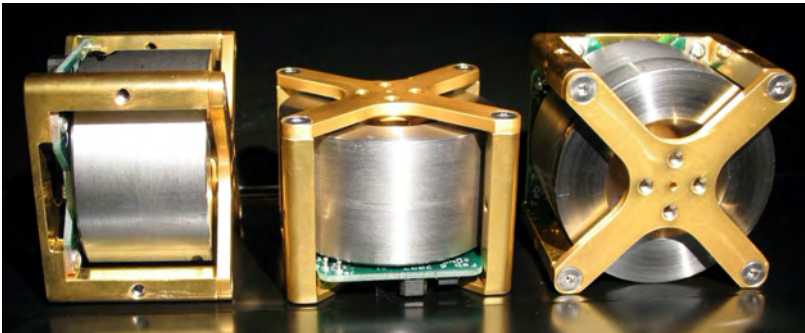


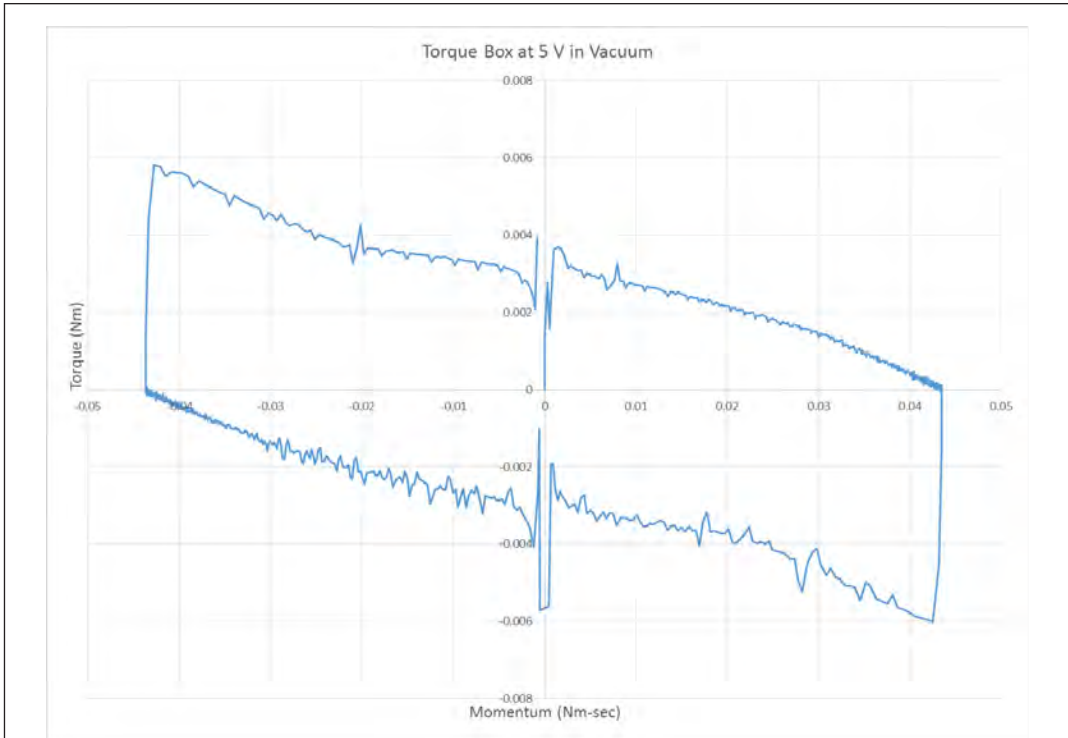
