



## P4902 T-Type Thermocouple B3 Probe Technical and Usage Information

### Application:

The P4902 T-type Thermocouple Probe is provided as an option to customers wishing to validate temperature within the 18 wells of the aluminum block of the P4900 Micro-Incubator. The P4902 option utilizes a small size, fast response copper-constantan junction. The junction is flattened for better heat transfer from the monitored surfaces and attached to the adhesive pad. The junction and the adhesive pad is sandwiched between two DoseStix dosimeters, inserted into the DoseStix pouch and sealed. The complete assembly is capable of closely mimicking thermal events occurring within a typical pouch sealed DoseStix dosimeter.

### Installation Instructions:

The P4902 Probe plugs directly into the P4901 digital thermometer. After the Micro Incubator has been turned on and well stabilized at the final temperature, the probe can be sequentially inserted into the wells of the incubator block. The individual temperature readings from all wells can be recorded and analyzed for uniformity within the block or long term time-related stability. Use of the probe will introduce over a long period of time an appreciable wear in the appearance of the DoseStix pouch used for the probe. Depending on the frequency of use, the pouch alone or the entire probe may have to be replaced.

### Calibration:

Individual company standard operating procedures will dictate the frequency of use and calibration of the components. Typical industry practices are:

- ❑ **Incubator** –Use GEX P8003 irreversible thermal labels or equivalent on the B3 dosimeter packages. Alternatively, use the Micro Incubator housing back panel connection to attach a calibrated temperature probe.
- ❑ **Thermal probe** – Calibrated annually in conjunction with P4901 Digital Thermometer, or at replacement.

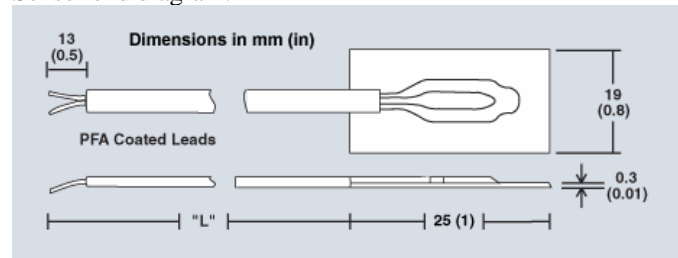
### Warranty:

The probe option P4902 is supplied with a one year manufacturer's warranty. User modifications are not warranted and are the sole responsibility of the user. Contact GEX Corporation for more details.

### Thermocouple Specifications:

Sensor Type	Copper-Constantan thermocouple
Response Time	Fast acting, flattened junction
Temperature Range	Better then 0.3 sec
	-90°C to +400°C
	-130°F to 752°F
Length	40" or 1 meter color coded PFA Insulated Leads
Connector	Male SMP connector with strain relief

Sensor end diagram:



### Typical Set-Up:

P4902 Thermocouple Probe connected to P4901 Digital Thermometer



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