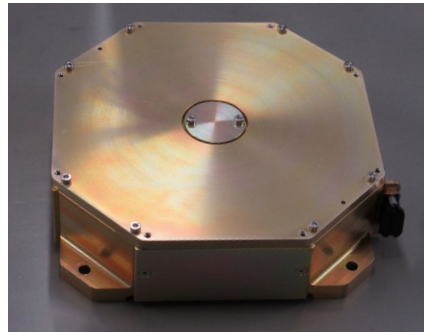
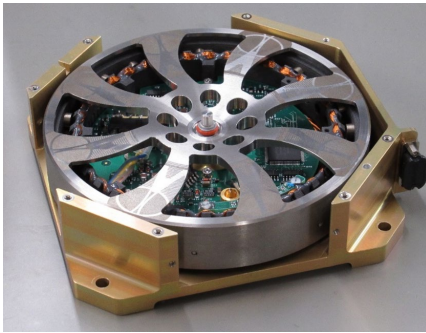


GEO REACTION WHEELS (RW4-1.0)



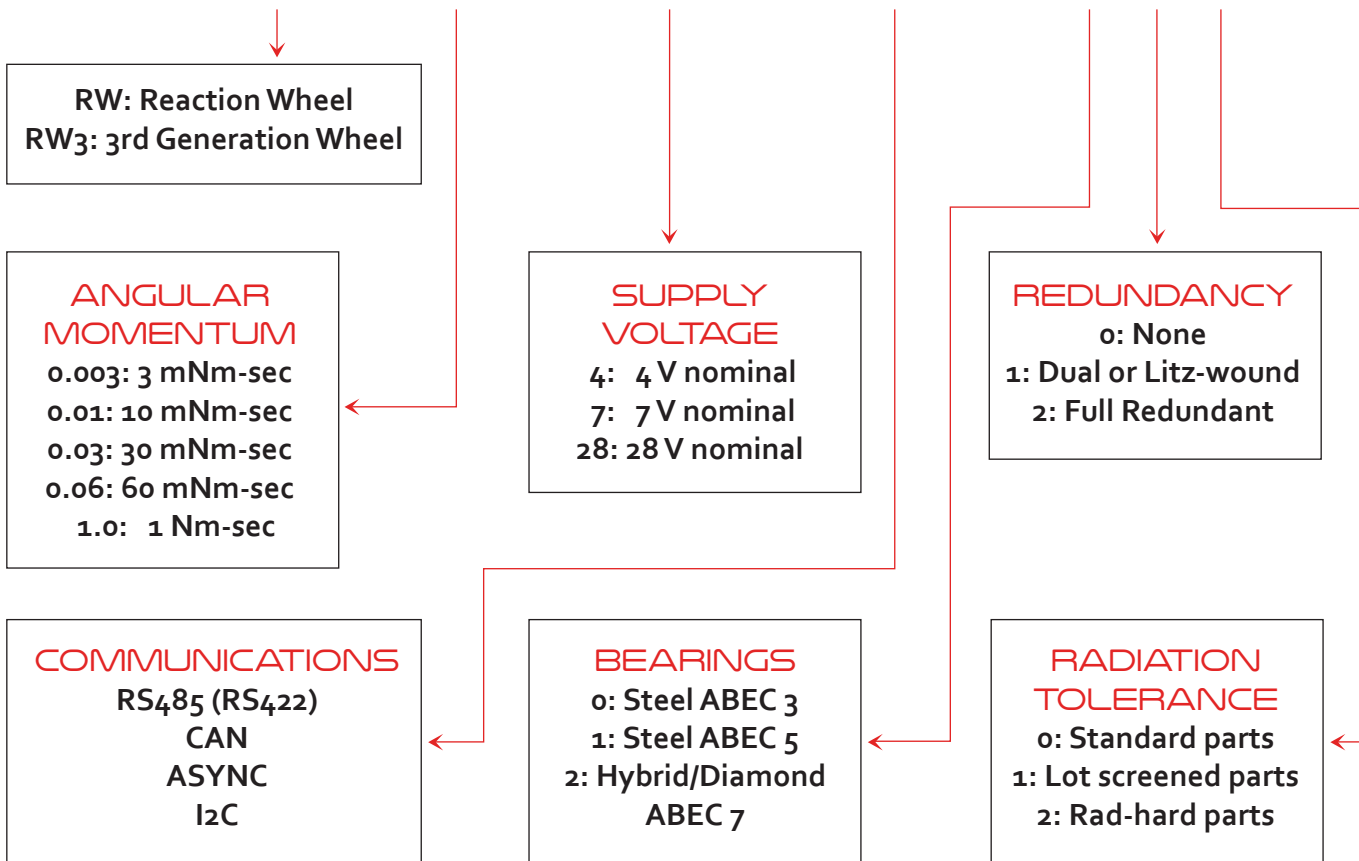
SPECIFICATIONS

Momentum	Nominal: 1.0 Nms
Torque	±100 mNm at 0.8 Nms (at 28 V supply)
Control Mode	Speed or torque, with built-in control CPU
Command / Telemetry	Redundant RS-485, with galvanic isolation from primary
Mechanical	Dimensions: 154 mm x 146 mm x 45 mm Mass: 1380 g
Supply Voltage	Nominal: 24 V to 34 V , Maximum: 50 V
Supply Power (28V) (in vacuum)	43 W @ 1.0 Nms, +60 mNm torque 5.3 W @ 1.0 Nms, steady state 1.4 W @ 0.2 Nms, steady state -28 W @ 1.0 Nms, -100 mNm regenerative braking
Environment	Thermal: -40°C to +70°C (operating) Vibration: >14 gRMS
Radiation	> 60 krad Total Dose. > 5 mm Al equivalent shield Heavy ion tested to 50 MeV-cm²/mg, LDRS tested Hardware TMR on all flip-flops, EDAC on all RAM
Reliability	Diamond coated hybrid ball bearings Redundant motor windings Active neutralization of rotor static charge
Heritage	Mechanical design from RW3-1.0, with 52 Units on-orbit. First flight deliveries December 2019
Price	US\$80,000 each

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UNDERSTANDING REACTION WHEEL PART NUMBERS

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



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

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