



PEPTIDE SCIENTIFIC INC

# PSI® PEPTIDE SYNTHESIZER

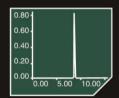
# FROM MILLIGRAM TO KILOGRAM

SYNTHESIZER	APPLICATION	SCALE (mmol)	CRUDE PEPTIDE (g)
PSI 200 series	R&D	0.01-1/channel	0.01-2 /channel
PSI 300 series	R&D	0.05-2	0.05-8
PSI 400 series	R&D/Clinic Trial	0.25-10	0.25-80
PSI 500 series	Pilot Production	5-100	20-400
PSI 600 series	Industrial	>100	200-10,000

# PSI INNOVATION, QUALITY AND PERFECTION

#### **HIGH PURITY**

- >99% coupling efficiency
- Unique PSI's "Thorough Reaction Mixing System"
   (TRMS)
- Adjustable 180/270 degree "Up-Down" Mixing



### LESS SOLVENT

- Solvent Recycling System (SRS)
- Saving up to 50% of the wash solvents
- Environment friendly waste disposal



### cGMP COMPLIANCE

- Software designed to meet FDA 21CFR part 11 and other GMP compliances
- Digital Signature Technology prevents possible data loss or modification
- Flexible program is easy to learn, modify and run



# **EASY & SAFE OPERATION**

- Fully automated operation
- Accidental Prevention & Protection System
- Personal Injury Protection



# LINEAR SCALE UP

 Automatic linear scale up from research to production
 Time consuming processing is avoided



# SOLID, RELIABLE AND DURABLE

- Teflon valves with 5 million operation life time
- Digital Servo Motor requires no maintenance
- Durable 316L Stainless Steel Structure



# LOCAL TECHNICAL SUPPORT

- Local professional service team
- Free technical support and consulting



# PSI200 SERIES (MULTIPLE)

PSI200 Mutiple Peptide Synthesizer is the best selling product of PSI. It is specially designed for research centers, hospitals, institutes and core laboratories to the application of peptide research, drug screening, custom peptide manufacturing, etc. Up to 6 peptides are synthesized simultaneously by PSI 200. It is a highly efficiency, low cost semi-automated instrument None of the likes has been seen in the market yet.

Adding amino acid and the selected coupling reagents is performed by hand. Everything else is automated. It is particularly helpful for scientists who want to check the coupling efficiency during the synthesis.

The software of PSI200 is simple and concise. It is compatible with touch sreen computer

#### PSI200A

**Three Channels** 

Scale: 0.01mmol-0.2 mmol/channel

Peptide Yield: 10-500 mg/channel

Reaction Vessel: 10 ml

## PSI200B

Three Channels

Scale: 0.05mmol-1 mmol/channel Peptide Yield: 50-2000 mg/channel

Reaction Vessel: 40 ml

### PSI200C

Six Channels

0.01mmol-0.2 mmol/channel Scale:

Peptide Yield: 10-500 mg/channel

Reaction Vessel: 10 ml



Six Channels

→ YES ← NO ↑ MIX ↓ EMPTY







# PSI300 SERIES (ADVANCED)

PSI300 high performance peptide synthesizer has been widely used by universities, research institutes, core facilities, pharmaceutical companies for peptide research, drug discovery and screening, peptide vaccine, etc.,

Thanks to the high coupling efficiency, peptide chemist now has the opportunity to synthesize the extra long and difficult peptides.

PSI300 software is designed for user-friendly operation. Each synthesis step is displayed on the screen both in text and diagram. Chemist can use desired parameters to control the synthesis, such as the speed of the mixing, coupling time, reagent washing, solvent recycling, etc.. Password protection ensures that the only authorized person can perform the instrument.



# PSI300A

Scale: 0.05-1 mmol Peptide Yield: 10 -800 mg Reaction Vessel: 40 ml

# PSI300B

Scale: 0.1-2 mmol
Peptide Yield: 100 -8000 mg
Reaction Vessel: 40 ml to 100ml

### PSI300A/PSI300B

Chemistry: Fmoo

Activation: HOBT/DIC/DCC/HBTU/HATU, etc

AA input: Powder or Solution

Reagents: 8 chemicals

AA Reservoir: 15 ml

Mixing: Adjustable 0-180/270 degre"up

-down" mixing





# PSI400 SERIES (GLP)

PSI400 is designed for peptide drug discovery, peptide vaccine research, clinic trial and small scale production.

Thanks to the high coupling efficiency, peptide chemist now has the opportunity to synthesize extra long and difficult peptides.

PSI400 software is designed for user-friendly operation. Each synthesis step is displayed on the screen both in text and diagram. Chemist can use desired parameters to control the synthesis, such as the speed of the mixing, coupling time, reagent washing, solvent recycling, etc.. Password protection ensures that the only authorized person can perform the instrument.



