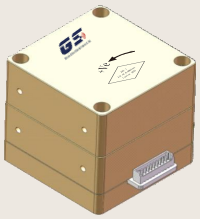
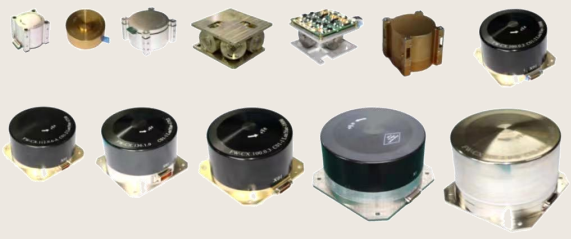
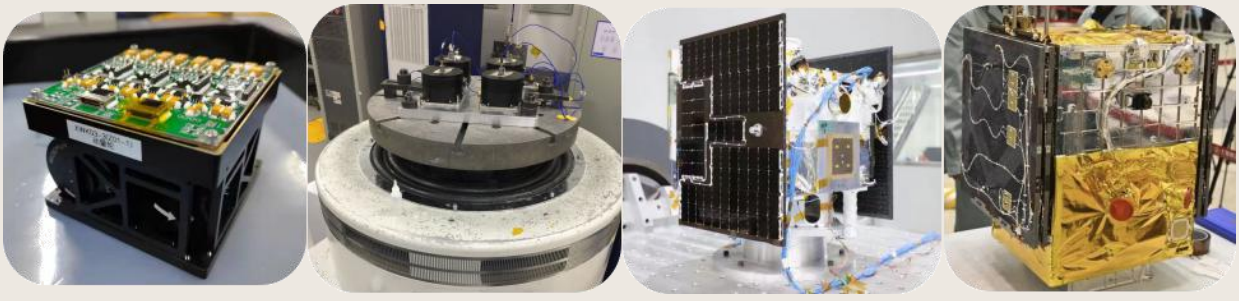
GranStal™ Reaction Wheels Solutions

GS-RW Reaction Wheels	The GS-RW series reaction wheels are low mass, low power reaction control wheels, which allow CubeSats and other pico- or nano-satellites to control their attitude. These reaction wheels are specifically designed for 1 to 3U CubeSat platforms, and they are also used in the iADCS-series of attitude determination and control systems as well as the iACS series of attitude control systems.

Products specification		
Model	GS-RWT37	GS-RWT41
Appearance		
Dimensions	37mm x 37mm x 37mm	41mm x 41mm x 41mm
Performance	• Total momentum storage: +/- 3mN.m.s@6000rpm • Maximum torque: 0.45mN.m • Maximum rotation rate: ±6000rpm • Control accuracy: ±5rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 8.0(6.4~8.4)VDC • Low mass: 90±10 g • Low power: 0.7W@3000rpm@8V ≤2.5W@0.45mN.m peak	• Total momentum storage: +/- 6mN.m.s@8000rpm • Maximum torque: 0.45mN.m • Maximum rotation rate: ±8000rpm • Control accuracy: ±5rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 24~32 VDC • Low mass: 115±10 g • Low power: 0.8W@3000rpm@8V ≤2.5W@0.45mN.m peak
GS-RW™ Reaction Wheel for CubeSat Attitude Control	 	

