

Electrofusion/Electroporation generator primarily used for cell fusion work.

- Used by top labs for hybridoma and antibody production
- Ideal for nuclear transfer and cloning
- Mammalian cell transfection
- Wide selection of specialty electrodes for In Vivo transfection

VWR Cat. No. Description

76221-820	ECM 2001+ Cell Fusion System includes ECM 2001+ Generator, Microslides (0.5 mm Gap, 3.2 mm Gap), Meander Fusion Chamber, Flat Electrode/Divergent Field, Electrode Adapter, Connection Cable, Safety Stand, Cuvettes 1 mm, 2 mm, 4 mm pk. of 30 (10 each), and Cuvette Rack
76221-824	ECM 2001+ Embryo Manipulation System includes ECM 2001+ Generator, Microslides, Round Wire (0.5 mm gap, 1.0 mm gap), Rectangular Wire (3.2 mm gap), Micrograbber Adapter Cables
76221-822	ECM 2001+ Electroporation System includes ECM 2001+ Generator, 630B Safety Stand, Cuvettes 1 mm, 2 mm, 4 mm pk. of 30 (10 each), and Cuvette Rack



High-Throughput Plate Handlers

Electroporation accessory that allows for multi-well electroporation in either a 25 or 96 – well plate format.

- Ideal for cDNA and BAC library preparation (bacteria)
- Mammalian, bacterial, and plant cells
- Popular method for demanding gene expression screening studies (knockdown/overexpression)

VWR Cat. No.	Description
47746-062	BTX HT100 96 Well Plate Handler, Manual
47746-064	BTX HT200 96 Well Plate Handler, Automatic
83009-294	96-Well Plate, 2 mm Gap, 125 μ L well capacity
47746-075	96-Well Plate, 4 mm Gap, 250 μ L well capacity

Electroporation Cuvettes

High quality electroporation cuvettes, optimized for BTX units, compatible with a number of electroporation systems.

- Sterile Transfer Pipette included with every cuvette Plus Package
- Available in 3 sizes : 1 mm, 2 mm, and 4 mm
- Round, color-coded cuvette caps for easy single-hand removal

VWR Cat. No.	Description
58017-890	Cuvette Plus, 1 mm gap, 90 μ l, 50 pk Grey
58017-895	Cuvette Plus, 2 mm gap, 400 μ l, 50 pk Blue
58017-900	Cuvette Plus, 4 mm gap, 800 μ l, 50 pk Yellow
89130-542	BTXpress Electroporation Solution Kit, 50 reactions in 2 mm gap cuvettes
89130-548	BTXpress Electroporation Solution Kit, 100 reactions in 2 mm gap cuvettes
89130-544	BTXpress Electroporation Solution Kit, 20 reactions in 4 mm gap cuvettes
89130-550	BTXpress Electroporation Solution Kit, 40 reactions in 4 mm gap cuvettes

Leading the **CRISPR** Charge

Efficient introduction
of CRISPR constructs
into any cell

Well established
publication record
with CRISPR

Faster time to
results with high
throughput options

NEW CRISPR Protocols

- 🔵 Chlamydomonas
- 🔵 Cryptosporidium
- 🔵 Toxoplasma
- 🔵 NIH/3T3 Cells
- 🔵 MEL Cells
- 🔵 Transgenic Rat
- 🔵 Chicken Germ Cells
- 🔵 Mouse Zygote
- 🔵 Mouse Oviduct
- 🔵 Pig Fibroblasts



The full power of the **CRISPR** construct for targeted gene editing has been a huge focus for top Life Sciences labs around the world. One of the main challenges for this has been to efficiently introduce the construct into certain cell types that are particularly difficult to transfect. BTX electroporators have been critical to allowing **CRISPR** transfection studies with these cell types:

Neurons • Primary Cell Cultures • Immune Cells • Zygotes • Embryos • Parasitic Cells



Legato™ 200 Series Touchscreen Syringe Pumps

A versatile syringe pump with touchscreen interface.

- Dual syringe infuse, infuse withdraw, programmable and continuous push/pull models
- Holds syringe sizes from 0.5 µl to 140 ml
- User configurable multi-step operation
- 75 lbs (34 kg) adjustable linear force
- Flow rates down to the pl/min
- Built in syringe selection table
- USB / RS-232 & TTL Interfaces for external control

VWR Cat. No. Description

10117-496	Legato 200 Infuse Only, Dual Syringe Pump
10117-498	Legato 210 Infuse/Withdraw/Continuous Dual Syringe Pump
10117-500	Legato 210 Infuse/Withdraw/Continuous Programmable Dual Syringe Pump
10117-890	Legato 270 Infuse/Withdraw/Continuous Dual Syringe Pump
10117-892	Legato 270P Infuse/Withdraw/Continuous Programmable Dual Syringe Pump



Gemini 88 Plus Dual Rate Syringe Pump

Two independent syringe pumps in one instrument.

