

# RPA-X™

Rubber Process Analyzer

▶ The new X-Series™ instruments are Alpha Technologies' modular production floor solution for customers who are looking to bring testing closer to the production line.



▶ The RPA-X™ brings Alpha's superior testing solutions to the production floor with a mobile design that easily connects to any X-Dock™ station. The "X" in the RPA-X™ brand name stands for "cross-over" from lab environment to production floor. These test instruments are based on Alpha's flagship Premier™ technologies with the same outstanding reproducibility, repeatability, and test sensitivity.

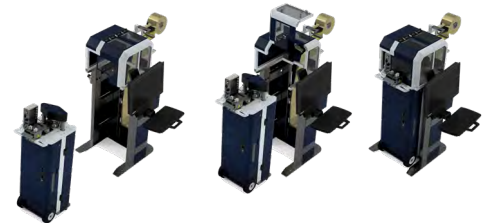


**ALPHA**TECHNOLOGIES

## Features



- Adaptable for lab and production floor use
- Auto module docking identification
- Sealed design for production floor environments
- NIST traceable standards ensure excellent reproducibility worldwide
- Pressure transducer standard to provide pressure measurement in addition to torque
- Proprietary electronics produce stable measurements over a wide range of torque values
- Measure dynamic properties of rubber before cure, during cure and after cure
- Sealed biconical dies
- Advanced Fourier Transform Rheology tests, including but not limited to Long Chain Branching determination
- Operates using Enterprise software, a flexible LIMS system based on an open SQL database platform



## Performance



- DYNAMIC SYMMETRY™ - A system that ensures dies remain parallel to reduce variation
- SMART ALIGNMENT™ - A system that ensures excellent die cavity sealing for better repeatability
- Measure dynamic properties of rubber before cure, during cure and after cure
- Runs tests under controlled stress
- Advanced precision strain control
- Incorporates Alpha's leading reproducibility, test sensitivity, and repeatability standards
- Enhanced data sampling and processing using up to 64x faster data rate per cycle
- Up to 80 unique sub tests within a single test configuration
- Pre-strain setting for frequency and strain sweeps
- Improved sensitivity to mixing errors and/or compound changes

## Options



- High temperature dies available up to 350°C
- Multiple film types available

## Specifications



FREQUENCY:	0.1 to 3000cpm (0.0016 to 50 Hz)	TESTING STANDARDS:	Meets ASTM D5289, D6048, D6204, D6601, D7050, D7605, and D8059
TEMPERATURE RANGE:	Ambient to 446°F (230°C)	ELECTRICAL:	100/110/115/120 VAC - 50/60 Hz single phase
MAX RAMP RATE:	33.8°F/sec (1°C/sec)		200/220/240/260 VAC - 50/60 Hz single phase
MAX COOL RATE:	32.9°F/sec (0.5°C/sec)	AIR PRESSURE:	60 psi (413Kpa, 4.2kg/cm <sup>2</sup> ) minimum 120 psi (827Kpa, 8.4kg/cm <sup>2</sup> ) maximum
STRAIN:	±0.07% to ±1255% (±0.005 to ±90 degrees)	DIMENSIONS:	W: 19.7 in (50 cm), D: 23.6 in (56.9 cm), H: 57.4 in (145 cm)
MEASURED DATA:	Torque, temperature, frequency, strain, pressure, and angle		
COLLECTED DATA:	G', G*, J, J', J*, S', S*, tanδ, η', η'', and η		

