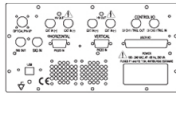


Products Home / Motion Control Electronics / Auto-Alignment / APT NanoTrak Auto-Alignment Controller

APT NanoTrak Auto-Alignment Controller

- ▶ Advanced "First Light" Closed-Loop Detection
- ▶ IR (InGaAs) Detector and PIN Current I/P Supplied
- ▶ Visible (Si) Detector Also Available
- ▶ Two High-Voltage Piezo Actuator Output Channels



Supplied with a Full Suite of Software Support Tools

Related Items



Overview Specs Pin Diagrams Further Info Motion Control Software APT Tutorials Feedback

Features

- Tracking Feature Maintains Optimum Throughput Indefinitely
- Advanced Dark Search Algorithms for First Light Detection with Motorized Fiber Launch
- Two Piezo Actuator Output Channels Provide Closed-Loop Feedback
- IR (InGaAs) Detector (Item # NTA007) & PIN Current Inputs Included
- Visible (Si) Detectors Available Separately
- Supports External Displacement Sensors for Deterministic Control of System when Latching (Freezing) Alignment
- Full Software GUI Control Suite
- ActiveX Graphical Panel Controls and Programming Interfaces
- Seamless Software Integration with Entire APT™ Family of Products (Electronics and Mechanics)

Benchtop Motion Controllers	
1-, 2- and 3-Channel Brushless DC Servo Controllers	
1-, 2- and 3-Channel Stepper Motor Controllers	
1- and 3-Channel Open Loop Piezo Controllers	
1- and 3-Channel Closed Loop Piezo Controllers	
2-Channel NanoTrak Auto-Alignment Controller	

The NanoTrak auto-alignment controller combines an intelligent, active-feedback, alignment control system and a two channel, piezoelectric controller into a single bench top unit. As part of the APT™ series, this auto-alignment system represents the latest developments in automated optical alignment technologies. This system is a basic building block from which advanced alignment systems can be quickly configured. It can be fully integrated with our extensive selection of motorized positioning systems, including our [3-Axis Nanoflex](#) and [6-Axis Nanomir](#). Resure stages with piezo actuators.

The initial coupling of light from one device (e.g. fiber) to another involves searching a multidimensional space until a signal is detected. The NanoTrak™ support software offers a series of motor search algorithms for the first light detection. Although used primarily for aligning optical fibers and integrated optical devices, the NanoTrak is ideal for automating just about any labor intensive alignment task, such as waveguide characterization, fiber pigtailing of active and passive devices, as well as a multitude of other R&D applications.

The NanoTrak is supplied with an Infrared wavelength (InGaAs) detector (NTA007) and a PIN diode SMB input for use with external detector heads. A visible wavelength (Si) detector (NTA009) is available separately as detailed below.

Other NanoTrak™ Auto-Alignment Controllers		
T-Cube™ 2-Channel Controller^a	Benchtop 2-Channel Controller	Modular 2-Channel Rack System Module

a. Piezo Drivers (KP2101) sold separately

APT NanoTrak Auto-alignment Controller



The NanoTrak controller optimizes the coupling power when aligning devices. The output piezo drive signal is used to position the input and output devices for optimum throughput. It is shipped with an IR range (InGaAs) detector and a PIN current adapter. A visible range (Si) detector (NTA009) is available separately (see below).

Based on your currency / country selection, your order will ship from Newton, New Jersey

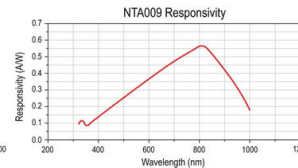
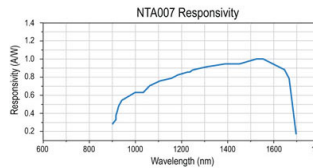
+1 Qty	Docs	Part Number - Universal	Price	Available / Ships
<input type="text" value="1"/>		BNT001/IR APT System Benchtop NanoTrak Controller, IR Detector	\$7,211.40	✓ Today

NanoTrak Detector Heads



These infrared (NTA007) and visible (NTA009) wavelength detector heads are compatible with the benchtop (BNT001/IR), T-Cube (TNA001/IR), and rack-mounted (MNA601/IR) NanoTrak controllers.

Item #	Wavelength Range	Active Area	Fiber Input	Dark Current	Junction Capacitance
NTA009	320 - 1000 nm	Ø 0.8 mm	FC/PC	0.01 nA (Typ.) @ 10 V	3.00 pF (Typ.) @ 10 V
NTA007	900 - 1700 nm	Ø 0.12 mm	FC/PC	0.05 nA (Typ.) @ 5 V	2.0 pF (Typ.) @ 5 V



Based on your currency / country selection, your order will ship from Newton, New Jersey

+1 Qty	Docs	Part Number - Universal	Price	Available / Ships
<input type="text" value="1"/>		NTA009 APT NanoTrak Visible Light (Si) Detector Head, 320 - 1000 nm	\$317.22	✓ Today
<input type="text" value="1"/>		NTA007 APT NanoTrak IR (InGaAs) Detector Head, 900 - 1700 nm	\$304.98	✓ Today

Additional Auto-Alignment

- [Benchtop NanoTrak Controller](#)
- [Rack NanoTrak Controller](#)
- [Rack System](#)
- [T-Cube NanoTrak Controller](#)
- [K-Cube Position Sensing Detector Controller](#)
- [USB Controller Hubs](#)
- [K-Cube and T-Cube Power Supplies](#)