AAC CLYDE SPACE

Reaction Wheels

RW222

HIGH PRECISION HIGH PERFORMANCE

The RW222 series reaction wheels are low mass, low power reaction control wheels, which allow CubeSats and other pico- or nano-satellites to control their attitude. The RW222 series of reaction wheels feature an internal fire-and-forget controller, which frees up the host processor's workload.The standard configuration features up to 2 mN.m torque, and an I²C interface. Different interfaces are available on request. The RW222 is available with either 3.0 or 6.0 mN.m.s of momentum storage in both directions of rotation.

KEY HIGHLIGHTS:

- Total Momentum Storage: +/- 3.0 or +/- 6.0 mN.m.s
- Maximum torque: 2mN.m
- Fire-and-forget speed and torque control
- I2C-compatible interface
- Plug-and-play design
- Low Mass & Low Power
- Compact: 25 x 25 x 15mm

MINIATURISED

Within this range of angular momentum storage (3 to 6 mNms), the RW222 series reaction wheels have one of the lowest mass and dimensions in the market.

INTEGRATION

Specifically designed for 1 to 3U CubeSat platforms, these low mass reaction wheels are also used in the iADCS series of attitude determination and control systems.

DESIGN

The RW222 reaction wheels have been subject to continued improvement ever since their first flight in 2017. This agile design approach ensures that changing user needs with regards to micro-vibrations, bearings, or shock absorption.

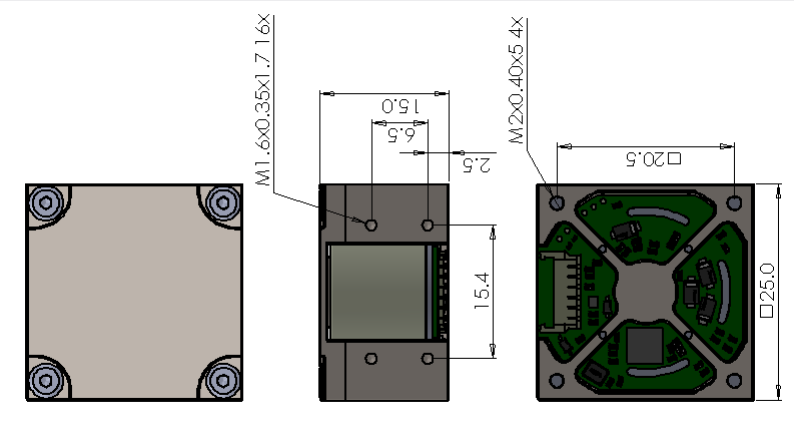
TECHNICAL SPECIFICATIONS

Performance		
Total momentum storage	+/- 3.0, +/- 6.0	mN.m.s
Maximum torque	2 mN.m	mN.m
Maximum rotation rate	10000 / 15000	To be tested
Control accuracy	+/- 0.5	To be tested

Dimensions		
Outer dimensions	25 x 25 x15	mm
Mass	TBC	g

Environmental		
Operating temperature	-20 - +60	°C
Radiation tolerance	TBC	krad (Si)

Electrical specifications				
	Min.	Typ.	Max.	
Supply voltage	3.25	3.3	3.5	V
Bus logic level voltage		3.3-5.1.		V



To make an enquiry, request a quotation or learn about AAC Clyde Space's other products and services, please contact:
enquiries@aac-clydespace.com

AAC CLYDE SPACE

#SPACEISAWESOME

www.aac-clyde.space