



TEMPERATURE SENSOR COMPARISON GUIDE

| Criteria | Thermocouple | RTD | Thermistor |
|-----------------------|--------------------------------|---------------------------|------------------------------------|
| Cost-OEM Quality | Low | High | Low |
| Temperature Range | Very wide -450°F +4200°F | Wide -400°F +1200°F | Shot to medium -100°F +500°F |
| Interchangeability | Good | Excellent | Poor to fair |
| Long-term stability | Poor to fair | Good | Poor |
| Accuracy | Medium | High | Medium |
| Repeatability | Poor to fair | Excellent | Fair to good |
| Sensitivity (output) | Low | Medium | Very High |
| Response | Medium to fast | Medium | Medium to Fast |
| Linearity | Fair | Good | Poor |
| Self heating | No | Very low to low | High |
| Point (end) sensitive | Excellent | Fair | Good |
| Lead effect | High | Medium | Low |
| Size/Packaging | Small to large | Medium to small | Small to medium |