



aapptec

advanced automated
peptide protein technologies

Spirit of Innovation

Vantage



Automated Parallel Organic Synthesizer



aapptec

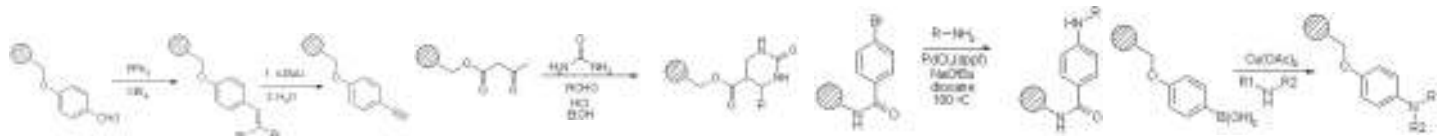
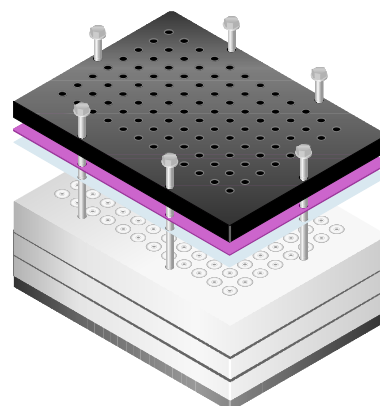
Vantage

Automated Parallel Organic Synthesizer

The Vantage has almost unlimited capabilities. Carbon-carbon bond formation, nucleophilic displacement, reduction, oxidation or carbohydrate chemistry are just some of the applications that can be handled. It is specially designed for efficient high throughput solid phase organic synthesis. In order to facilitate a wide range of organic reactions, the Vantage is equipped with an Ares™ reactor assembly that can uniformly cool to $-78\text{ }^{\circ}\text{C}$ and uniformly heat to $150\text{ }^{\circ}\text{C}$, with less than $1.5\text{ }^{\circ}\text{C}$ variation between reactors,

The Ares™ Reactor assembly allows performance of organic synthesis not previously possible in a standard open reactor. With complete confidence, low boiling point reagents and solvents such as DCM, DMF, THF, Dioxane and Toluene, can be heated above their boiling points without *any* significant volume loss. The new, patented, Teflon™ membrane system independently and completely seals the top and bottom of each reactor and can maintain pressures from 0 to 6 barr. Hence the Vantage can carry out high-pressure reactions that are usually conducted in a sealed tube.

After the library synthesis is completed, the products are automatically cleaved and collected in individual vials.



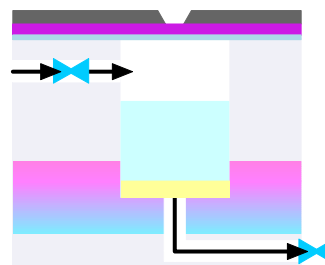
- **Variable Speed Vortex Mixing**

Variable speed vortex mixing produces thorough, efficient mixing in all reaction vessels.



- **N₂ Assisted Bottom Filtration**

Completely empties up to 96 reactor wells within 1 minute, while providing an inert atmosphere that retains the integrity of the prepared compounds. Reagents and wash solvents are completely removed from reaction vessels through bottom filtration.



- **Multiprobe Fast Delivery System**

The MultiProbe Fast Delivery System reduces synthesis time dramatically. The 6 probes wash an Ares™ 96 well reactor assembly in less than one minute. Up to 6 different reagents with unique volumes can be transferred simultaneously within 2 minutes to 96 reactor wells.



- **Optional Combinatorial Reagent Racks**

These special racks enhance the capability of the MultiProbe Fast Delivery System. The same reagent can be dispensed to 6 vessels at the same time or up to 6 different reagents can be delivered simultaneously. Utilizing the combinatorial reagent racks, matrix libraries can be quickly created.



A Few Examples of the Reactions the Vantage Can Perform

Aldol	Diels-Alder	Michael Addition
Alkylation	Emmons	Nitro Group Reduction
Amination	Ester Formation	Sonagashira Coupling
Aromatic Substitution	Grignard	Stille Coupling
Baylis-Hillman	Heck Coupling	Suzuki Coupling
Dess-Martin	Imine Formation	Tebbe
Dieckman	Metathesis	Wittig

Features & Options

- Program-Controlled Variable Speed Vortex Mixer
- Inert Atmosphere System
- Numerous Amino Acid and Reaction Vessel Configurations
- Temperature-Controlled Monomer Vessels
- 95 mL and 190 mL Monomer Vessels
- Easy-to-Use Windows Software
- Diluter/Syringe Dispensing System with Microliter Accuracy

Specifications

Width	33 inches (84 cm) (without computer)
Depth	30 inches (76 cm)
Height	39 inches (99 cm)
Weight	350 pounds (159 kg) (without computer)
Cooling /Heating	-78 °C to 150 °C
Computer	HP Pentium-4, Windows XP™ Professional
Monitor	HP 17" LCD Flat Screen
Printer	HP Inkjet
Warranty	On site warranty



Spirit of Innovation

© 2006 Copyright AAPPTEC LLC USA All rights reserved

aappTEC • 6309 Shepherdsville Rd., Louisville, KY 40228-1027, U.S.A.
phone: 502.968.2223 • toll-free: 888.692.9111 • fax: 502.968.3338
email: info@aappTEC.com • www.aappTEC.com