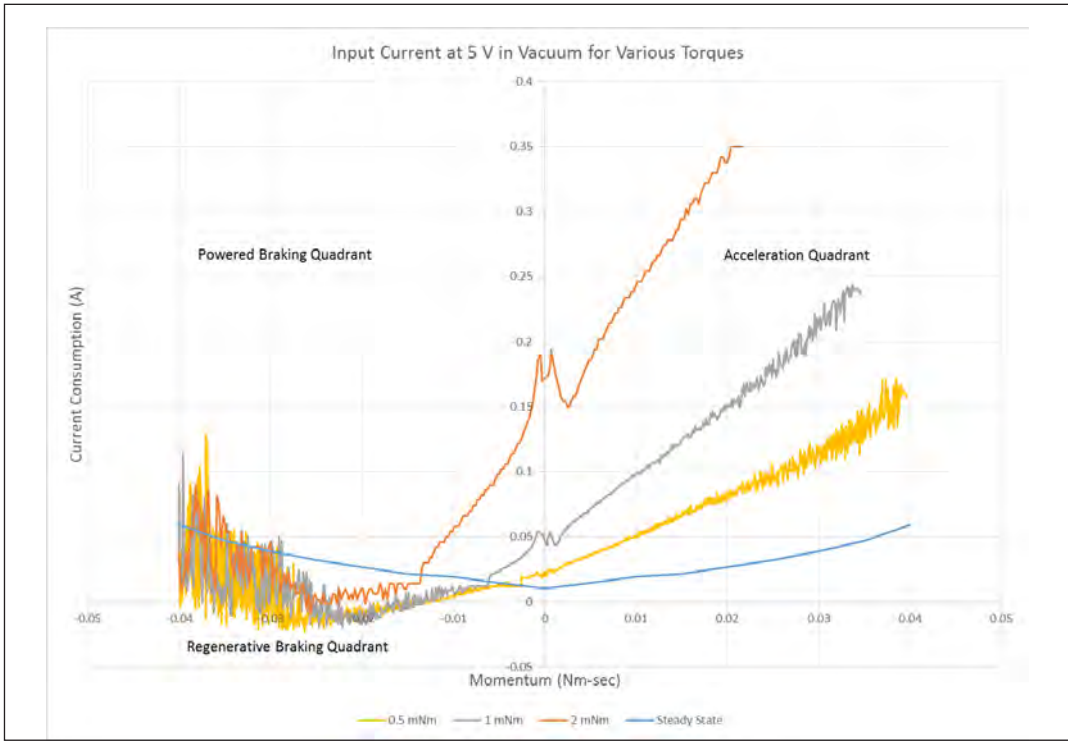
# NANOSATELLITE REACTION WHEELS (RW-0.03)



