

NovaPT™-D Sapphire Fiber Optic Pressure and Temperature Sensing System



NovaPT™-D is a patented fiber optic pressure and temperature sensor system for permanent downhole installation. The sensor is built with a monolithic sapphire structure which offers exceptional physical and chemical robustness and extremely low hysteresis. These features coupled with a unique interrogator design, this product has the following advantages:

- High resolution and accuracy
- High operating temperature
- Exceptionally low drift
- Superior resistance against all downhole conditions
- Long sensing distance

These characteristics avoid the problems of electrical downhole sensors with limited sensing distance and maximum operating temperature, and overcome the high pressure and high temperature induced drifts often suffered by other optical sensors. NovaPT™-D sensor offers a universal choice for all downhole pressure and temperature measurement needs.

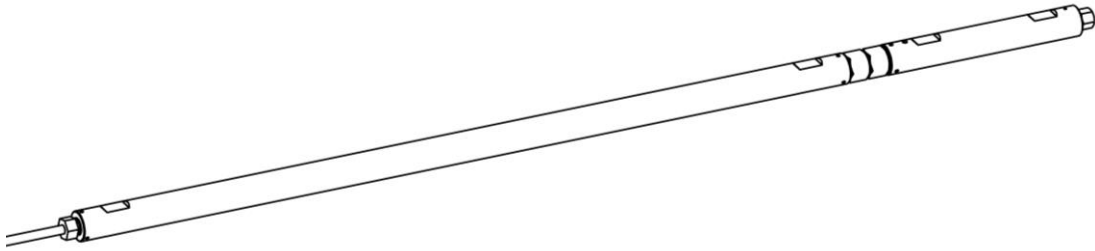
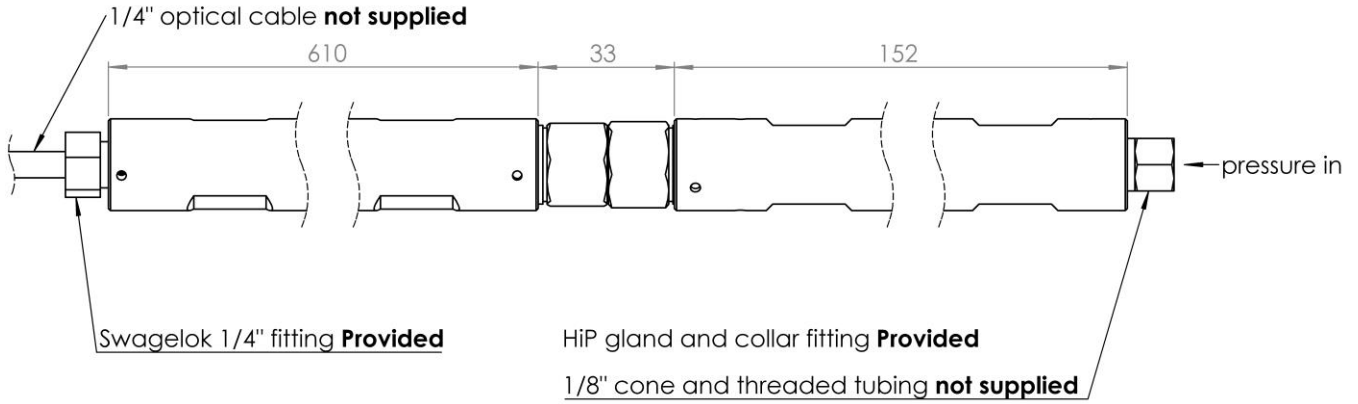
SPECIFICATIONS

Parameter	Sensor			
Model	NovaPT™-D150	NovaPT™-D200	NovaPT™-D250	NovaPT™-D700
Maximum Service Temperature	150°C	200°C	250°C	>250°C up to 650°C
Pressure Range	0-10,000psi*			By special request
Pressure Resolution	0.5psi			
Pressure Accuracy	5psi			
Temperature Resolution	0.1°C			
Temperature Accuracy	0.5°C			
Sampling Rate	1Hz			
Optical Fiber	C-Band Singlemode with High-Temp Acrylate or Polyimide Coating			
Sensor Packaging Material	SS316L or Inconel 718			
Sensor Dimensions	0.875"(diameter)x32"(length)			

Parameter	Surface Interrogator
Sensor Channels	1 or 3
Optical fiber	Singlemode@1550nm
Maximum Sensing Distance	15km
Fiber connector	FC/APC
Power	240/110V, 50/60Hz
Dimensions and Weight	480 x 180 x 350 mm; 6.7kg
Computer Interface	Ethernet
Operating Temperature	-20 to 50°C
Humidity	5-95%

* Higher pressure ratings are available by request

MECHANICAL DIMENSIONS



ORDERING INFORMATION

Please send your quote request to sales@sentekinstrument.com and specify model number, sensing distance and interrogator channel count.