

PH:770/304-8225 SOUTHREP FAX:770/304-8226

447 POSEY ROAD

NEWNAN, GA 30265

e-mail: sales.sri@southrep.com

Technical Data for ENET sensors

Sensor Element: PT 1000 ohms @ 0 °C, +/- .12%, TRC .00385, IEC 751
Sensor Current: < 0.11 mA
Sensed Temperature: Currently 0-100C, adjustable to any span and any range compatible with Pt sensors
Transfer Characteristics: Linear to temperature
Linearity Error: Negligible (by design < 0.01 °C)

Overall Accuracy after factory or field calibration: Total linearity, offset, gain and (one year) drift error, at constant electronics temperature: expressed as deviation from true reading: +/- 0.1 °C (0.016 mA), in the 0-100 °C range.

Overall error: +/- 0.3 °C (0.05 mA) Including transmitter Temperature Coefficient within operating temperature range.

Output signal: DC current 4-20mA,
Also possible:
4- 20 mA, etc., max 50 mA
linearized absolute DC voltage, 0-1V, 0.1-1.1 V, (max 5 V)
ratiometric DC Voltage (max 7.5 V)

Communications potential: RS-485, I2C, SSI on request

Electrical Characteristics:
For 4-20 mA:
- Shorted sensor: 2.5 +/- 0.5 mA
- Open sensor: 25+/- 2 mA
- Inrush current: limited by internal resistor to Vin/100 A.

Circuit protection:
- Protected against reverse voltage
Protected against voltage spikes (to 15000 V, 1 J)
And inductive charges

Burden (Rb): Negligible
Burden error: Negligible
Step response: < 2 sec (determined by Pt sensor thermal impedance)
Switch on delay: None (To Be Determined)
Supply voltage: 3.85V-48V DC

PCB Environmental influences
Operating temperature range: -40-125 °C
Storage Range: Same as above
Long-term Stability: < .005 °C% per year
Climatic Conditions: Potted system is fully submersible
EMC: Ratings for Interference emission and immunity to interference
Complies with FCC class A and B, CE EN 50081-1, EN 50082-1