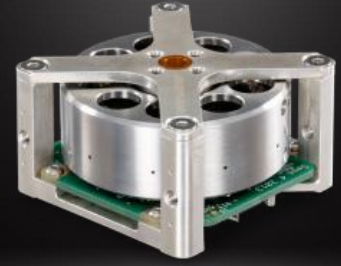


REACTION WHEEL

RW-0.01 Data Sheet

Version 3.0 – 2024-08-02



| | |
|---|---|
| MOMENTUM | Nominal: ± 0.01 Nms Peak: ± 0.018 Nms (at 5 V) |
| TORQUE | ± 1 mNm at 0.01 Nms (at 5 V) |
| CONTROL MODE | Speed or Torque |
| COMMAND/TELEMETRY | UART/ASYNC |
| MECHANICAL | Dimensions: 50 mm x 50 mm x 30 mm Mass: 122 g |
| SUPPLY VOLTAGE | 3.4 V to 6.0 V (nominal 5V) |
| SUPPLY POWER (28 V in VACCUUM) | 1.05 W @ 0.01 Nms, +1 mNm 0.25 W @ 0.018 Nms, steady state 0.11 W @ 0.005 Nms, steady state (See below power curve for various torque commands) |
| ENVIRONMENT | Thermal: -30°C to $+85^{\circ}\text{C}$ (operating) Vibration: 12.87 gRMS Radiation (TID): 24 krad (board level) |
| FLIGHT HERITAGE | Total of 19 units on orbit, with cumulated 92 years of heritage since first launch in 2014. Common design with RW-0.03, with additional 87 units and 446 years since 2008. |

