Aerospace-Ready RTD-Integrated Thermal Sensor
Meet the TS1000!

CPI's newest innovation brings precision sensing and rugged switching together in a single, mission-ready assembly engineered for the toughest aerospace and defense environments. By embedding a platinum RTD directly into our proven stainless-steel probe architecture, this design delivers high-accuracy temperature measurement from -40°C to 150°C (-40°F to 302°F) while maintaining the reliability CPI is known for.

Built for high-vibration platforms, extreme thermal cycling, and harsh environmental exposure, this hybrid sensor-switch unit is designed for the next generation of aircraft, UAVs, military vehicles, and propulsion systems. With a certification path aligned to RTCA-DO-160, it will meet the demands of modern aerospace qualification standards.

Custom design form factors are available! - Any type of connector and completely customizable threads/probe length

This product marks a major leap forward in integrated thermal management—pairing laboratory-grade measurement accuracy with battlefield-grade durability. It's precision where it counts, reliability where it matters, and performance where failure isn't an option.

Ideal Applications - Aerospace & Defense

- Engine bay and propulsion temperature monitoring
- Avionics cooling circuits and liquid cooling loops
- UAV and missile guidance thermal zones
- Military vehicle power systems & coolant routing
- Environmental control systems (ECS) in aircraft
- High altitude, cryogenic, or vacuum exposed assemblies

Who is Control Products? What do we do?

CPI is a U.S. based manufacturing company with designs in the aerospace thermal safety switch market as early as 1946. Proven track record in aerospace, defense and heavy-duty OEM sectors. Rapid prototyping for new sensors and switches. Full engineering collaboration available. Let us design it for you!

Early 2025, CPI began to look at different designs to incorporate an RTD into our already robust design. Originally conceptualized as a retro fit into our switches, has now become the newest member of our thermal line up. We've built the prototype and ready for your input on how we can implement into your design.

RTD element

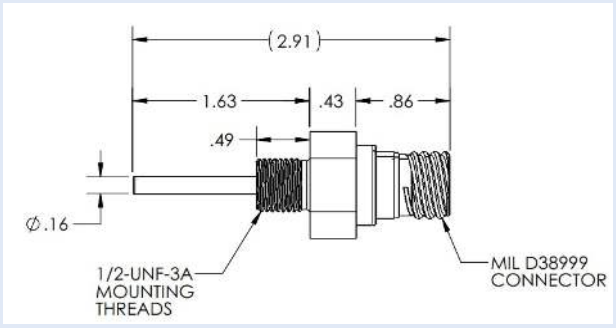
What technology is being used in our newest sensors?

Utilizing a Thinfilm Platinum ERTD2 (redundant configurations of multiple RTD sensor available upon request)

Aerospace & Defense RTDs live in places where a bad temperature reading can ground a jet—or worse.

Applications

- Engine nacelles and APU temperature monitoring
- Environmental control systems (ECS)
- Avionics bay thermal monitoring
- Hydraulic system overheat detection
- Satellite & spacecraft thermal loops
- Military vehicle powerpack temperature sensing
- Missile guidance & control system stabilization
- Radar & EW cooling systems



More Information

For further information and an initial discussion of your needs, contact us today!

Frank Martucci
Regional Project Manager
Control Products Inc. | East Hanover | NJ 07936 USA
Exostar-Verified Partner | Secure Access for Defense & Aerospace

(973) 887-9400 ex 212 | www.cpi-nj.com | Frank@cpi-nj.com

Control Products Inc
Harsh Environment Thermal & Waterproof Switches