

# REACTION WHEEL

## RW-0.06 Data Sheet

Version 3.0 – 2024-08-02



<b>MOMENTUM</b>	Nominal: $\pm 0.06$ Nms Peak: $\pm 0.18$ Nms (at 28 V)
<b>TORQUE</b>	$\pm 20$ mNm at 0.12 Nms (at 28 V)- see below torque-box
<b>CONTROL MODE</b>	Speed or Torque
<b>COMMAND/TELEMETRY</b>	Redundant RS-485
<b>MECHANICAL</b>	Dimensions: 77 mm x 65 mm x 38 mm Mass: 233 g
<b>IMBALANCE</b>	Static: 0.25 g·mm Dynamic: 2.5 g·mm <sup>2</sup>
<b>SUPPLY VOLTAGE</b>	7.5 V to 34 V (nominal 28 V)
<b>POWER (28 V in VACCUUM)</b>	Steady state: 0.5 W @ 0.06 Nms, 0.9 W @ 0.12 Nms (See below power curve for various torque commands)
<b>ENVIRONMENT</b>	Thermal: -30°C to +85°C (operating) Vibration: 15.82 gRMS Radiation (TID): 20 krad (board level)
<b>FLIGHT HERITAGE</b>	Total of 271 units on orbit, with cumulated 735 years of heritage since the first design launched in 2014