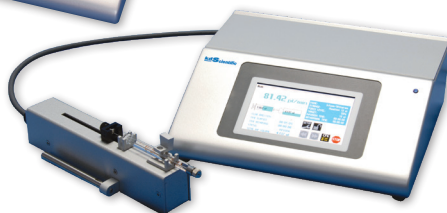
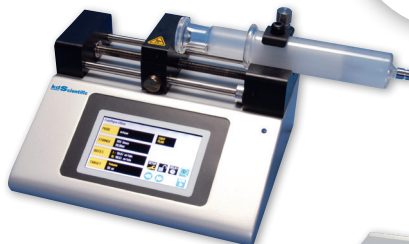
- Two separate syringe pumps in one instrument
- Large touch screen display allows quick and easy setup
- High or low pressure operation
- Compatible with a wide variety of syringes
- Continuous fluid delivery
- TTL, USB & RS-232 Communication

VWR Cat. No. Description

76000-914	Gemini 88 Plus Dual Rate Syringe Pump
-----------	---------------------------------------



SYRINGE PUMPS



KD Scientific Single Syringe Infusion Pump

Single syringe infusion pump which combines precision with simplicity.

- Simple menu-driven setup
- 10ul to 60ml dispensing volume with wide flow range up to 419 ml/hour
- Fast setup with built-in syringe size table
- Quick-release drive nut for fast syringe installation and removal
- Durable housing with welded seams

Legato™ 100 Series Touch Screen Syringe Pumps

Next generation of syringe pumps with touchscreen interface.

- Single and dual syringe infuse, infuse withdraw and programmable models
- Holds syringe sizes from 0.5 µl to 60 ml (single) or 0.5 µl to 10 ml (dual)
- 30 lbs (13.6 kg) adjustable linear force
- Flow rates down to the pl/min
- Built in syringe selection table
- USB / TTL Interfaces for external control

VWR Cat. No. Description

52459-000	Single Syringe Infusion Pump
-----------	------------------------------

VWR Cat. No. Description

10117-894	Legato 100 Single Syringe Infuse Only Syringe Pump
10117-502	Legato 101 Dual Syringe Infuse Only Syringe Pump
10117-490	Legato 110 Single Syringe Infuse/Withdraw Programmable Syringe Pump
10117-492	Legato 111 Dual Syringe Infuse/Withdraw Programmable Syringe Pump
10117-494	Legato 130 Single Syringe Infuse/Withdraw Programmable Remote Head Syringe Pump
10117-504	Legato 185 Picoliter Single Syringe Infuse/Withdraw Programmable Syringe Pump
10117-506	Legato 180 Picoliter Dual Syringe Infuse/Withdraw Programmable Syringe Pump



Allegro™ Peristaltic Pump System

KD Scientific Allegro Peristaltic Pump System allows maintenance free, continuous flow pumping of various liquids.

- Clearly displays flow rate and total dispensed volume
- User configurable multi-step operation
- Dispenses in forward or reverse direction and allows flow rate adjustments while the pump is running
- Stackable sealed remote pump drive with IP 32 rating
- Selectable tubing table with automatic tubing break-in and calibration for accurate dispensing
- External connectivity with USB interface and I/O port
- Easy to maintain

VWR Cat. No.	Description
10117-550	Allegro I Peristaltic Pump System, 1 Channel
10117-508	Allegro II Peristaltic Pump System, Dual Channel
10117-510	Allegro III Peristaltic Pump System, 2 x 1 Channel
10117-514	Masterflex® C-Flex® Ultra L/S® 14 Tubing
10117-516	Masterflex® C-Flex® Ultra L/S® 16 Tubing
10117-518	Masterflex® C-Flex® Ultra L/S® 25 Tubing
10117-520	Masterflex® C-Flex® Ultra L/S® 17 Tubing
10117-522	Masterflex® C-Flex® Ultra L/S® 18 Tubing

Additional Tubing Formulations Available



NOTE: This brochure features only a small sampling of our various company product lines. Please be sure to request additional brochures and/or catalogs for more extensive information about our products, or visit our web site.



800 932 5000 | VWR.COM

Prices and product details are current when published and subject to change without notice. | Certain products may be limited by federal, state, provincial, or local regulations. | VWR, part of Avantor, makes no claims or warranties concerning sustainable/green products. Any claims concerning sustainable/green products are the sole claims of the manufacturer and not those of VWR International, LLC and/or Avantor, Inc. or affiliates. All prices are in US dollars unless otherwise noted. Offers valid in US and Canada, void where prohibited by law or company policy, while supplies last. | Trademarks are owned by Avantor, Inc. or its affiliates, unless otherwise noted. | Visit vwr.com to view our privacy policy, trademark owners, and additional disclaimers. © 2019 Avantor, Inc. All rights reserved.