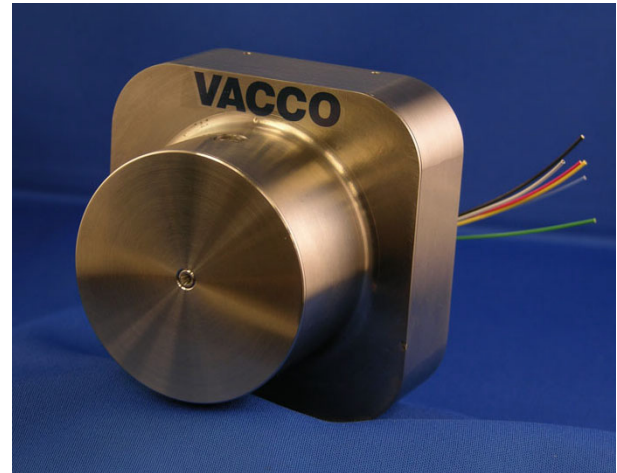


Propulsion Unit for CubeSats

VACCO's Propulsion Unit for CubeSats (PUC) is a delta-v propulsion system specifically optimized for CubeSats. The PUC is available in a variety of sizes from 0.14U to 1U with features that include minimal payload displacement, high delta-v, low mass, low power and a simple control interface.

Development hardware has been extensively tested including 75,000+ cold gas firings in a vacuum chamber.

The self-contained PUC includes an integral controller, propellant storage, propellant feed system, sensors and a 5.4 mN warm gas thruster. Reliability is ensured through simplicity of design, welded titanium construction and frictionless valve technology.



0.25U Model

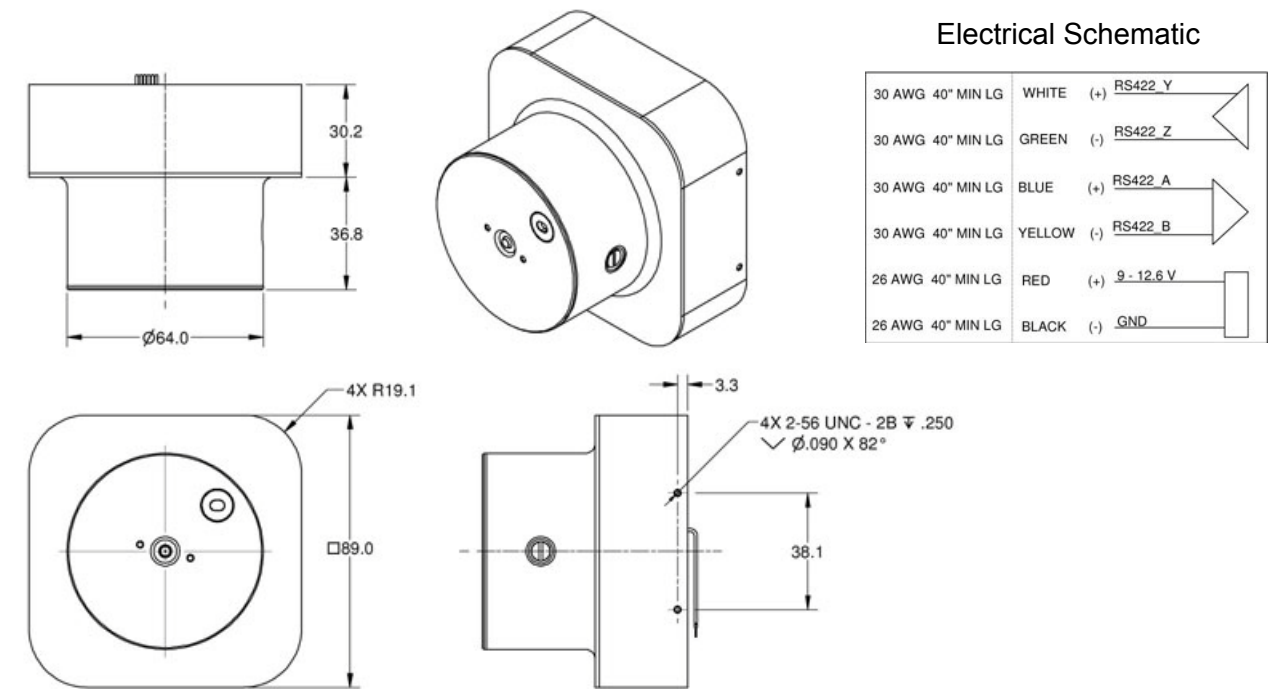
Features

- Scalable from 0.14U to 1U
- Minimal payload displacement
- High total impulse and delta-v
- 5.4 mN CU Aerospace MCD thruster
- Low power
 - 15 watts firing in warm gas mode
 - 0.055 watts in standby mode
- Simple control interface
- Reliable, frictionless valve technology

Performance Matrix

Warm Gas Mode: 5.4 mN, 70 sec Isp, 15 watts						
Unit	Tank Volume (cm ³)	88.5% Volume (cm ³)	Total Impulse (N-sec)	Delta-V, 3 kg CubeSat (meters/sec)	Delta-V, 4 kg CubeSat (meters/sec)	Dry Mass (grams)
0.14U	140	126	120	41	31	316
0.25U	230	207	196	69	51	355
0.50U	390	351	333	121	89	510
1U	709	638	605	239	171	753

Performance characteristics are based on customer requirements. As such, they are not representative of component capabilities or limitations.



Sizes 0.14U to 1U Available

