

Thermal Sensors

Indian Space Research Organisation at its Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram has developed thin foil heat flux sensors (Gardon Gauge) and temperature probes. They have applications in a variety of heat measurements like radiative and convective heat flux measurement for short durations in flight, aerodynamic heat transfer measurements on moving bodies during flight, plume heat flux measurement at nozzle exhaust, flame temperature measurement at nozzle exit, hot gas temperature measurement inside combustion chambers etc.

VSSC is willing to offer the process know-how of processing these sensors to eligible interested parties who are working in the domain of heat transfer/sensors.

infrastructure available, market assessment of the product, financial arrangements made, turn over and sales of their products for the past years and a copy of their latest annual report

Interested entrepreneurs are requested to contact the address given below with all relevant particulars regarding their line of current activity,

Sensor Name	Measured parameter	Range	Sensor output at full range	over range	accuracy
Thin foil heat flux sensor (uncooled)	Heat flux	10 and 30 W/cm ²	Linear output, 10 mV	25% of rated heat flux	±5%
Thin foil heat flux sensor (cooled)	Heat flux	10 and 30 W/cm ²	Linear output, 10 mV	25% of rated heat flux	±5%
Gas Temperature probe	Temperature	77 to 2500K	75mV	-----	±2%

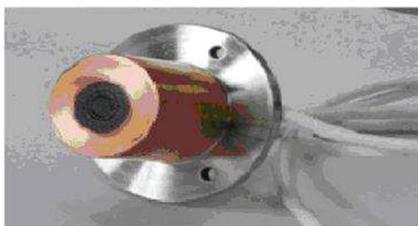


Fig1. Thin foil Heat Flux Sensor (Uncooled)

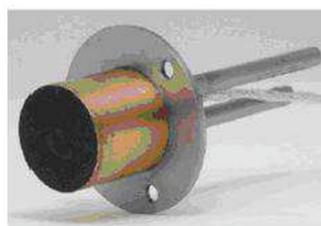


Fig2. Thin Foil Heat Flux Sensor (cooled)



Fig3. Gas Temperature probe