

## RPA-X™

### Production Floor Rubber Process Analyzer

The 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 an X-Dock™ station. The "X" in the MDR-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.

#### Features

- Adaptable for lab and production floor use
- Auto module docking recognition and alignment
- Sealed design for production floor environments
- NIST traceable standards ensure excellent reproducibility worldwide
- 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 Long Chain Branding determination
- Operates using Enterprise software, a flexible LIMS software based on a SQL server database
- Pressure transducer standard to provide measurement in addition to torque
- Five sample queuing

#### 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
- Runs tests under controlled stress
- Advanced precision strain control
- Incorporates Alpha's leading repeatability, reproducibility, and test sensitivity
- 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

#### Options

- Wide assortment of films
- Multiple die selections
- Sample prep
- Multiple languages

## Specifications

Frequency:	0.1 to 3000 cpm (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 220/220/240 VAC -50/60 Hz single phase
Max Ramp Rate:	33.8°F/sec (1°C/sec)	Air Pressure:	60 psi (413Kpa, 4.2 kg/cm <sup>2</sup> ) minimum 120 psi (827Kpa, 8.4kg/cm <sup>2</sup> ) maximum
Max Cool Rate:	32.9°F/sec (0.5°C/sec)	Collected Data:	G', G'', G*, J', J'', J*, S', S'', S*, tanδ, η', η'', and η
Measured Data:	Torque, temperature, frequency, strain, pressure, and angle	Dimensions:	Width: 19.7 in (50 cm) Height: 57.4 in (145 cm) Depth: 23.6 in (56.9 cm)