CUBEROVER SURFACE MOBILITY



CubeRover is Astrobotic's small-scale planetary rover class designed to revolutionize access to the Moon. CubeRovers use flight heritage and off-the-shelf components to perform science missions and technology demonstrations at a fraction of historical prices. Akin to CubeSats for the lunar surface, each CubeRover unit or "U" can support a 10x10x10cm payload that weighs 1 kg. This standard configuration is scalable to support payloads with robust services.

KEY BENEFITS



Customizable

The CubeRover platform can be tailored to mission needs, including lunar night survival and missions to craters and PSRs.



Affordable

Orders of magnitude lighter than traditional rovers. Reduced mass = reduced cost.



Modular

Scalable

Supports top and bottom mounted payloads, and several lander configurations.

All CubeRovers use the same power, thermal,

structural, avionics, and software systems to

minimize re-engineering costs and risks.





SYSTEM DETAILS	20	4 U	6U
Rover Mass	4.6 kg	8 kg	10.6 kg
Payload Capacity	Up to 2 kg	Up to 4 kg	Up to 6 kg
Guaranteed Payload Envelope	20 x 10 x 10 cm	20 X 20 X 10 cm	30 X 20 X 10 cm
Non-Standard Payload Envelope	Additional 2100cm ³ internal and 910cm ³ external volume available	Additional 3900cm ³ internal and 1768cm ³ external volume available	Additional 5700cm ³ internal and 2625cm ³ external volume available
Payload Nominal Power Services	100 Wh +	150 Wh +	200 Wh +
Payload Power Interface	28 Vdc		
Payload Thermal Environment	-20C to 60C		
Payload Wired Interface	RS-422		
Payload Comms Services	10 kbps per kilogram		
Payload Wireless Standard	WLAN 802.11n		
Payload Data Storage	32 Gb +		
Nominal Speed	4 cm/s		
Mission Duration	8 Earth days		
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Non-standard services can be made available upon request.

