



Thermal Energy Storage Panel Q-Store

Q-Store is a thermal energy storage panel that provides passive thermal management in a compact, reliable form factor.

Benefits include reduced maximum temperatures, more isothermal systems, and improved heat load sharing.

Leveraging phase change materials (PCMs), Q-Store includes an optimized PCM to panel mass, integrated thermal vias, customized geometries, and short lead times.



APPLICATIONS

+ Low Earth Orbit (LEO) missions

+ Deep Space Missions

+ Planetary Missions



PARAMETERS

Minimum Size

5.0 cm x 5.0 cm x 0.5 cm (or 2470 J)

Tailored control temperatures

(-10°C to 61°C)

Maximum Size

105 cm x 105 cm x 3.0 cm (or 6500 kJ)

High thermal storage capacity

(215 to 250 J/g of wax)

Technology Readiness Level (TRL)

TRL 5 currently



MARKETS SERVED

+ Spaceflight applications