

Reaction Wheel Type S



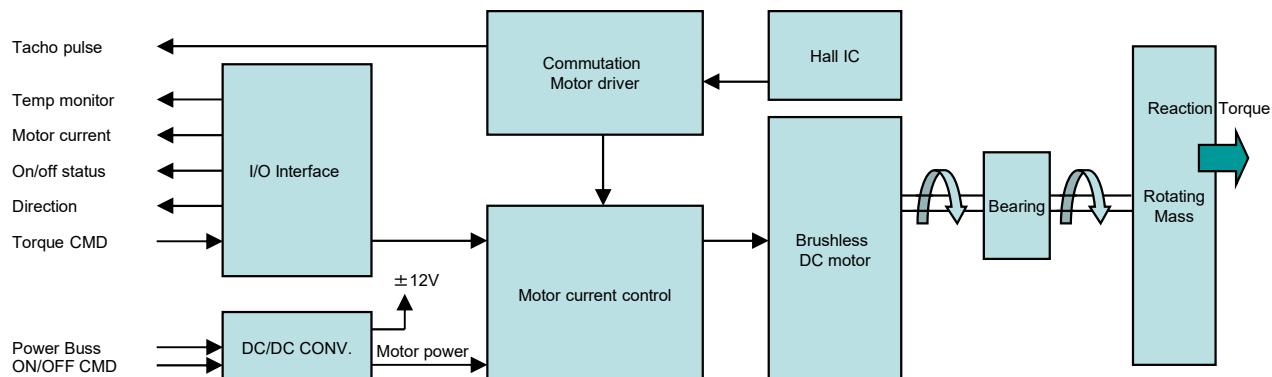
Features

- Angular momentum is selectable from 5 to 10Nms by rotor momentum mass.
- Low disturbance by well-balanced tuning technology.
- Up to severe environmental condition
- Duplex angular contact bearings
- Lubricant: synthetic oil MAC
- Built-in drive electronics
- Over current protection

Heritage

SLATS

Block Diagram



Performance

Item	Capability	Remarks
Maximum momentum	5 ~ 10Nms	@ 5000rpm
Maximum output Torque	> 0.06Nm	@ 5000rpm
Speed range	±5000rpm	
Power consumption		
Peak Torque @ 5000rpm , 0.06Nm	50W TYP	
Steady state @ 5000rpm	10W TYP	
Disturbance @ < 1000rpm	Torque 0.18Nm TYP Force 1N TYP	83.3 to 200Hz
Static Imbalance	< 0.25 g·cm	
Dynamic Imbalance	< 5.0 g·cm ²	
Power Bus Voltage	22 ~ 52VDC	
Dimension (Diameter X Height)	Φ 220mm X 98mm TYP	
Mass	3.9kg TYP @ 5Nms	
Integrated Electronics	Yes	
Tachometer	48Pulses/rev	
Signal Interface	Analog	
Operation Temperature Range	-15 ~ +60°C	
Turn on Temperature Range	-30 ~ +60°C	
Random Vibration	> 196.0m/s ² rms (X-Y) > 206.3m/s ² rms (Z)	
Radiation Hard	> 100krad (Si)	
Design Life	> 10years	

Subject to change without prior notice.