

CUSTOMER:

Satellite Thruster Rocket Manufacturer

MARKET:

Communications and Military Satellites

APPLICATION:

Rocket Nozzle Heater Control
Mars Pathfinder Program

PRODUCT:

Custom Design 3200 Series
High Reliability Thermostat

DESCRIPTION:

The 3200 series device shown is used to control the primary and backup heaters on a Thruster Rocket that determines the course and attitude of various types of satellites. The flow of the rocket fuel, Hydrazine, through the nozzle can cool it to the point where the flow is restricted limiting the thrust. The heater is used to keep this potentially disastrous condition from occurring.

Product Features:

- Hermetically Sealed to withstand Space environments
- Integral Strain Relief to help wire leads withstand high G-loads
- Low Out-gassing overmold isolates electrically conductive terminals
- Withstands extremely High Vibration and Shock levels
- Extended life. Up to 250K cycles depending on electrical load
- Contact ratings to 120VDC
- Tight Temperature Tolerances ($\pm 3^{\circ}\text{F}$, $\pm 1.7^{\circ}\text{C}$)

The 3200 series device has been used on virtually every major space program for over twenty years, including the Mars Pathfinder, Hubble Space Telescope, GPS, Mars Explorer and the Space Shuttle. Applications include heater controls for batteries, gimbals, inertial guidance systems, avionics and propellant lines.

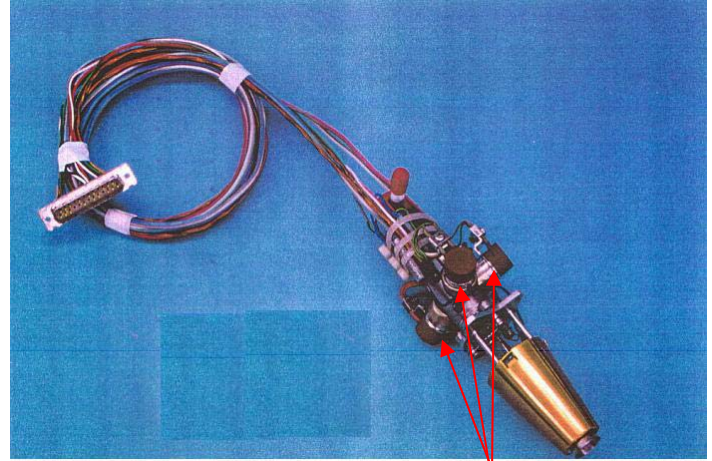
PRICING: Varies with quantity, required temperature accuracy and test requirements. Contact the factory.

WHY WE WON:

- Custom Design provides a cost effective solution for the customers needs.
- Tighter tolerances than competitors devices
- Extended life cycle capabilities meet the requirements of long-term space missions
- Honeywell recognized as the High Reliability leader due to NASA qualification
- Over 25 years of experience in space flight applications

POTENTIAL CUSTOMERS FOR THIS PRODUCT:

Boeing	EADS Astrium	General Dynamics
Ball Aerospace	Alcatel	Lockheed Martin
NASA	Eastman Kodak	Northrup Grumman



3200 Series Thermostats

