PR710 Standard Precision Digital Thermometer

------ Ideal Substitute of Mercury-in-glass Thermometer

The PR710 series characteristic of a high accuracy and stability is a hand-held precision temperature measurement instrument customized for temperature measurement. The measurement range is between -60℃ and 300℃. The thermometer can provided with enriched functions. PR710 series is compact in size, portable and ideal for laboratories and sites.

● *Features*

1.Excellent accuracy index, annual change is better than 0.01 °C

Performing self-calibration using internal standard resistance, PR710 series offers an excellent long-term stability with a temperature coefficient as low as 1ppm/℃. When it is operating above a heat source, the effect of the heat source temperature on its temperature indication is minimal.

2.Resolution 0.001 °C

PR710 series has built-in high performance measurement modules in a compact and slim shell. The electrical measurement performance is comparable to the commonly used 7 1/2 multimeter. Stable readings at a resolution of 0.001℃ can be achieved.

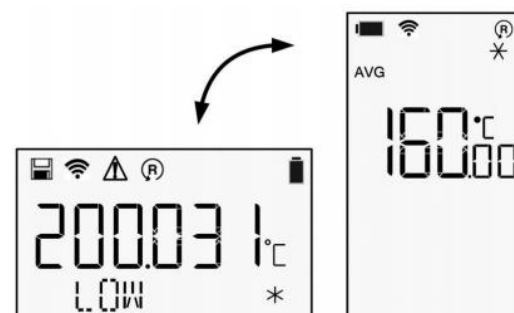**3.Traceable to other temperature standards**

With the PC software or the calibration function provided by itself, PR710 can be easily traced to standard temperature standards such as SPRTs. After tracing, the temperature measurement value can be coincide with the standard for a long time.

4.The screen can suit the sight with its built-in gravity sensor.

PR710 series has two display modes, horizontal and vertical, (PATENT NO.:201520542282.8),and can realize automatic conversion of two display modes, making it easy to read.

5.Temperature Stability Calculation

The PR710 series accurately calculates the temperature stabilities of the measured space for 10 minutes at a sampling rate of one data point per second. In addition, the simultaneous use of two PR710 series thermometers makes it easy to measure the temperature

difference between two points in the space. Combined with its temperature stability measurement function, a simpler and more accurate solution for thermostatic bath test is provided.

6. Ultra low power consumption

The portable products designed by PANRAN have always had the characteristic of ultra-low power consumption. PR710 series have brought this feature to the extreme. Under the premise of turning off the wireless communication function and only three AAA batteries are used, it can work continuously for more than 1400 hours.

7. Wireless communication function

After the PR2001 wireless communication module is connected to the computer, a wireless 2.4G network can be established with multiple PR710 series thermometer, and the indication value can be monitored in a real-time way. It is easier to obtain the temperature indication than other conventional standards.

● Technical parameters

Items	PR710A	PR711A	PR712A
Name	Hand held Precision Digital Thermometer		Standard Digital Thermometer
Temperature range (℃)	-40~160℃	-60~300℃	-5~50℃
Accuracy	0.05℃	0.05℃+0.01%rd	0.01℃
Sensor length	300mm	500mm	400mm
Sensor type	Wire wound platinum resistance		
Temperature resolution	Selectable: 0.01, 0.001 (default 0.01)		
Electronics dimensions	104mm*46mm*30mm (H x W x D))		
Time of duration	Turn off wireless communications and backlight≥1400 hours Turn on wireless communications and auto send ≥700 hours		
Wireless communication distance	Up to 150 meters in the open area		
Communication	Wireless		
Sample rate	Selectable: 1 seconds, 3 seconds (default 1 seconds)		
Number of data recorder	Can store 16 sets of data,a total of 16000 data points, and a single set of data has up to 8000 data points		
DC power	3-AAA Batteries, typical battery life of 300 hours without LCD backlight		
Weight (including battery)	145g	160g	150g
Operating temp. range readout	-10℃~50℃		
Preheating time	Preheat one minute		
Calibration Period	1 year		