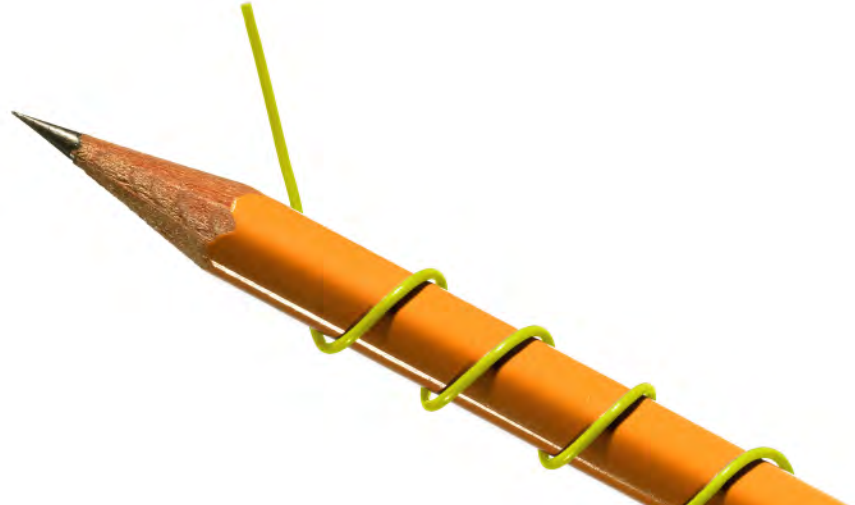


## T1™ Fiber Optic Temperature Sensor

**A multiple use fiber optic temperature sensor for measurement in laboratory, industrial and cryogenic applications**

### Key Features

**Fast response time  
-272 to +250°C range  
No gage factor or calibration  
Solvent and chemical resistant  
Calibrated precision of  $\pm 0.2^\circ\text{C}$   
Compatible with high vacuum**



Neoptix T1™ optical temperature sensor is specifically designed for general use in laboratories, industrial and cryogenic applications. It features complete immunity to microwaves and RF (EMI/RFI), high voltage and harsh environments. It has a high resistance to a wide range of temperature and meets all requirements for long term survivability to chemicals and solvents. Also, Neoptix optical temperature sensors are intrinsically safe and are perfectly adapted to temperature measurement in critical or explosive areas.

As all Neoptix probes, the «T1» does not require any recalibration or complex «gage factor» input to operate. The small optical fiber diameter allows very sharp bending radius.

The standard probe has a response time of less than 500 milliseconds. A faster version is available with a response time of 35 milliseconds. The size of the sensitive area is 400 microns in diameter.

The outer protective jacket is made out of pure virgin PTFE Teflon™ and has a diameter of 1.15 millimeters. It has a standard length of 2 meters and features a ST connector. The T1 can be ordered with a MW/RF immune dielectric connector made out of Ultem material.

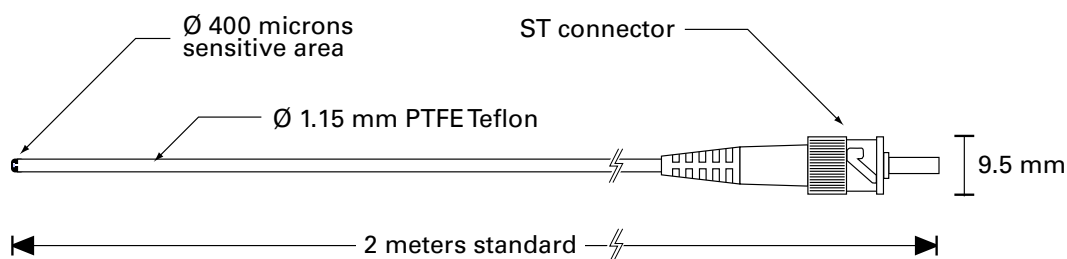
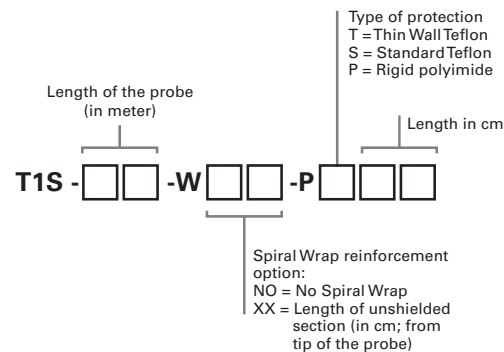
The operating temperature range from minus 272 to 250 Degrees Celcius (-457 to 482 °F ). Optionally, this sensor can be ordered with a temperature range as low as 2 Kelvin. Its uncalibrated accuracy is  $\pm 0.8^\circ\text{C}$ . The T1 probe can also be used in a high vacuum environment.

Neoptix T1™ optical temperature sensor is designed to perfectly mate with our complete line of signal conditioners including the Nomad handheld, the Reflex™ and the Omniflex™. The sensor is delivered with a NIST traceable Calibration Certificate and standard length probes are covered by our "48 Hours Turn-around Guarantee".

Neoptix, Inc.  
1415 Frank-Carrel, suite 220  
Québec (Québec) G1N4N7 Canada  
Phone : (418) 687-2500  
Fax : (418) 687-2524  
info@neoptix.com

Model:	T1™ Fiber Optic Temperature Sensor
Temperature range:	-272 to +250 °C (-457 to +482 °F)
Resolution:	System dependent
Uncalibrated accuracy:	±0.8 °C
Calibrated accuracy:	±0.2 °C at ±10 °C of calibration point(s)
Response time:	35 milliseconds for unprotected; 500 milliseconds with Teflon protection
Probe length:	2 meters standard, Any other length available upon request
Maximum probe length:	500 meters
Connector type:	ST (Standard) or Dielectric (made with Ultem; optional)
Probe sheathing material:	PTFE (Teflon™) standard
Probe dimensions:	1.15 mm O.D. standard
Probe sensitive area:	Direct point measurement with a sensitive area of 400 microns O.D.
Probe compatibility:	Compatible with all Neoptix signal conditioners; Also compatible with previous version of Nortech-Fibronic, Inc. systems with recalibration (see note 1)

### Ordering codes:



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