

ANNEX I

Super-Thermometer features

- Calibrate SPRTs, PRTs, RTDs and thermistors (0 Ω to 500 k Ω)
- Accuracy as good as 0.06 ppm (0.000015 $^{\circ}$ C)
- “Ratio Self-Calibration” verifies and calibrates resistance ratio accuracy
- Automatic zero-power measurements calculate thermometer probe self- heating
- Temperature-controlled internal reference resistors
- Calibrated sensing current lowers overall instrument uncertainty
- Four input channels on the front panel accept sensors under test or external references
- Two dedicated external reference input channels on the rear panel
- Standby current reduces transient effects when scanning between channels
- Channel Select keys turn measurement mode on or off at the touch of a button
- Sample rates as fast as one second
- USB data transfer and computer control
- Remote view and device control via Ethernet
- Compatible with MET/TEMP II automated calibration software and LogWare II multichannel, real-time data acquisition software

| General Specifications | |
|---------------------------------|--|
| Measurement capability | 4-wire PRT, Thermistor, Resistance, Resistance Ratio |
| Input resistance range | 0 to 500 k Ω |
| Ratio range | 0 to 10 |
| Accepted external RS range | 1 Ω to 10 k Ω |
| Internal RS | 1 Ω , 10 Ω , 25 Ω , 100 Ω , and 10 k Ω |
| PRT conversion types | ITS-90, PT-100, CVD-ABC, CVD-ALPHA, Polynomial |
| Thermistor conversion types | R(T) Polynomial, T(R) Polynomial |
| Display units | ratio (RX / RS), K, $^{\circ}$ C, $^{\circ}$ F, Ω |
| Display resolution | 0.1 to 0.000001 |
| Sample period | (seconds) 1, 2, 5, and 10 |
| Statistics | Average, Std Dev, SE of Mean, Max, Min, Difference, Peak-Peak, Delta, N |
| Front panel channels | Four PRT/Thermistor inputs (channels 2 & 4 can be configured for either RX or RS inputs) |
| Rear panel channels | Two dedicated reference resistor inputs (RS) |
| Input terminals | DWF Connector, Tellurium Copper |
| Data logging to internal memory | 80,000 individual time- and date-stamped readings (~6 MB) |
| Internal real-time clock | Yes |
| Computer communications | RS-232, USB, IEEE-488, Ethernet |
| Display type | Full VGA, LCD |
| User interface languages | English, French, Spanish, German, Russian, Chinese, Japanese |

Training will be two parts: One to be conducted in product company office (abroad) by the technical specialist and one to be done at site (PAGASA) by company factory trained engineer. Abroad training will be for 2 pax and will include airfare, hotel accommodation, meals and local transportation. Duration of training is 4 days. The local training will be conducted at site (PAGASA) after the training in abroad for 7 technical personnel which will include installation and commissioning of said instrument. This will provide Familiarization on the basic operation of the unit and will enable the end-user to discuss their concerns during the abroad training. All the expenses related to the training will be shouldered by the winning bidder.