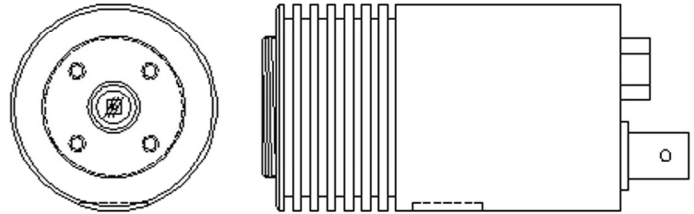




## AP300-T2 TE-Cooled Infrared Sensor

### Features

- 1.2 to 2.6um Sensitivity
- Extended InGaAs Sensor
- 0.5, 1.0 and 2.0 mm dia. Active Areas
- Compact Size - 1.5" Dia x 2.5"
- 2-Stage Thermo-Electric Cooling
- Flexible Mounting Options



### Applications

- IR Sensing
- Gas Detection
- R&D

### Description

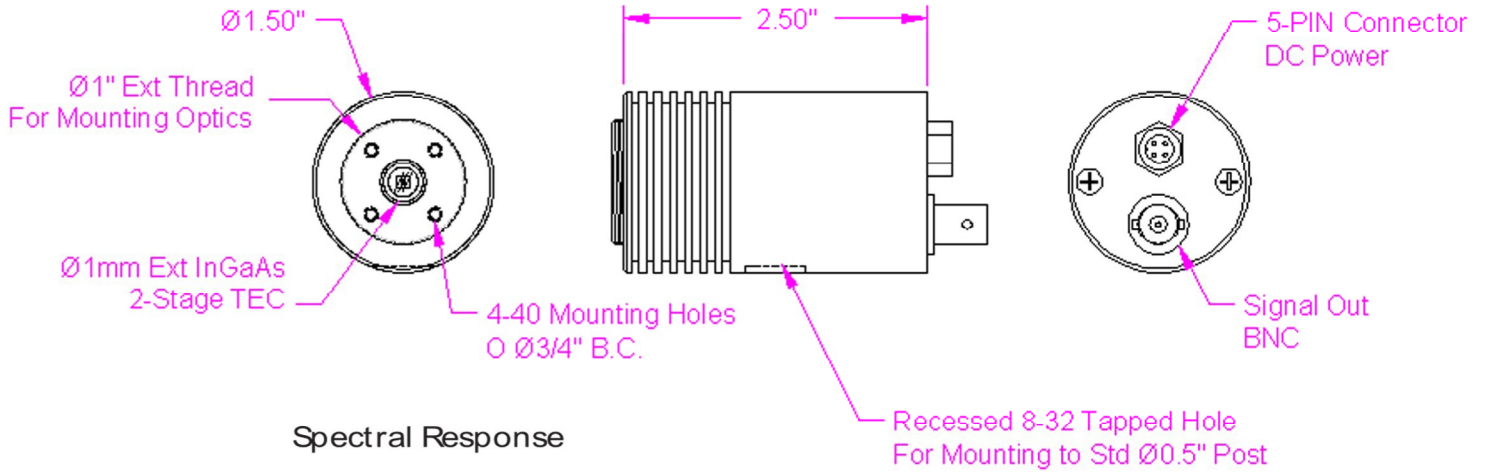
The AP300-1-T2 is an amplified InGaAs sensor with a 2-stage thermo-electric cooler (TEC). A low noise amplifier provides detector-noise limited performance in a compact package. The 2-stage TEC ensures low noise operation up to 2.6um and a large 1mm<sup>2</sup> active area provides generous light collection. All that is needed is a DC power supply.

OEM custom configurations welcome. Please contact us to discuss your requirements.

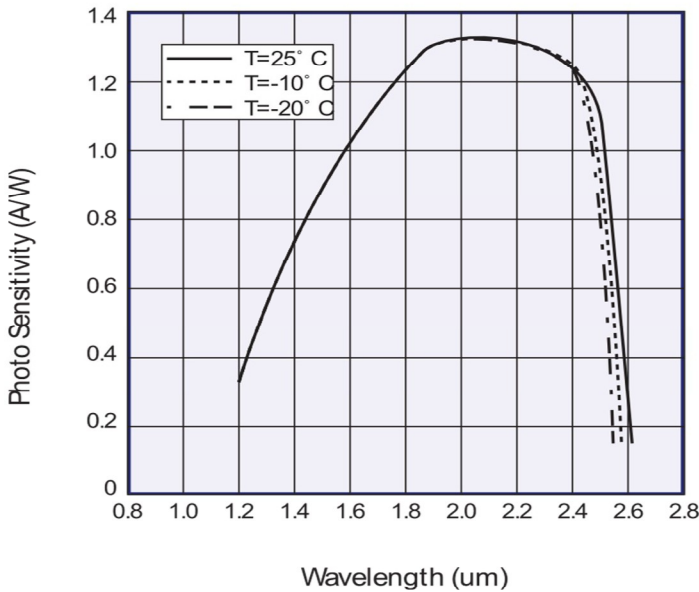
### Specifications

Part Number:	AP300T2-.5	AP300T2-1	AP300T2-2
Active Area Dia (mm):	0.5	1.0	2.0
Detector:	Extended InGaAs		
Detector Operating Temp (°C):	-20 °C		
Peak Wavelength:	2.3um		
Responsivity:	2.0 x 10 <sup>8</sup> V/W		
NEP ( W/√Hz):	3 x 10 <sup>-13</sup>	5 x 10 <sup>-13</sup>	9 x 10 <sup>-13</sup>
Frequency Response:	DC - 5KHz		
Output Voltage:	10V		
DC Power Supply:	+/- 12V @ 50mA		
TEC Power Supply:	3.3V @ 1.1A		

# Dimensions



Spectral Response



## About NEP

The Technical Staff at NEP has over 100 years of experience in the field of Infrared ( IR ) Detectors. Whether your application is Imaging, Spectroscopy, Environmental Testing, Process Control, Medical or Aerospace, NEP has the products and experience to make your program a success.

## Engineering and Design Services

New England Photoconductor has manufactured Infrared Detectors since 1973. During this time NEP has met detector and electronic requirements for applications ranging from gas analyzers to satellites. Linear and Focal Plane Multiplexed Arrays, our latest introduction to the market, brings innovation and low cost manufacturing to the Spectroscopy and Imaging markets.



New England Photoconductor  
 253 Mansfield Ave., P.O. Box M, Norton, MA 02766-0927  
 Tel. 508-285-5561 • Fax. 508-285-6480  
 (USA) 1-888-PBS-PbSe (727-7273)  
 Email: [nepcorp@nepcorp.com](mailto:nepcorp@nepcorp.com) • [www.nepcorp.com](http://www.nepcorp.com)