

**PREMIER RPA  
QUALITY.  
RELIABILITY.  
DEPENDABILITY.**



## **These instruments are on your job all day, every day.**

Premier RPA measures your compounds before, during and after cure in a single test. This instrument has been engineered for continuous production in both lab and factory-floor environments. Premier RPA delivers consistent, repeatable data batch after batch after batch. And that kind of repeatability means your data is consistently reproducible over the many instruments located in your plants around the world. Your data doesn't shift just because your time zone does.

That's why Alpha is trusted by more top tier rubber and polymer manufacturers than any other brand.



## **How to compare Premier RPA with all the others.**

**Stiffer seals with low friction to prevent slippage and leakage and ensure no loss of signal.** Plus, they last longer.

**Separate user interfaces** – Workbench for instrument management and Online Manager for data analysis. Gives you true multi-tasking. Unlike others there's no waiting for the test to finish before being able to review data.

**Oversampling captures better signal to noise for more data points per second than anybody else.** Premier's Extended Dynamic Range (EDR) is especially important at low strains where you have a really small signal. EDR gives you the resolution you need. Others tend to offer a lot of noise.

**Easy calibration for customers who want to do it themselves when they change seals.** So you can get your instrument back in precise calibration without resorting to fudge factors.

**Torque standards you can trust.** Premier RPA torque standards make sure your instrument is accurately calibrated. Others use cheaper torque standards that have an unacceptable margin of error and need fudge factors to make them come out "right."

## Get more value from your Premier RPA. Options that expand your capabilities.

- Precision Dynamic Modulus (PDM) measures the die gap throughout the test.
- Large Amplitude Oscillatory Shear (LAOS) to measure the harmonics of torque curves.
- Custom dies and housing that extend temperature range to 350°C.
- Sub-Zero Technology™. Predict tire performance characteristics at temperatures down to -25°C
- 3-side open enclosure makes it easy to add multiple automation options to support low to high volume production demands.



### SPECIFICATIONS

<b>Frequency:</b>	0.1 to 3000 cpm (0.0016 to 50 Hz)
<b>Temperature Range:</b>	Ambient to 446°F (230°C)
<b>Max Ramp Rate:</b>	1.8°F/s (1°C/s)
<b>Max Cool Rate:</b>	0.9°F/s (0.5°C/s)
<b>Strain:</b>	±0.07% to ±1255% (±0.005 to ±90 degrees)
<b>Measured Data:</b>	Torque, temperature, frequency, strain, pressure, and angle
<b>Calculated Data:</b>	G', G'', G*, J', J'', J*, S', S'', S*, tanδ, η', η'', and η*
<b>Testing Standards:</b>	Meets ASTM D5289, D6048, D6204, D6601, D7050, D7605, and D8059
<b>Reports and Export Files:</b>	Numerous formats including text and Microsoft Excel © files
<b>Electrical:</b>	100/110/120/130 VAC ±10%, 60 ±3 Hz, 20 amp single phase 200/220/240/160 VAC ±10%, 50 ±3 Hz, 10 amp single phase
<b>Air Pressure:</b>	80 psi (5.6 kg/cm 550 kPa) minimum
<b>Dimensions:</b>	W: 22 in (56 cm), D: 25 in (64 cm), H: 45 in (122 cm)
<b>Weight:</b>	Net 346 lb (157 kg), gross 547 lb (248 kg)



For more information scan the QR code or visit [alpha-technologies.com/premier-rpa](http://alpha-technologies.com/premier-rpa).

There's a lot riding on our testing.™



**ALPHA**TECHNOLOGIES

Rheologists and Engineers

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## There's a lot to like about every Premier Instrument.

- Custom Electronics that are matched to the instrument. Better control. Better resolution.
- Custom Designed Heating Control System that ramps up heating cycles faster and maintains control for more accurate cure times and more efficient production.
- Efficient die cooling that gets your instrument ready for the next test.
- Smart Alignment and Dynamic Symmetry means you get on-target, parallel die closing, high stiffness and constant closing force.
- Cast Aluminum Frame that's lighter... stronger... stiffer.