1. Select the Reactor-Ready Pilot Core.

2. Choose the lid you require (custom options available).

3. Choose the vessel kits you need.

4. Select the overhead stirrer you need.

5. If you need a thermoregulator, hoses, hose adapters, thermofluid or accessory glassware, then select from the accessory list.

6. If you need automation, add AVA Software and Data Hub.
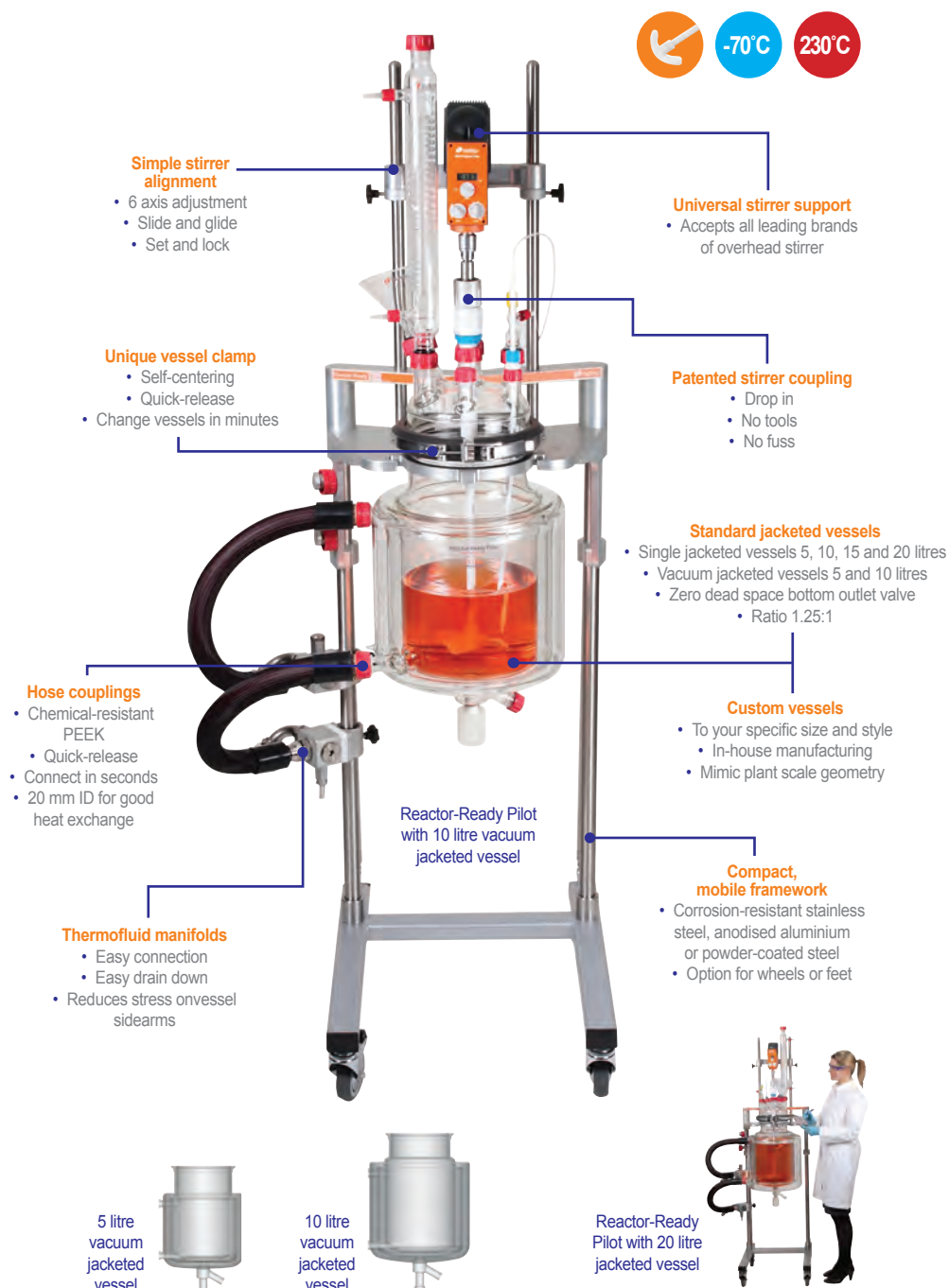
Control and log your chemistry

ava lab control software

Reactor-Ready™ Pilot - *5 to 20 litres*

Replace multiple reactor set-ups with a single, universal pilot scale system with interchangeable vessels that can be swapped in minutes, not hours

Reactor-Ready Pilot is ideal for process development, scale-up, pilot and kilo labs.

