AgilePulse™ PLUS Bipolar Transfection System

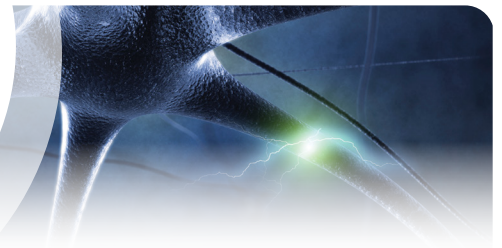## HIGH EFFICIENCY TRANSFECTION IN VITRO OR IN VIVO

Easily perform advanced transfection protocols with multiple groups of pulses—each with separate parameters, with the BTX AgilePulse PLUS waveform generator. This system is ideal for high efficiency transfection of mammalian cells, including difficult to transfect cell types, such as stem cells and primary cells. It is also suitable for scale up to large volume electroporation for applications such as large-scale creation of engineered cells and large-scale protein expression. AgilePulse PLUS offers the flexibility to be used in combination with BTX specialty electrodes for in vivo and adherent cell electroporation.

APPLICATIONS

- Suspension and adherent cell transfection
- Large volume electroporation
- CAR-T cell production
- CRISPR gene editing
- Intradermal, intramuscular, and intratumor delivery
- Animal immunization and vaccine research

FEATURES AND BENEFITS

- Program up to 5 groups of pulses with separately defined pulse number, voltage, pulse length, interval, and polarity—within each group.

- Direct scale up from standard low-volume cuvettes to large-volume chambers— transfect up to a billion cells in suspension per sample.

- Incorporate bipolar switching into your electroporation protocols for convenient, more efficient in vivo transfection protocols—pulse chains in each group may be defined as +, -, or flip (+—> - or -—>+) polarity.

- Maximum number of pulses per protocol increases to 100 pulses.

- Compatible with all BTX specialty electrodes for adherent cell electroporation, intradermal electroporation, intramuscular electroporation and other in vivo transfection applications.

Specifications

Pulse Program Specifications

Voltage Range	100 to 1200 VDC
Pulse Width Range	0.05 to 10 ms
Pulse Interval Range	0.2 to 1000 ms
Number of Pulses per Group	1 to 10
Group Interval Range	0.2 to 1000 ms
Polarity Settings for each Group	Positive, Negative, Flip Positive —> Negative, or Flip Negative —> Positive
Number of Pulse Groups	1 to 5

Other Specifications

User Interface	Capacitive Touchscreen Display
Data Export*	USB thumb drive
Input Voltage and Frequency Ratings	100 to 240 VAC, 50/60 Hz
Warranty	2 years
Storage Temperature	-10°C to 70°C (14°F to 158°F)
Operating Temperature	4°C to 40°C (40°F to 104°F)
Intended Use	Indoor Use Only
Operating/Storage Humidity	20% to 80% RH, non-condensing
Pollution Degree	IP2X
Insulation Category	Category II
Regulatory Certifications	CE, ETL (UL, CSA), FCC, WEEE, EU and RoHS

Physical Characteristics

Dimensions W x H x D	30.5 x 7.8 x 5.4 cm (12 x 6.25 x 14.5 in)
Weight	5.7 kg (12.5 lb)

*All data automatically stored in internal memory and may be downloaded to external USB Key. Maximum data logs stored and retrievable from internal memory >20,000.

Ordering Info

Order No.	Description	Included Items
AgilePulse PLUS Systems		
47-0600N	AgilePulse PLUS Bipolar Transfection System	AgilePulse PLUS Generator, HV Output Cable 5 ft, F/F Adapters, Extended Capacity Safety Stand, Cytoporation Medium T 4 mm Gap Cuvettes, and Cuvette Rack
47-0601N	AgilePulse PLUS Bipolar Transfection Generator Only	AgilePulse PLUS Generator, HV Output Cable 5 ft, and F/F Adapters

Order No.	Description
AgilePulse PLUS Accessories	
47-0610N	Flatpack Safety Stand for AgilePulse PLUS
47-0620N	Large Volume Chamber Stand for AgilePulse PLUS
47-0095	5 ft HV Outplut Cable for AgilePulse PLUS
47-0096	10 ft HV Outplut Cable for AgilePulse PLUS
47-0097	Adapter, connects AgilePulse PLUS to AgilePulse MAX Safety Stands and Large Volume Chamber Stands
47-0098	Adapter, connects AgilePulse PLUS to AgilePulse In Vivo Needle Array Handles

Please visit www.btxonline.com for a full list of accessories and consumables for AgilePulse PLUS.