



PSI686 Double-armed Peptide Synthesizer

Fully Automated Peptide Synthesizer Common Features

Design Objective

- Developed in full accordance with GMP production requirements.
- Specially designed for the peptide synthesise process R&D, pilot test and production.

Double-arm Reactor Support

- Reactors above 30L are supported by double-arm mechanical structure.
- The heavier the reactor, the greater the mixing efficiency.

Solvent Circulation

- Pioneer of the solvent circulation for peptide synthesizers.
- Two solvent circulation systems are set up to save at least 40% of the washing solvent.
- Environmentally friendly; greatly reduces capital cost .

Linear Scale Up

- Synthetic data generated by the pilot production can be directly used in larger size reactors.
- Save raw material input and time cost profoundly.

Synthesis Report

- A comprehensive synthesis report is available for pharmaceutical declaration.

Solid, Reliable and Durable

- Durable 304/316L stainless steel structure.
- Patented double-armed support of reactor.
- World-class electronic Servo Motor requires no maintenance.
- International standard PLC control module.
- Pneumatic valve group.

Environmental Friendly

- First-invented Reagent Recycling System (SRS)--applied to medium / large scale equipment.
- > 40% of washing solvent can be saved.
- Greatly reduce the amount of waste disposal.

High Purity

- > 99% coupling efficiency.
- Unique PSI "Thorough Reaction Mixing System" (TRMS).
- 180 degree "up-down" mixing; speed adjustable.
- No agitator structure, resin and filter screen will not be damaged.
- Synthesize procedure is carried out under the nitrogen / inert gas protection to prevent direct contact with air.

Easy & Safe Operation

- Force-stop button.
- Personal safety protection.
- Identification multi-verification.
- Water-bath heating.

Remote Training

- User can operate the instrument remotely.
- Manufacturer can remotely operate and diagnose the equipment faults.
- Manufacturers can remotely train users.

Identification & Security

- Password and face recognition.
- Any combination of identification methods.



UV Detection

- Monitor the UV spectral absorbance of two times amino acid deprotection, and show results by graphs.
- Judge the coupling degree through the peak difference between each UV detection time.

Multi-level of Management

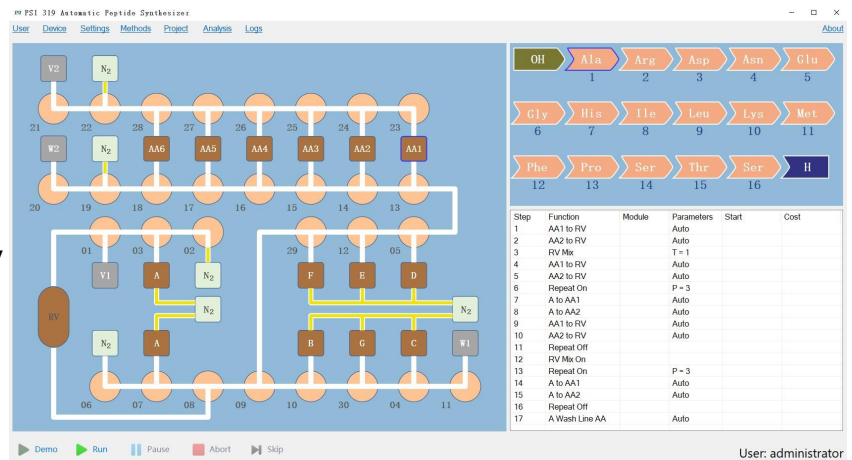
- Management personnel, quality control personnel, production managers, operators.
- Personnel of different levels can only operate the equipment within the authorized scope.

Data Storage

- Software complies with FDA 21 CFR Part 11.
- Digital signature technology prevents data loss or tampering.
- The log cannot be deleted or modified arbitrarily.
- All operations will be recorded and can be uploaded to the designated database synchronously.

Audit Trail

- All modified programs and parameters automatically generate audit trail logs.
- Log contents cannot be deleted or modified.
- All operations will be recorded and uploaded to the designated database synchronously.



Error Alarm

- All abnormal states automatically sound alarm and send e-mail notification.
- All records are automatically saved and will not be lost.

Flexible, Convenient and Intuitive

- Customized addition of various amino acids and other coupling reagents.
- Customized sequence and duration of each step.
- Previous settings can be optimized at any time.
- Current running modules and remaining time are shown intuitively.
- Data is recorded and saved during operation.

	A Type	B Type
Synthesize Scale	0.15~1mmol	1~3mmol
Reactor	30L / 50L / 100L	200L / 300L
Amino Acid Storage Tank	5/10L×1	30L×1
Solvent Channel	3-5, pipeline supply	
Solvent Circulation	2, pipeline supply	
Stirring Speed	0~10RPM	0~6RPM
Reagent Speed	5~10L/min	10~20L/min
Specifications (mm)	1580mm(W)×700mm(D)× 1350mm(H)	1980mm(W)×1000mm(D)× 1550mm(H)
Weight (kg)	500kg	800kg
Power Supply	220V 50Hz or 110V 60Hz	
Reactor Power	3.5kW	
Solvent Tank Dimensions (mm)	800mm(W)×500mm(D)× 1200mm(H)	1200mm(W)×800mm(D)× 1500mm(H)