## SPECIFICATIONS

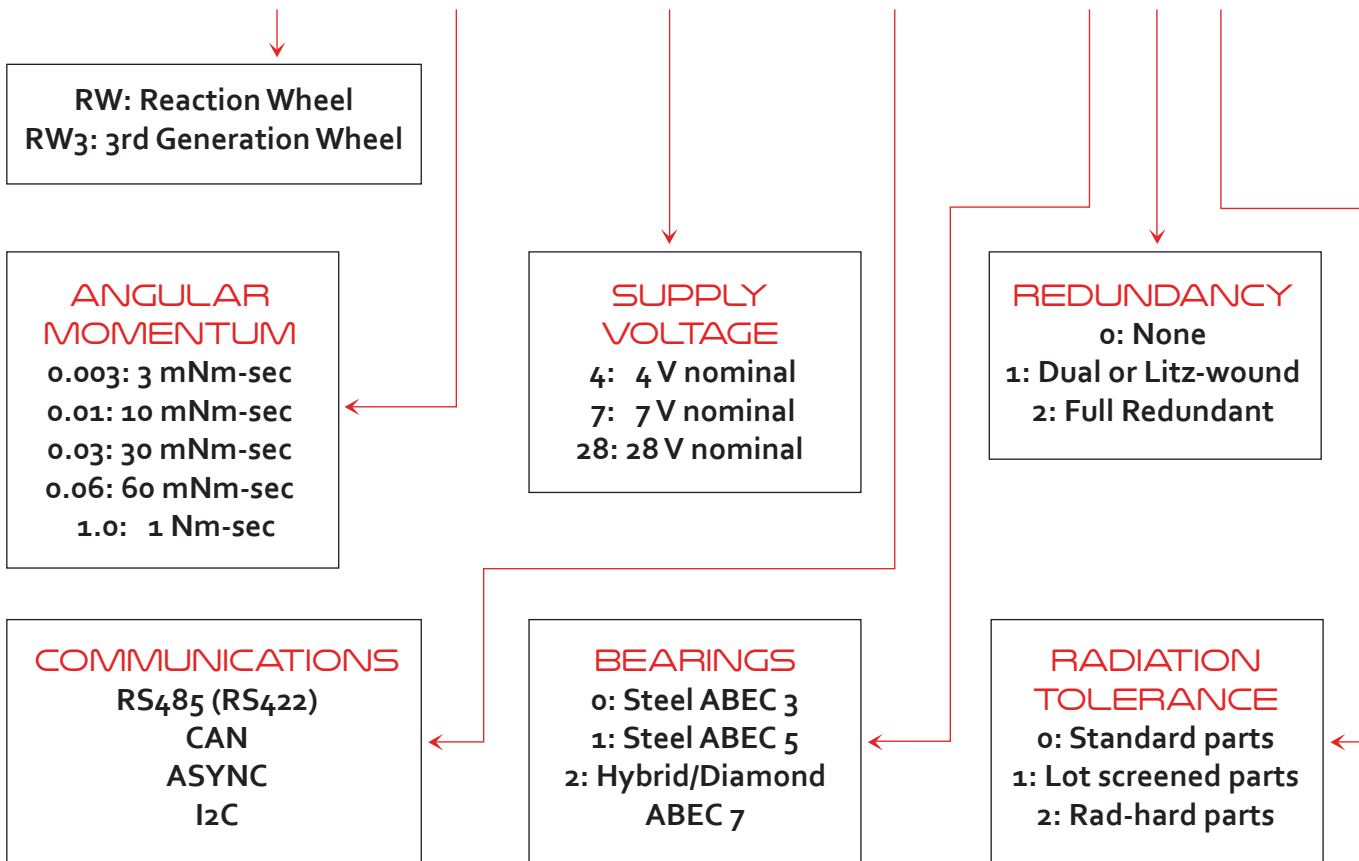
Momentum	Nominal: 0.03 Nms Peak: 0.04 Nms (at 5 V supply)
Torque	$\pm 2$ mNm at 0.02 Nms $\pm 0.5$ mNm at 0.04 Nms (at 5 V supply)
Control Mode	Speed or torque with built-in control CPU
Command / Telemetry	UART or I <sup>2</sup> C/SMBus
Mechanical	Dimensions: 50 mm x 50 mm x 40 mm Mass: 185 g
Supply Voltage	Nominal: 3.4 V to 6.0 V, Maximum: 8 V
Supply Power (in vacuum)	1.8 W @ 0.02 Nms, +2 mNm 0.3 W @ 0.04 Nms, steady state 0.1 W @ 0.01 Nms, steady state
Environment	Thermal: -40°C to +70°C (operating) Vibration: >12 gRMS Radiation: >20 krad dose
Reliability	Diamond coated hybrid ball bearings Redundant motor windings Radiation lot-screened parts (optional)
Heritage	55 Units total on-orbit, on 20 satellites First launch April 28, 2008, design essentially unchanged Demonstrated 12 arc-sec RMS pointing on 7 kg satellite
Price	US\$25,000 each, +US\$2,000 for radiation lot-screened parts

**CONTACT** // +1 (714) 465 5737 | [components@rocketlabusa.com](mailto:components@rocketlabusa.com)



# UNDERSTANDING REACTION WHEEL PART NUMBERS

**RW3-0.06-28-RS485-2-1-1**



Not all combinations mutually possible. Please consult factory for full selection.

**CONTACT** // + 1 (714) 465 5737 | [components@rocketlabusa.com](mailto:components@rocketlabusa.com)