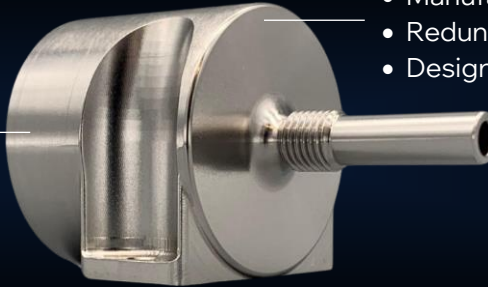


# GARNET

## Pressure and Temperature Sensor

- High accuracy and reliability
- Best-in-class on size and mass
- SpaceX rideshare compliant (RPUG)
- Availability off the shelf



- Radiation SEL immune
- Manufactured to IPC3
- Redundant seal design
- Design and testing based on ECSS

### Performance

Pressure range (MEOP)	0 ... 10 bar, 30 bar, 100 bar, 200 bar, 320 bar
Proof pressure	1.5 x MEOP
Burst pressure	4 x MEOP
Accuracy	±0.25% FS at BOL ±0.4% FS at EOL (pending mission profile)
Temperature sensing	Internal thermistor (1 kΩ @ 25°C PTC)

### Interface

Electrical interface	9-pin Nano-D-Sub (MIL-DTL-32139)
Supply voltage	8 V – 34 VDC
Current consumption	< 10 mA
Output interface	0 V – 5 V (analog)
Mechanical interface	2 x M3 fasteners
Size	62 mm x 36 mm x 36 mm
Mass	Starting from 110 g
Wetted material	AISI 316L
Fluidic interface	1/4" weldable tube

### Environmental

Temperature range	-30°C to +60°C operational -40°C to +70°C non-operational
Radiation	TID > 30 krad, SEL immune
Random vibration / Shock	14.1 Grms / SRS 1000 g (ECSS-E-ST-10-03C)
Compatibility	MON, MMH, AND, HAN, HTP, N2O, Water, He, N2, Xe, Kr, Ar

### Customization

Electrical interface	Flying leads, custom connector
Fluidic interface	VCR, Swagelok tube fitting
Wetted material	Ti-6Al-4V, Hastelloy C-276
Pressure range	Custom range and temperature calibration
Output interfaces	0 V – 3 V (analog)
Analysis	PSA, WCA, FIT, Structural