Features
- Rapid vessel exchange with quick-release vessel clamp and wide bore hose couplings.
- Single jacketed vessels available in 5, 10, 15 and 20 litres.
- Vacuum jacketed vessels available in 5 and 10 litres.
- Vessels have 1.25 to 1 ratio of internal height to diameter to mimic plant scale reactors.
- DN200 vessel flange.
- Accepts all leading brands of overhead stirrer and allows easy, tool-free adjustment.
- Compact stainless steel framework accepts all vessel sizes.
- Self-aligning stirrer coupling engages without the need for tools.
- Jacket temperature range: -70 °C to +230 °C.
- Innovative hose manifolds allow easy thermofluid drain down.

-70°C   230°C

Simple stirrer alignment
- 6 axis adjustment
- Slide and glide
- Set and lock

Universal stirrer support
- Accepts all leading brands of overhead stirrer

Unique vessel clamp
- Self-centering
- Quick-release
- Change vessels in minutes

Patented stirrer coupling
- Drop in
- No tools
- No fuss

Standard jacketed vessels
- Single jacketed vessels 5, 10, 15 and 20 litres
- Vacuum jacketed vessels 5 and 10 litres
- Zero dead space bottom outlet valve
- Ratio 1.25:1

Hose couplings
- Chemical-resistant PEEK
- Quick-release
- Connect in seconds
- 20 mm ID for good heat exchange

Custom vessels
- To your specific size and style
- In-house manufacturing
- Mimic plant scale geometry

Reactor-Ready Pilot with 10 litre vacuum jacketed vessel

Compact, mobile framework
- Corrosion-resistant stainless steel, anodised aluminium or powder-coated steel
- Option for wheels or feet

Thermofluid manifolds
- Easy connection
- Easy drain down
- Reduces stress on vessel sidearms

5 litre vacuum jacketed vessel

10 litre vacuum jacketed vessel

Reactor-Ready Pilot with 20 litre jacketed vessel

AVA™ Software - *take control of your chemistry*

AVA Level 4 controls multi-device jacketed reaction systems

- Unattended chemistry for improved productivity
- Automatically log your process data
- Improve safety and reduce manual errors
- Control any reactor

If you answer YES to any of the following:

Do you want to...

☑ Manage multiple devices easily during complex reactions?

☑ Have freedom from manual recording of experimental data?

☑ Safely run and monitor unattended reactions 24/7?

☑ Reduce manual errors or inconsistencies in your chemistry?

☑ Safely control exotherms?

Then AVA Software is what you need to take control of your chemistry

Control multi-device reactions
- Control up to 4 reaction systems with up to 16 devices on one screen
- Create complex experiments with any number of steps in series or in parallel
- Pre-program multi-step recipes, with the flexibility to make and track on-the-fly adjustments
- Interlink devices and set feedback/control loops, end-point conditions and safety limits

No more manual data logging or manual errors
- Automatically record reaction parameters and log what you do, as you do it
- Repeat experiments accurately for reproducible and consistent results
- Create reports in a few clicks or export data as a CSV file for further analysis
- Share results between users to improve research and collaboration

Safe unattended chemistry
- Automate cooling during exothermic events
- Link devices such as balances and pumps for controlled, unattended reagent addition
- Define safety overrides and cut-off conditions
- Configure audio and visual alarms

Download and try AVA software for FREE

Learn how AVA software works - try before you buy
- Simulate control of devices
- Set up apparatus and control experimental Schedules
- Share setups and Schedules with other AVA users
- Analyse results and create reports for real or simulated data
- Find out more about AVA Level 1-3 on our website

Download Free Demo www.radleys.com

AVA Care Support
- Free support for 1st year
- Free priority email and telephone support
- Free set-up and application support
- Free software updates during support period, keeping software current.

Data Hub
Integrates devices via an RS232 serial interface

Pt100 Temp. Sensor Ports

RS232 Serial Port

Control a variety of devices
AVA software includes a library of pre-configured driver files allowing easy integration with a wide range of 3rd party devices.

Radleys also provide a 'New Driver Configuration Service' if required.