Position Sensing System – Visible to NIR

Features

- Operates in the Visible to NIR Wavelength Range
- 12-Bit A/D Resolution
- Compact Footprint
- Expandable up to Four Channels
- USB or Stand-Alone Operation
- Ideal for Automatic Alignment
- Alignment Indicator for Each Port

PDQ80A Detector Specifications

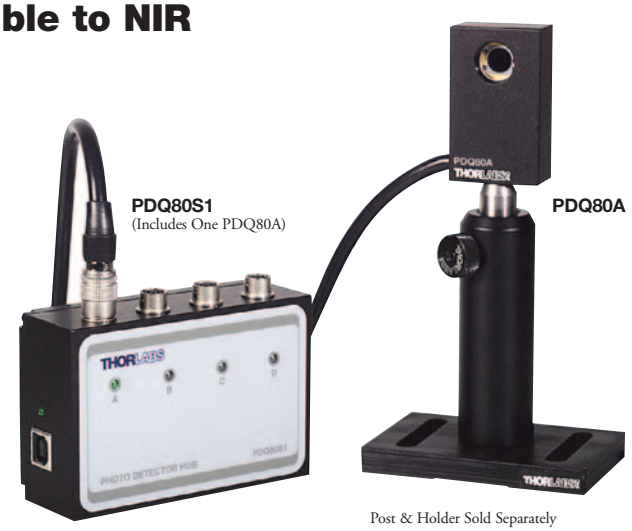
- **Wavelength Range:** 400nm-1050nm
- **Photodiode Diameter:** 8mm
- **Detector Bandwidth:** 150kHz
- **Detector Dimensions:** 2.0" x 1.20" x 0.65"
- **Damage Threshold:** 100mW/cm^2
- **Cable Length:** 5'

PDQ80S1 Hub Specifications

- **Interface:** USB 2.0 High-Speed (480Mb/s Compatible)
- **A/D Resolution:** 12-bit
- **Scan Rate:** 1000 Scans per Second
- **LED Accuracy:** 3.8% of Sensor Range
- **Connectors:** Hirose
- **Hub Dimensions:** 3.6" x 2.4" x 1.258"
- **Operating Temperature:** 10-40ºC
- **Input Voltage:** +5VDC Typ. (From USB)

Host PC System Requirement

- 750 MHz Pentium III PC or Equivalent (1GHz Recommended)
- 128MB RAM (256MB Recommended)
- 16MB of Free Hard Drive Space
- CD-ROM Drive
- USB 2.0 High-Speed Dedicated Port
- Mouse or Compatible Pointing Device
- 800 x 600 Resolution 256 Color Display (1024 x 768 Recommended)
- Windows 2000 or XP



Post & Holder Sold Separately

Monitor Up to Four Quadrant Detectors as a Stand-Alone System or With a Computer

The PDQ80S1 is a four-channel quadrant detector system with USB 2.0 interface that is capable of monitoring up to four separate quadrant detectors (PDQ80A). Software is provided for displaying the relative beam positions on a computer monitor. The PDQ80S1 will also work independent of a computer, indicating a centered beam with four LEDs (one per channel). This system is ideal for integration into an auto-alignment system. Each PDQ80S1 comes with one PDQ80A quadrant detector and a four channel detector hub. Additional PDQ80A detectors can be purchased.

No external power supply is required when connected to a host PC USB port (power is drawn from PC USB port). For stand-alone operation, the PDQ80S1 may be powered from a USB compatible AC power converter.

The application software provided with the unit includes a real-time graphical user interface with Sensor XY Display (See Figure 1). The scaling factors for the GUI provide a maximum resolution of ±1300 units from the center of the sensor, with a surface XY beam position detection range of ±3.9mm from the center for a 3µm display resolution.

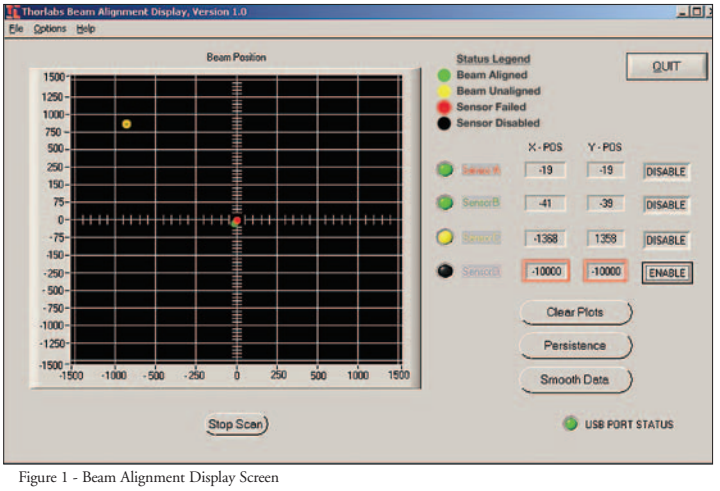


Figure 1 - Beam Alignment Display Screen

ITEM#	$	£	€	RMB	DESCRIPTION
PDQ80S1*	$ 870.00	£ 548.10	€ 809,10	¥ 8,308.50	Position Sensing System With PDQ80A Detector
PDQ80A*	$ 480.00	£ 302.40	€ 446,40	¥ 4,584.00	Quadrant Detector for PDQ80S1 System

*Universal design, imperial and metric compatible