# PSI400A/PSI400B/PSI400C

Chemistry: Fmoc

Activation: HOBT/DIC/DCC/HBTU/HATU, etc

AA input: Powder or Solution

Reagents: 8 chemicals
AA Reservoir: 50-200 ml

Mixing: Adjustable 0-180/270 degree "up

-down" mixing

# PSI400A

Scale: 0.25-4 mmol Peptide Yield: 0.25 -16g Reaction Vessel: 40 ml-200nl

#### PSI400B

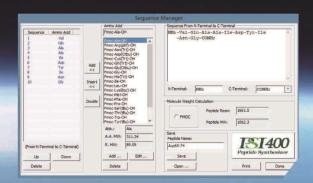
Scale: 0.5-10 mmol Peptide Yield: 0.5 -32 g

Reaction Vessel: 100 ml to 500ml

### PSI400C

Scale: 1-20 mmol Peptide Yield: 1 -64 g

Reaction Vessel: 200 ml to 1000ml





# PSI500 SERIES (GMP)

PSI500 is a GMP peptide synthesizer designed to meet FDA's requirements for cGMP production. The software complies with FDA 21 CFR Part 11, too.

PSI500 is best for the clinic trial and pilot peptide production. Thanks to the "Thorough Reaction Mixing System (TRMS)" Technology, the coupling efficiency for each amino acid has been improved to >99%.

PSI500 software is designed for user-friendly operation. Each synthesis step is displayed on the screen both in text and diagram. Chemist can use desired parameters to control the synthesis, such as the speed of the mixing, coupling time, reagent washing, solvent recycling, etc.. Quadruple password protection prevents any unauthorized operation. Digital Signature Technology records every step of the synthesis automatically and permanently. Leak Detection System prevents possible synthesis failure due to Inadequate solvents or gas during the synthesis. Sophisticated Solvent Delivery System eliminates cross contamination.



#### PS1500A

Scale: 5-40 mmol
Peptide Yield: 5-130g
Reaction Vessel: 0.25-2L

#### PS1500B

Scale: 20-100 mmol Peptide Yield: 20 -300 g Reaction Vessel: 1 to 5L

# PSI500A/PSI500B

Chemistry: Fmoc

Activation: HOBT/DIC/DCC/HBTU/HATU, etc

AA Input: Powder or Solution

Reagents: Support 8 different reagents

AA Reservoirs: 500-2000 ml

Mixing: Adjustable 0-180 degree "Up

-Down" Mixing







# PSI600 SERIES (GMP)

PSI600 is a GMP peptide synthesizer designed to meet FDA's requirements for pharmaceutical API production. The software complies with FDA 21 CFR Part 11, too.

PSI600 is best for the clinic trial and pilot peptide production. Thanks to the "Thorough Reaction Mixing System (TRMS)" Technology, the coupling efficiency for each amino acid has been improved to >99%.

PSI600 software is designed for user-friendly operation. Each synthesis step is displayed on the screen both in text and diagram. Chemist can use desired parameters to control the synthesis, such as the speed of the mixing, coupling time, reagent washing, solvent recycling, etc.. Quadruple password protection prevents any unauthorized operation. Digital Signature Technology records every step of the synthesis automatically and permanently. Leak Detection System prevents possible synthesis failure due to Inadequate solvents or gas during the synthesis. Sophisticated Solvent Delivery System eliminates cross contamination.

# PSI600A/PSI600B/PSI600C/PSI600D

Chemistry: Fmoc

Activation: HOBT/DIC/DCC/HBTU/HATU, etc

AA Input: Powder or Solution

Reagents: Support 8 different reagents

AA Reservoirs: 500-20000 ml

Mixing: Adjustable 0-180 degree "Up

-Down" Mixing



#### PSI600A

Scale: 40-200 mmol Peptide Yield: 40 -600g Reaction Vessel: 2-10L

#### **PSI600B**

Scale: 100-400 mmol Peptide Yield: 100 -1200 g Reaction Vessel: 5 to 20L

#### PS1600C

Scale: 100-600 mmol Peptide Yield: 100 -1800g Reaction Vessel: 5-30L

#### PS1600D

Scale: 200-1000 mmol Peptide Yield: 500 -3000 g Reaction Vessel: 20 to 50L





Based in New York, USA, Peptide Scientific Inc (PSI) is a leading peptide instrument company in the world. The new generation of PSI peptide synthesizers are the most advanced products on the market to meet today's tough demanding from the peptide society.

PSI is the inventor of the "Thorough Reaction Mixing System (TRMS)" technology which greatly improves the coupling efficiency - the most important key factor in the peptide synthesis. PSI's unique "Solvent Recycling System (SRS)" is a green design which cuts consumption of washing solvents and the waste in half without sacrificing the quality.

PSI has earned reputations from renowned universities, research institutions and pharmaceutical companies. From milligrams to kilograms, from R&D to GMP Production, from single channel to multiple channels, from semi-auto to fully automated, you can always find the most suitable instrument from PSI to meet your requirements.

Not only we guarantee the super performance of the PSI instrument, but also we make very effects to support the customers to reach their goal in the peptide synthesis. We believe that if our customers don't succeed, we won't succeed.

# **USA HEADQUARTER**

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