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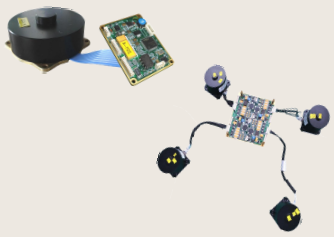
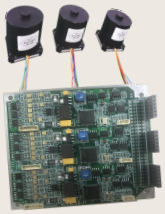
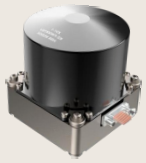
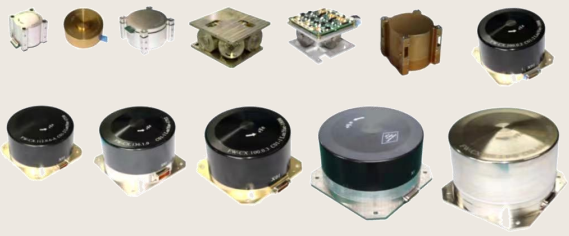
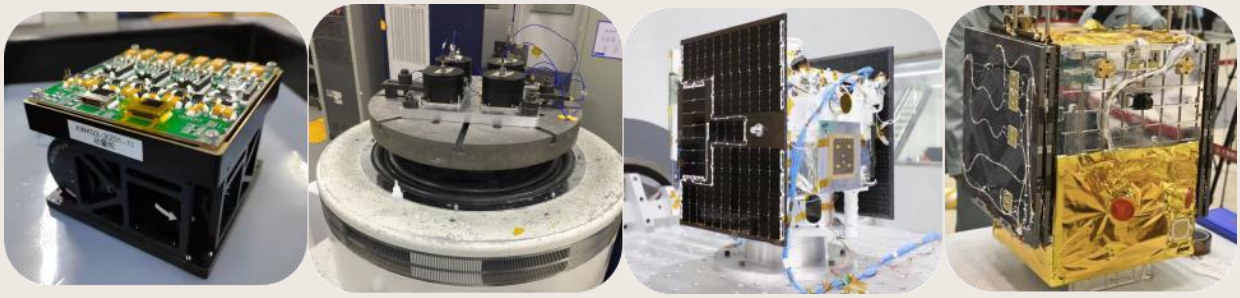
Products specification			
Model	GS-RWS15	GS-RWS56	GS-RWS67
Appearance			
Dimensions	49mm×49mm×23mm	49mm×49mm×49mm	70mm×70mm×72.4mm
Performance	• Total momentum storage: 15N.m.s@6000rpm • Maximum torque: 2.5mN.m • Maximum rotation rate: ±6500rpm • Control accuracy: ±5rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 7.0~12)VDC • Low mass: 150g • Low power: 2.5W@6000rpm@8V ≤5.0W@2.5mN.m peak	• Total momentum storage: 56mN.m.s@8000rpm • Maximum torque: 8.0mN.m • Maximum rotation rate: ±6200rpm • Control accuracy: ±5rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 12 VDC • Low mass: 460 g • Low power: 2.5W@6000rpm@8V ≤7.5W@0.45mN.m peak	• Total momentum storage: 67mN.m.s@8000rpm • Maximum torque: 10.0mN.m • Maximum rotation rate: ±6500rpm • Control accuracy: ±5rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 24~32 VDC • Low mass: 450 g • Low power: 3.0W@6000rpm@8V ≤7.5W@0.45mN.m peak
GS-RW™ Reaction Wheel for CubeSat Attitude Control	 		

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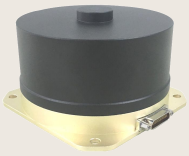
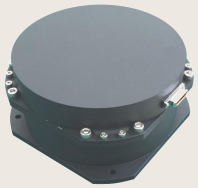
Products specification

Model	GS-RW10	GS-RW60	GS-RW200	GS-RW400
Appearance				
Dimensions	50mm x 50mm x 60mm	100mm x 100mm x 65mm	130mm x 130mm x 85mm	170mm x 170mm x 91mm
Performance	• Total momentum storage: +/- 0.1N.m.s • Maximum torque: 10mN.m • Maximum rotation rate: ±6800rpm • Control accuracy: ±0.5rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Plug-and-play design • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 9~15 VDC • Low mass: 250 g • Low power: 3.5W@6000rpm@28V	• Total momentum storage: +/- 0.6N.m.s • Maximum torque: 20mN.m • Maximum rotation rate: ±6500rpm • Control accuracy: ±0.5rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Plug-and-play design • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 10~32 VDC • Low mass: 1050 g • Low power: 4.5W@6000rpm@28V	• Total momentum storage: +/- 2.0N.m.s • Maximum torque: 60mN.m • Maximum rotation rate: ± 6200rpm • Control accuracy: ± 0.5rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Plug-and-play design • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 24~32 VDC • Low mass: 1850 g • Low power: 5W@6000rpm@28V	• Total momentum storage: +/- 4.0N.m.s • Maximum torque: 100 mN.m • Maximum rotation rate: ±5600rpm • Control accuracy: ±1.0rpm • Fire-and-forget speed and torque control. • I2C-compatible interface • Plug-and-play design • Primary components radiation tolerant to over 36 krad (Si) • Supply voltage: 20~32 VDC • Low mass: 2850 g • Low power: 10W@5600rpm@28V
GS-RW™ Reaction Wheel for CubeSat Attitude Control