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