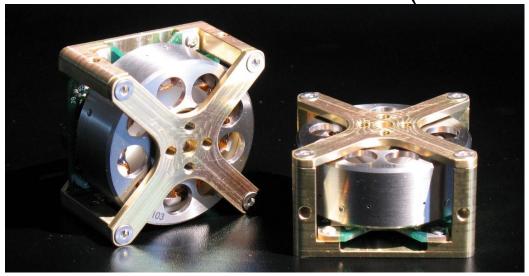
## Picosatellite Reaction Wheels (RW-0.01)



Momentum	Nominal: 0.01 Nms Peak: 0.018 Nms (at 5 V supply)
Torque	±1 mNm at 0.01 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 30 mm Mass: 120 g
Supply Voltage	Nominal: 3.4 V to 6.0 V Maximum: 8 V
Supply Power (in vacuum)	1.05 W @ 0.01 Nms, + 1 mNm 0.25 W @ 0.018 Nms, steady state 0.11 W @ 0.005 Nms, steady state
Environment	Thermal: −40°C to +70°C (operating)  Vibration: >12 g <sub>RMS</sub> Radiation: >20 krad dose
Reliability	Diamond coated hybrid ball bearings Redundant motor windings Radiation lot-screened parts (optional)
Heritage	10 Units total on-orbit on 4 satellites, first launched June 2014 Common design to RW-0.03, with >8 year on-orbit
Price	US\$20,000 each, +US\$2000 for radiation lot-screened parts





Rev 2016a RW-0.01

